

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4

IN THE MATTER OF:

Bluestone Coke, LLC  
3500 35th Avenue North  
Birmingham, Alabama 35207

Respondent.

Proceedings under Section 3008(a) and (h) of the  
Solid Waste Disposal Act, as amended by, inter alia,  
the Resource Conservation and Recovery Act, 42  
U.S.C. §§ 6928(a) and (h)

Docket No. RCRA-04-2023-2106

**EXHIBITS CX01–CX19 IN  
SUPPORT OF COMPLAINANT’S  
PREHEARING EXCHANGE**

Complainant’s exhibits in support of its Prehearing Exchange, filed on August 23, 2024, have been divided into two (2) volumes in order to conform to the file-size limitations of the E-Filing system of the Office of Administrative Law Judges for the EPA. What follows is the first of these two volumes, consisting of three hundred and sixty (360) pages, inclusive of this cover sheet, and including the Exhibits numbered CX01–CX19.

*[Remainder of page intentionally left blank]*



# Exhibit CX01



## CERTIFICATE OF SERVICE

I hereby certify that on the date shown below, I served one copy of the ***Complaint, Compliance Order, and Opportunity to Request a Hearing*** In the Matter of: Bluestone Coke, LLC, Docket No. RCRA-04-2023-2106, originally filed with the Regional Hearing Clerk, Region 4, EPA, on April 10, 2024, on the addressee listed below by causing said copy to be deposited with United Parcel Service, a reliable commercial delivery service which provides written verification of delivery, with a courtesy copy sent by email.

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\_\_\_\_\_  
Date

\_\_\_\_\_  
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# Exhibit CX02





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# Exhibit CX03



RCRA SECTION 3008(h)

ORDER ON CONSENT

Originally Issued to

Walter Coke Inc.

Docket No. RCRA-04-2012-4255

As Modified and Reissued to

ERP Compliant Coke, LLC

Docket No. RCRA-04-2016-4250



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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

IN THE MATTER OF:	)	Docket Number: RCRA-04-2016-4250
	)	
ERP Compliant Coke, LLC	)	Proceeding under Section 3008(h)
	)	of the Resource Conservation and
	)	Recovery Act, 42 U.S.C. § 6928(h)
	)	
EPA ID No.: ALD 000 828 848	)	
	)	
Respondent	)	
_____	)	

USEPA, REGION 4  
OFFICE OF REGIONAL  
COUNSEL  
2016 AUG 11 AM 7:13  
HEARING CLERK

**ADMINISTRATIVE ORDER ON CONSENT**

**I. JURISDICTION**

1. This Administrative Order on Consent ("Order") is issued 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 ("HSWA") of 1984, 42 U.S.C. § 6928(h). The authority vested in the Administrator to issue orders under Section 3008(h) of RCRA has been delegated to the Regional Administrators by EPA Delegation Nos. 8 - 31 and 8 - 32 dated April 16, 1985, and has been further delegated by the Regional Administrator for Region 4 to the Deputy Director, RCR Division on August 18, 2010. Section 3008(h) of RCRA, 42 U.S.C. § 6928(h), authorizes the Administrator of EPA or her delegatee to issue an order requiring corrective action or such other response which she deems necessary to protect human health or the environment, if, on the basis of any information, she determines that there is or has been a release of hazardous waste or hazardous constituents into the environment from a Facility that is, was, or should have been authorized to operate under Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).
2. This Order was originally issued to Walter Coke, Inc., Birmingham, Alabama on September 17, 2012 ("2012 Order"). It became effective on September 24, 2012. This Order is being reissued to ERP Compliant Coke, LLC, ("Respondent") because Respondent purchased certain assets of Walter Coke out of bankruptcy and, in doing so, agreed to implement the Order. This Order shall become effective as stated in Section XXXVIII., Effective Date, of this Order, below.
3. Respondent consents to and agrees not to contest EPA's jurisdiction to issue this Order or to enforce its terms. Accordingly, Respondent will not contest EPA's jurisdiction to: 1. compel compliance with this Order in any subsequent enforcement proceeding, either



administrative or judicial; 2. require Respondent's full or interim compliance with the terms of this Order; and 3. impose sanctions for violations of this Order. In addition, Respondent agrees not to seek pre-enforcement review of this Order.

4. On September 29, 1989, EPA issued Walter Coke an Administrative Order pursuant to Section 3008(h) of RCRA. Following negotiations between EPA and Walter Coke, a modified Administrative Order was issued ("1989 Order"). The 1989 Order required Walter Coke to perform a RCRA Facility Investigation (RFI) to evaluate whether any hazardous waste or hazardous constituents had escaped the identified solid waste management units in which they were, or suspected to be, located and, if so, the nature and extent of any release. The 1989 Order also required Walter Coke to develop, upon completion of the RFI, a Corrective Measures Study (CMS), if necessary, to identify remediation alternatives and to recommend any corrective measures to be taken at the Facility. By entry of the 2012 Order between EPA and Walter Coke, EPA declared, and the Parties agreed, that Walter Coke has completed all of the approved investigation tasks of the RFI Work Plans required by the 1989 Order. The EPA and Walter Coke also agreed that the CMS work and the selection and implementation of any remedy would be best conducted and completed pursuant to the 2012 Order, and any subsequent modifications or new Orders, and that as a result, the 1989 Order was terminated and is no longer in force and effect.

## **II. PARTIES BOUND**

5. This Order shall apply to and be binding upon EPA, Respondent and its officers, directors, employees, agents, successors and assigns, heirs, trustees, receivers, and upon all persons, including but not limited to contractors and consultants, acting on behalf of the Respondent.
6. No change in ownership or corporate or partnership status relating to the Facility will in any way alter Respondent's responsibility under this 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 Order. Respondent will be responsible for and liable for any failure to carry out all activities required of the Respondent by the terms and conditions of the Order, regardless of the Respondent's use of employees, agents, contractors, or consultants to perform any such tasks.
7. Respondent shall provide a copy of this Order to all contractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this Order within seven (7) days of the issuance of this Order or the retention of such person(s), whichever occurs later, and shall condition all such contracts on compliance with the terms of this Order.
8. Respondent shall provide written notice of this Order within ten (10) days to any successor-in-interest prior to transfer of ownership or operation of the Facility or a portion thereof. In addition, the Respondent shall provide written notification of said transfer of ownership and/or operation to the EPA within ten (10) days prior to such transfer.



9. Respondent agrees to undertake all actions required by the terms and conditions of this Order, including any portions of this Order incorporated by reference. Respondent waives its right to request a hearing on this matter pursuant to Section 3008(b) of RCRA and 40 C.F.R. Part 24, and consents to the issuance of this Order without a hearing pursuant to Section 3008(b) of RCRA as a Consent Order issued pursuant to Section 3008(h) of RCRA. Any noncompliance with this Order, other than noncompliance authorized by EPA, constitutes a violation of the Order.

### **III. DEFINITIONS**

10. Unless otherwise expressly provided in Attachment A: Definitions & Terms herein, terms used in this Order which are defined in RCRA or in regulations promulgated under RCRA shall have the meaning assigned to them under RCRA or in such regulations.

### **IV. STATEMENT OF PURPOSE**

11. In entering into this Order, the mutual objectives of EPA and Respondent are: (1) to perform one or more CMSs to identify and evaluate alternatives for any corrective measures (i.e., remedies) necessary to prevent, mitigate, and/or remediate any releases of hazardous wastes or hazardous constituents at or from any Solid Waste Management Units (SWMUs), Areas of Concern (AOCs) and SWMU Management Areas (SMAs) listed in Attachments D and E or identified as "new" pursuant to Section VIII; (2) to implement the remedies approved by EPA for such SWMUs, AOCs and SMAs listed in Attachments D and E or identified as "new" pursuant to Section VIII; (3) to perform any other activities necessary consistent with this Order, including additional work and interim measures (IMs), to the extent necessary to address impacted environmental media to ensure it meets protective criteria or to evaluate actual or potential threats to human health and/or the environment resulting from the release or potential release of hazardous waste or hazardous constituents at or from SWMUs, AOCs and/or SMAs; 4) to implement and maintain, as appropriate, institutional controls required by Section XV. of this Order approved by EPA; and (5) to perform any activities required pursuant to Section VIII of this Order, and to the extent otherwise consistent with this Order. A list of all SMAs is provided in Attachment D, and a list of all SWMUs and AOCs is provided in Attachment E.
12. It is the mutual objective of EPA and Respondent to streamline the process for completing the work required by this Order, and to avoid potentially unnecessary delays caused by inadequate communication, particularly in advance of formal submissions required by Respondent under this Order. To accomplish this objective, the parties will frequently and in good faith communicate orally, in writing, and face-to-face to discuss progress of the Work and upcoming tasks scheduled by Respondent, to address any concern of EPA or the Respondent, to ensure EPA is kept current on the Work, and to ensure the successful and timely completion of the requirements of this Order.

### **V. EPA FINDINGS OF FACT**

13. Respondent is a company doing business in the State of Alabama and is a person as defined in Section 1004(15) of RCRA, U.S.C. § 6903(15).



14. References to "Respondent" in the description of the Facility in this Order are to ERP Compliant Coke, LLC, as well as to any predecessors which owned or operated the Facility, including Walter Coke, Inc., and Sloss Industries Corporation. References to "Respondent" in this Order insofar as the obligations to perform the work required by this Order are to ERP Compliant Coke, LLC. The Facility is shown in the maps that are attached as Attachment B: Site Map and SMAs 1-5; Figures 1-6 dated 7/24/12 and 8/16/12.
15. On November 19, 1980, the applicable date which rendered facilities subject to interim status requirements or the requirement to have a permit under Sections 3004 and 3005 of RCRA, 42 U.S.C. §§ 6924 and 6925, the Facility achieved interim status as Walter Coke owned and operated the Facility and certain of its operations thereon qualified as hazardous waste treatment, storage, or disposal within the meaning of RCRA. In its original Part A Hazardous Waste Permit Application, dated November 17, 1980, Walter Coke identified itself as operating a coke plant, a chemical plant, a blast furnace and a mineral wool plant.

## **VI. EPA DETERMINATIONS AND CONCLUSIONS OF LAW**

16. Based on the foregoing findings of fact and after consideration of the Administrative Record, the Deputy Director of the RCR Division of EPA Region 4 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), and is a "person" as defined in 40 C.F.R. § 260.10.
  - b. Respondent is the "owner" and "operator" of an interim status Facility that is operating subject to Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).
  - c. Hazardous waste storage activities subject to interim status requirements of 40 C.F.R. Part 265 were engaged in at the Facility.
  - d. The Facility was subject to interim status requirements or the requirement to have a permit under Sections 3004 and 3005 of RCRA, 42 U.S.C. §§ 6924 and 6925.
  - e. Certain wastes and constituents thereof found at the Facility are hazardous waste and/or hazardous constituents thereof as defined by Section 1004(5) of RCRA, 42 U.S.C. § 6903(5). These are also hazardous wastes or hazardous constituents within the meaning of Section 3001 of RCRA, 42 U.S.C. § 6921 and 40 C.F.R. Part 261.
  - f. There is or has been a release of hazardous wastes or hazardous constituents into the environment from the Facility.
  - g. The actions required by this Order are necessary to protect human health and/or the environment.



## **VII. WORK TO BE PERFORMED**

17. Pursuant to Section 3008(h) of RCRA, the Respondent agrees and is hereby ordered to perform the acts required by this Order. All work undertaken pursuant to this Order shall be performed in a manner consistent with, at a minimum, 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 Order.
18. To the extent necessary to meet any of the requirements of this Order, all work previously performed and reports previously submitted by Walter Coke to EPA pursuant to the 1989 Order may be relied upon or referred to by Respondent in submissions to EPA by Respondent. Respondent need not re-submit such completed work or reports.
19. Unless otherwise specified, two (2) complete paper copies and two (2) complete electronic copies in portable document format, of all documents submitted pursuant to this Order, or revisions thereof, shall be hand delivered, sent by certified mail, return receipt requested, or by overnight express mail to the Project Coordinator or to other addresses he/she designates. Electronic copies can be emailed if possible.

## **VIII. NEW AREAS OF CONCERN AND NEW SWMUS**

20. Any SWMUs and/or AOCs that are not identified in Attachment D and/or E, and that otherwise are designated by EPA and discovered after the Effective Date, are "New AOCs" or "New SWMUs". New AOCs or New SWMUs designated by EPA or discovered during the course of environmental sampling, monitoring, field investigations, environmental audits, or other means, shall become part of this Order. As used in this Order, the terms "discover," "discovery," or "discovered," refer to the date on which the Respondent or EPA either: (1) visually observes evidence of a new SWMU or AOC; (2) visually observes evidence of a previously unidentified release of hazardous waste or hazardous constituents to the environment; or (3) receives information which suggests the presence of a new release of hazardous waste or hazardous constituents to the environment.
23. Respondent shall notify EPA in writing, within fifteen (15) days of discovery, of any suspected New AOC or New SWMU as discovered under this Section VIII. The notification shall include, at a minimum, the location of the New AOC or New SWMU and all available information pertaining to the nature of the release (e.g., media affected, hazardous waste or constituents released, magnitude of the release, etc.). The notification shall also include whether the New SWMU or New AOC is contained within one of the defined SMAs which previous investigations, the CMS, or the CMI may already address. To the extent necessary to satisfy the Statement of Purpose, the following steps may be undertaken: The EPA may conduct, or require the Respondent to conduct, further assessment (i.e., Confirmatory Sampling) in order to determine the status of the suspected New AOC and/or New SWMU. EPA may also require that Respondent submit an AOC or SWMU Assessment Report (ASAR) for each New AOC and/or New SWMU. Based on the results of the ASAR, the EPA shall determine the need for further investigations of the New AOCs and/or New SWMUs covered in the ASAR.



## **IX. INTERIM MEASURES**

24. The Respondent shall evaluate data as it becomes available and assess the need for interim measures.
25. The Respondent shall report any Imminent and/or Existing Hazard (IEH) from a release of hazardous waste or hazardous constituents that may endanger human health or the environment onsite or beyond the Facility property boundary. Any such information shall be reported orally to the EPA within 24 hours from the time the Respondent becomes aware of the circumstances. This IEH Report shall include, but is not limited to:
  - a. Information concerning the release of any hazardous waste or hazardous constituents that may endanger public drinking water supplies; and,
  - b. Information concerning the release or discharge of any hazardous waste or hazardous constituents, which could threaten the environment or human health outside the Facility.
26. Pursuant to Paragraph 12. of this Order, the parties may agree that Respondent can implement an Interim Measure (IM) for any IEH, SWMU, AOC, and/or SMA, as appropriate, to eliminate, prevent, or mitigate exposure to human health or the environment at or from the Facility, without the necessity of Respondent preparing and submitting to EPA for approval a Work Plan. If the parties do not agree, and/or EPA determines an IM Work Plan submission and approval process is necessary, the Respondent shall prepare an IM Work Plan and submit it to EPA, for approval, within the time frame specified by EPA. The IM Work Plan is subject to approval by EPA and shall be developed in a manner consistent with the IM Scope of Work at:

[http://www.epa.gov/reg3wcmd/ca/pdf/RCRA\\_InterimMeasuresTTA.pdf](http://www.epa.gov/reg3wcmd/ca/pdf/RCRA_InterimMeasuresTTA.pdf)

27. The Respondent shall implement the IM in accordance with the agreement of the Parties or with any EPA required IM Work Plan.
28. The Respondent shall seek approval from the EPA for any planned changes, reductions or additions to the IM and or IM Work Plan prior to implementation (unless to prevent or mitigate an IEH).

## **X. CORRECTIVE MEASURES STUDY**

29. Respondent shall perform and complete a CMS and submit the CMS Report for the SMAs listed in Attachment D according to the schedule contained therein, or as required pursuant to Section VIII or XXII. Respondent shall follow and comply with all of EPA's guidelines and requirements for the performance of a CMS.



30. EPA will review the CMS Report and notify Respondent in writing of EPA's approval/disapproval, or modification in accordance with Section XIX: APPROVAL/DISAPPROVAL OF SUBMISSION.

## **XI. REMEDY SELECTION**

31. EPA may select a Remedy Decision from the remedial alternatives evaluated during the CMS and presented in the CMS Report. EPA's selection will be based at a minimum on protection of human health and/or the environment, considering specific site conditions, and existing regulations and EPA guidance. The selected remedy may include any IM implemented to date. EPA shall select the remedy and prepare a Statement of Basis to present the proposed Remedy to the public.
32. EPA will provide the public with an opportunity to review and comment on its selection of the proposed final corrective measure(s), including the detailed written description and justification for its selection in the Statement of Basis. Following the public comment period, EPA will select the final corrective measure(s), and will notify the public and Respondent of the decision and rationale in a written Final Decision and Response to Comments (RTC). The RTC will include EPA's detailed reasons for selecting the corrective measure(s) and for rejecting the other proposed corrective measure(s).
33. Should EPA determine that none of the remedial alternatives evaluated during the CMS and presented in the CMS Report is appropriate as a remedy, EPA shall notify Respondent in writing of such decision, including the reasons. Respondent and EPA shall have thirty (30) days from Respondent's receipt of EPA's written notification to reach an agreement. Subject to Section XX, if Respondent and EPA are unable to reach an agreement, Respondent must revise the CMS Report and/or perform additional corrective measures studies in accordance with EPA's request.

## **XII. FINANCIAL ASSURANCE**

34. Following RTC issuance for each Remedy, the Respondent shall provide cost estimates, and demonstrate financial assurance for completing the approved remedy in accordance with Attachment C. Thereafter, the Respondent shall review the remedy cost estimates, adjust the financial assurance instrument, and submit the revised estimate and instrument to the EPA annually for each remedy.

## **XIII. CORRECTIVE MEASURES IMPLEMENTATION WORK PLAN**

35. Within one hundred twenty (120) days of Respondent's receipt of notification of EPA's selection of the corrective measure(s), Respondent shall submit to the EPA a Corrective Measures Implementation Work Plan (s) ("CMI Work Plan"). Each CMI Work Plan shall include a QA/QC plan as well as a schedule and date for remedy construction completion.
36. Each CMI Work Plan submission is subject to approval by EPA in accordance with Section XIX: APPROVAL/DISAPPROVAL OF SUBMISSION and shall be developed



in a manner consistent with the requirements of RCRA and its directives and implementing regulations as well as the following guidance:

[https://www3.epa.gov/reg3wcmd/ca/pdf/RCRA\\_CorrectiveMeasureImpli\\_sow.pdf](https://www3.epa.gov/reg3wcmd/ca/pdf/RCRA_CorrectiveMeasureImpli_sow.pdf)

#### **XIV. PUBLIC PARTICIPATION/COMMUNITY ENGAGEMENT**

37. Within thirty (30) days of the Effective Date of this Order, Respondent shall submit for approval to EPA a Public Participation/Community Engagement Plan consistent with applicable EPA guidance, including the document found in the following link:

[https://www.epa.gov/sites/production/files/2015-08/documents/rcra\\_pub\\_participn\\_man.pdf](https://www.epa.gov/sites/production/files/2015-08/documents/rcra_pub_participn_man.pdf)

38. The administrative record supporting this Order and the administrative record in support of any remedy selected pursuant to this Order will be available for public review and maintained by the Respondent at the Facility or at a designated location (i.e., closest library to facility) near the facility, and at the U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, S.W., Atlanta, Georgia 30303.

#### **XV. INSTITUTIONAL CONTROLS**

39. Respondent must consider institutional controls and/or land use restrictions for protection of human health and the environment from contamination left in place at any SMAs, SWMUs or AOCs. Institutional controls and/or land use restrictions may also be used to protect the corrective measures if the order is terminated at the completion of corrective action.
40. A detailed listing of EPA's Institutional Controls may be found at the following EPA website:

<https://www.epa.gov/sites/production/files/documents/icfactfinal.pdf>

#### **XVI. COMPLETION OF RCRA CORRECTIVE ACTION**

41. The determination of completion of RCRA corrective action at the Respondent's Facility shall be made pursuant to EPA's February 13, 2003, Guidance on Completion of Corrective Action Activities at RCRA Facilities, 68 FR 8757-8764.
42. When, upon receipt of the certification, and in consideration of public comments and any other relevant information, the EPA determines that the corrective measures have been completed in accordance with the terms and conditions of this Order and the requirements for completion, the EPA shall terminate this Order. Upon termination of the Order or modification of the Order for completion of corrective action at the entire Facility, EPA shall release the Respondent from the financial assurance requirements of this Order.



## **XVII. SCHEDULES OF COMPLIANCE**

43. Respondent is required to adhere to each of the deadlines and schedules set out in this Order. Respondent may request an extension to any deadline in this Order. Any extension request must be submitted to the EPA project manager for approval within a minimum of fourteen (14) days prior to the deadline. Failure to adhere to any deadline may be considered a violation of this Order.

## **XVIII. PROJECT COORDINATOR**

44. EPA and Respondent have each designated a Project Coordinator as set out below. Each Project Coordinator shall be responsible for overseeing the implementation of this Order and for designating a person to act in his/her absence. The EPA Project Coordinator will be EPA's designated representative for the Facility. To the maximum extent practicable, all communications between Respondent and EPA, and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to this Order shall be directed through the Project Coordinators.
45. The parties may change their Project Coordinators, but agree to provide at least ten (10) days written notice prior to changing a Project Coordinator.

- a. The EPA Project Coordinator is:

Wesley Hardegree, Environmental Scientist  
RCRA Corrective Action and Permitting Section  
RCRA Cleanup and Brownfields Branch, RCR Division  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

- b. The Facility Project Coordinator is:

Don Wiggins  
Manager of Technical Services  
ERP Compliant Coke, LLC  
3500 35<sup>th</sup> Avenue North  
Birmingham, Alabama 35207

46. The absence of a designated EPA Project Coordinator for overseeing the implementation of this Order shall not be cause for the stoppage of work.

## **XIX. AGENCY APPROVAL/DISAPPROVAL OF SUBMISSION.**

### **A. EPA APPROVALS**

47. EPA will provide Respondent with its written approval, approval with conditions and/or modifications, or disapproval for any submission (or resubmission) requiring such



approval required by this Order. Any disapproval or any approval with conditions and/or modifications shall be consistent with this Order and the Statement of Purpose.

48. In connection with an EPA action under paragraph 47 other than approval of a submission, Respondent shall revise any submission required by this Order in accordance with EPA's written comments within thirty (30) calendar days of Respondent's receipt of EPA's written comments, unless EPA has specified an alternative due date. Revised submittals are also subject to EPA approval, approval with conditions and/or modifications, or disapproval. Any revised submittal that is disapproved or is not approved with conditions and/or modifications is considered noncompliant with the terms of this Order. For purposes of Respondent's submissions, dispute resolution shall apply only to submissions disapproved and revised by the EPA, or that have been disapproved by the EPA, then revised and re-submitted by the Respondent, and again disapproved by the EPA.
49. Subject to Section XX, upon receipt of EPA's written approval, Respondent shall commence work and implement any approved Work Plan in accordance with the schedule and provisions contained therein. If no schedule is contained in an approved Work Plan, then Respondent shall commence work and implementation of the Work Plan within fifteen (15) calendar days of receipt of EPA's written approval of the Work Plan.
50. Subject to Section XX, any submission required by this Order that EPA-approved or EPA-approved with conditions and/or modifications shall be incorporated by reference into this Order as set forth fully herein. Prior to EPA's written approval, no submission required by this Order shall be construed as approved and final. Oral advice, suggestions, or comments given by EPA representatives will not constitute an official approval, nor shall any oral approval or oral assurance of approval be considered binding.
51. Subject to Section XX, noncompliance with any requirement of this Order shall be considered a violation of this Order and shall subject Respondent to the statutory penalty provisions and enforcement actions pursuant to Section 3008(h)(2) of RCRA, 42 U.S.C. § 6928(h), and any other applicable sanctions, including the stipulated penalties provisions agreed to in Section XXVIII Delay in Performance/Stipulated Penalties of this Order.
52. Any changes or modifications proposed by Respondent to the EPA-approved documents and schedules submitted pursuant to and required by this Order must be approved by EPA prior to implementation.

#### B. PROGRESS REPORTS

53. Unless otherwise specified in an EPA-approved document pursuant to this Order, beginning with the first full month following the effective date of this Order, and through the period that this Order is effective, Respondent shall provide EPA with quarterly progress reports. Progress reports are due by the fifteenth (15) day of the month following the end of the previous quarter. The progress reports for specific deliverables shall conform to requirements in any relevant EPA guidance referenced in this Order.



## **XX. DISPUTE RESOLUTION**

54. 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 Order.
55. Notwithstanding any other provision in this Order, in the event the Respondent disagrees in whole or in part with any written decision by EPA, or revision of a submission or disapproval of any revised submission required by the Order, the following may, at the Respondent's discretion apply:

Any dispute concerning EPA written decisions, or revisions or disapprovals of deliverables required under this Order (including required revisions for, disapprovals of, or approvals with conditions and/or modifications of any deliverable required under this Order), excluding any EPA final agency action, shall be raised to EPA within 15 days after receiving the written decision or comments on the deliverables. Disputes will be resolved as follows: EPA and Respondent shall expeditiously and informally attempt to resolve any disagreements. The Project Coordinators shall first confer in an effort to resolve the dispute. If the Project Coordinators are unable to informally resolve the dispute within 14 days, Respondent shall notify EPA's Chief, RCRA Cleanup and Brownfields Branch, RCR Division, in writing of its objections. The Respondent's written objections shall define the dispute and state the basis of Respondent's objections. EPA and Respondent then have an additional 14 days to reach agreement. If an agreement is not reached within 14 days, Respondent may request a determination by EPA Region 4's RCR Division Director. The RCR Division Director's determination is EPA's final decision, and shall be incorporated into and become an enforceable part of this Order to the extent it is otherwise consistent with this Order. If Respondent does not agree to perform or does not actually perform the Work in accordance with EPA's final decision, EPA reserves the right in its sole discretion to conduct the work itself, to seek reimbursement from Respondent, to seek enforcement of this Order on the issue subject to EPA's decision, to seek stipulated penalties, and/or to seek any other appropriate relief. Notwithstanding any other provision of this Order, Respondent retains the right to contest the validity of or assert any defenses it may have with respect to any EPA written decision it claims was taken or made pursuant to this Order, including with respect to any EPA written decision that was subject to the dispute resolution procedure set forth in this Paragraph.

56. If EPA and Respondent reach agreement on a dispute at any stage, the agreement shall be set forth in writing, and shall upon signature of EPA and Respondent, be incorporated into and become an enforceable part of this Order.
57. The existence of a dispute and EPA's consideration of matters placed in dispute shall not excuse, toll, or suspend any compliance obligation or deadline required pursuant to the Order during the pendency of the dispute resolution process except as provided in Section XXVIII, Delay in Performance/Stipulated Penalties or agreed to by EPA in writing. With



the exception of those conditions under dispute, the Respondent shall proceed to take any action required by those portions of the submission and of the Order that the EPA determines are not affected by the dispute. The invocation of dispute resolution does not stay accrual of stipulated penalties under this Order, unless the delay is a result of EPA's failure to timely issue a written resolution of the dispute.

## **XXI. PROPOSED CONTRACTOR/CONSULTANT**

58. All work performed pursuant to this Order shall be under the direction and supervision of a professional engineer, hydrologist, geologist, or environmental scientist, with expertise in hazardous waste cleanup. Respondent's contractor or consultant shall have the technical expertise sufficient to adequately perform all aspects of the work for which it is responsible. Within forty-five (45) days of the effective date of this Order, Respondent shall notify the EPA Project Coordinator in writing of the name, title, and qualifications of the engineer, hydrologist, geologist, or environmental scientist and of any contractors or consultants and their personnel to be used in carrying out the terms of this Order. EPA reserves the right to disapprove Respondent's contractor and/or consultant. If EPA disapproves a contractor or consultant, then Respondent must, within forty-five (45) days of receipt from EPA of written notice of disapproval, notify EPA, in writing, of the name, title, and qualifications of any replacement.
59. Respondent shall provide at least ten (10) days written notice prior to changing professional engineer/geologist/hydrologist/environmental scientist or contractor/subcontractor.

## **XXII. ADDITIONAL WORK**

60. EPA may determine or Respondent may propose that certain tasks, including investigatory work, engineering evaluation and design work plan, remediation, procedure/methodology modifications, or community engagement documents are necessary in addition to or in lieu of the tasks included in any EPA approved Work Plan, when such additional work is otherwise consistent with this Order and necessary to meet the purposes set forth in Section IV. Statement of Purpose. If EPA determines that Respondent shall perform additional work, EPA will notify Respondent in writing and specify the basis for its determination that the additional work is necessary. Consistent with Paragraph 12 of this Order, Respondent may confer with EPA to discuss the additional work. If required by EPA, subject to Section XX, Respondent shall submit for EPA approval a Work Plan for the additional work. EPA will specify the contents of such Work Plan. Such Work Plan shall be submitted within sixty (60) days of receipt of EPA's determination that additional work is necessary, or at a later date according to an alternative schedule established by EPA. Upon approval of a Work Plan by EPA, Respondent shall implement it in accordance with the schedule and provisions contained therein.



### **XXIII. QUALITY ASSURANCE**

61. Respondent shall follow EPA guidance for sampling and analysis. Work Plans 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 EPA prior to implementation; must be documented, including reasons for the deviations; and must be reported in the applicable report (e.g., CMS).
62. The name(s), addresses, and telephone numbers of the analytical laboratories Respondent proposes to use must be specified in the applicable Work Plan(s).
63. Respondent shall monitor to ensure that high quality data is obtained by its consultant or contract laboratories. All investigation activities shall be done in accordance with the USEPA, Region 4, Science and Ecosystem Support Division's (SESD's) "Field Branches Quality System and Technical Procedures" which is available on the SESD website. The direct link to the website is:

<https://www.epa.gov/quality/quality-system-and-technical-procedures-sesd-field-branches>

Any RCRA Work Plan submitted pursuant to this Order (e.g., IM, RFI, CMS, CMI) shall include data quality objectives and guidance which can be found in the February 2006 "U.S. EPA Guidance for the Data Quality Objectives Process" available at:

[https://www.epa.gov/sites/production/files/documents/guidance\\_systematic\\_planning\\_dqo\\_process.pdf](https://www.epa.gov/sites/production/files/documents/guidance_systematic_planning_dqo_process.pdf)

and the March 2001 "U.S. EPA Requirements for Quality Assurance Project Plan" (EPA QA/R-5) for achieving the Data Quality Objectives available at:

<https://www.epa.gov/sites/production/files/2015-07/documents/r5-final.pdf>

Samples are to be collected and analyzed in accordance with EPA publication SW# 846 "Test Methods for Evaluating Solid Waste," 3<sup>rd</sup> Edition. A National Environmental Laboratory Accreditation Program (NELAP) certified laboratory is to be used to analyze the samples. If methods other than EPA methods are to be used, Respondent shall specify all such protocols in the applicable Work Plan (e.g., CMS). EPA may reject any data that does not meet the requirements of the approved Work Plan or EPA analytical methods and may require re-sampling and additional analysis.

64. Respondent shall ensure that laboratories they use for analyses participate in a quality assurance/quality control program equivalent to that which is followed by EPA. EPA may conduct a performance and quality assurance/quality control audit of the laboratories chosen by Respondent before, during, or after sample analyses. Upon request by EPA, Respondent shall have any such laboratory perform analyses of samples provided by EPA to demonstrate laboratory performance. If the audit reveals deficiencies in a laboratory's performance or quality assurance/quality control, re-sampling and additional analysis may be required.



#### **XXIV. DATA AND DOCUMENT AVAILABILITY**

65. Respondent shall submit (i.e., in hardcopy and in an electronic copy in appropriate standard business format) to EPA upon request the results of all sampling and/or tests or other data generated by divisions, agents, consultants, or contractors pursuant to this Order.
66. Notwithstanding any other provisions of this 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.
67. Respondent shall notify EPA in writing at least ten (10) days before engaging in any field activities and/or corrective measures, such as well sampling, installation of equipment, and/or sampling. 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 management, to commence such activities immediately. At the request of EPA, Respondent shall provide or allow EPA or its authorized representative to take split or duplicate samples of all samples collected by Respondent pursuant to this Order. Similarly, at the request of Respondent, EPA shall allow Respondent or its authorized representative(s) to take split or duplicate samples of all samples collected by EPA under this Order.
68. Respondent may assert a business confidentiality claim covering all or part of any information submitted to EPA pursuant to this Order. Any assertion of confidentiality must be accompanied by information that satisfies the items listed in 40 C.F.R. § 2.20(e)(4) or such claim shall be deemed waived. Information determined by EPA to be confidential shall be disclosed only to the extent permitted by 40 C.F.R. Part 2. If no such confidentiality claim accompanies the information when it is submitted to EPA, the information may be made available to the public by EPA without further notice to Respondent. Respondent agrees not to assert any confidentiality claim with regard to any physical or analytical data.

#### **XXV. ACCESS**

69. EPA, its contractors, employees, and/or any duly designated EPA representatives are authorized to enter and freely move about the Facility accompanied by Respondent's representative pursuant to this Order for the purposes of, inter alia: interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts related to the Facility; reviewing the progress of Respondent in carrying out the terms of this Order; conducting such tests, sampling, or monitoring as EPA deems necessary for purposes of this Order; using a camera, sound recording, or other documentary type equipment for purposes of this Order, and verifying the reports and data submitted to EPA by Respondent. EPA agrees to provide Respondent with copies of any such tests, sampling, or monitoring, including photographs, sound recordings or other documentary type equipment. Furthermore, upon Respondent's request, EPA shall provide Respondent the



opportunity to receive a split of any sample taken by EPA for purposes of this Order. Respondent agrees to provide EPA and its representatives access at all reasonable times to the Facility and subject to the next Paragraph below, to any other property to which access is required for implementation of this Order. Subject to Paragraph 68, 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 Order and that are within the possession or under the control of Respondent or their contractors or consultants, excluding any attorney-client privileged or attorney work product privileged documents.

70. To the extent that work being performed pursuant to this 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 Order from the present owner(s) of such property within thirty (30) days of approval of any Work Plan for which access is required. Best efforts, as used in this Paragraph 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 as necessary and appropriate the payment of reasonable compensation in consideration of granting access. Any such access agreement shall provide for access by EPA and its representatives. Respondent shall ensure that EPA's Project Coordinator has a copy of any access agreement(s). In the event that agreements for access are not obtained within thirty (30) 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 EPA in writing within fourteen (14) days thereafter of both the efforts undertaken to obtain access and the failure to obtain access agreements. EPA may, at its discretion, assist Respondent in obtaining access. In the event EPA obtains access, Respondent shall undertake EPA-approved work on such property.
71. The Respondent agrees to indemnify the United States to the extent provided in Section XXXIII. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT, for any and all claims arising from activities on such property.
72. Nothing in this section limits or otherwise affects EPA's right of access and entry pursuant to applicable law, including RCRA and CERCLA.
73. Nothing in this section shall be construed to limit or otherwise affect Respondent's liability and obligation, if any, to perform corrective action including corrective action beyond the Facility boundary. In case of transfer or lease of any portion of the Facility, Respondent shall retain a right of access to the extent required to fully implement the terms of this Order.

#### **XXVI. RECORD PRESERVATION**

74. Respondent shall retain, during the pendency of this Order and for a minimum of six (6) years after its termination, all 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 Order. Respondent shall notify EPA in writing ninety (90) days prior to the destruction of any



such records, and shall provide EPA with the opportunity to take possession of any such records, including those over which a CBI claim has been made pursuant to Paragraph 68, but excluding any attorney-client privileged or attorney work product privileged documents. Such written notification shall reference the effective date, caption, and docket number of this Order and shall be addressed to:

EPA Project Coordinator  
RCRA Corrective Action and Permitting Section  
RCRA Cleanup and Brownfields Branch  
RCR Division  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

75. Respondent agrees that within thirty (30) days of retaining or employing any agent, consultant, or contractor for the purpose of carrying out the terms of this Order, Respondent will enter into an agreement with any such agents, consultants, and/or contractors whereby such agents, consultants, and/or contractors will be required to provide the Respondent a copy of all documents produced pursuant to this Order.
76. All documents required under this Order shall be stored by the Respondent in a centralized location to afford ease of access by EPA or its representatives.

#### **XXVII. NOTIFICATION AND DOCUMENT CERTIFICATION**

77. Unless otherwise specified, all reports, correspondence, approvals, disapprovals, notices, or other submittals relating to or required under this Order shall be in writing and shall be hand delivered, sent by certified mail, return receipt requested, or by overnight express mail as follows:

- a. Two hardcopies and one electronic copy on a disk and by email in an appropriate standard business format, of all documents to be submitted to the EPA shall be sent to the:

Project Coordinator  
RCRA Corrective Action and Permitting Section  
RCRA Cleanup and Brownfields Branch  
RCR Division  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

- b. One electronic copy on a disk and by email in an appropriate standard business format to:

Chief,  
RCRA Corrective Action and Permitting Section



RCRA Cleanup and Brownfields Branch  
RCR Division  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303.

- c. One hardcopy and one electronic copy on a disk and email in an appropriate standard business format, of all documents to be submitted to ADEM shall be sent to:

Chief, Engineering Services Section  
Industrial Hazardous Waste Branch  
Land Division  
Alabama Dept. of Environmental Mgmt.  
1400 Coliseum Blvd.  
Montgomery, AL 36110

- d. Documents to be submitted to Respondent shall be sent to:

General Manager  
ERP Compliant Coke, LLC  
3500 35<sup>th</sup> Avenue North  
P.O. Box 5327  
Birmingham, Alabama 35207

and

Dan Grucza, Esquire  
Kazmarek, Mowrey, Cloud, and Laseteer  
3008 7<sup>th</sup> Avenue South  
Birmingham, Alabama 35233

78. Any report or other document submitted by a Respondent pursuant to this Order which makes any representation concerning the Respondent's compliance or noncompliance with any requirement of this Order shall be certified by a responsible corporate officer of the 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.
79. The certification required by Paragraph 78 above, shall be in the following form:
- “I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to evaluate the information submitted. I certify that to the best of my knowledge and belief the information contained in or accompanying this submittal is true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify



the accuracy, I certify that this submittal and all attachments were prepared in accordance with procedures designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, or the immediate supervisor of such person(s), 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:

#### **XXVIII. DELAY IN PERFORMANCE/STIPULATED PENALTIES**

80. Unless there has been a written modification by EPA of a compliance date, a written modification by EPA of an approved Work Plan condition, or excusable delay as defined in Section XXIX: Force Majeure and Excusable Delay, if Respondent fails to comply with any term or condition set forth in this Order in the time or manner specified herein, 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 EPA or at the time required pursuant to this Order: \$1,500.00 per day for the first ten business days of such violation, \$2,000.00 per day for the eleventh through twenty-first business day of such violation, and \$2,500.00 per day for each business day of such violation thereafter
  - b. For failure to complete and submit, other written submittals not included in Paragraph 80 (a) of this section in a manner acceptable to EPA or at the time required pursuant to this Order: \$1,000.00 per day for the first ten business days of such violation, \$1,500.00 per day for the eleventh through twenty-first business day of such-violation, and \$2,000.00 per day for each business day of such violation thereafter;
  - c. For failure to comply with any other provisions of this Order in a manner acceptable to EPA: \$1,000.00 per day for the first ten business days of such violation, \$1,500.00 per day for the eleventh through twenty-first business day of such violation, and \$2,000.00 per day for each business day of such violation thereafter.
81. 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 Order. Penalties shall continue to accrue regardless of whether EPA has notified the Respondent of a violation.

82. All penalties owed to the United States under this Section shall be due and payable within thirty (30) days of the Respondent's receipt from EPA of a written demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XX: Dispute Resolution. Such a written demand will describe the violation and will indicate the amount of penalties due.
83. Interest shall begin to accrue on any unpaid stipulated penalty balance beginning on the thirty-first day after Respondent's receipt of 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 days.
84. All penalties shall be made by cashier's check or certified check payable to: **"Treasurer, United States of America"** or by one of the other payment options set out below: The Facility name and the docket number for this matter shall be referenced on the face of the check or noted if possible on the other payment options. The payment options are:

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

US 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  
US EPA Fines & Penalties  
1005 Convention Plaza  
SL-MO-C2-GL  
St. Louis, Missouri 63101  
(314) 418-1028

c. Wire Transfer:

Federal Reserve Bank of New York  
ABA: 021030004  
Account Number: 68010727  
SWIFT address: FRNYUS33  
33 Liberty Street  
New York, New York 10045



Field Tag 4200 of the Fedwire message should read:  
"D 68010727 Environmental Protection Agency

- d. Automated Clearinghouse (ACH) for receiving US currency (also known as REX or remittance express):

PNC Bank  
US Treasury REX / Cashlink ACH Receiver  
ABA: 051036706  
Account Number: 310006, Environmental Protection Agency  
CTX Format Transaction Code 22 – checking  
Environmental Protection Agency  
808 17<sup>th</sup> Street, N.W.  
Washington, DC 20074  
Contact: Jesse White, (301) 887-6548

- e. On line payment:

There is now an On Line Payment Option, available through the Dept. of Treasury. This payment option can be accessed from the information below:

[www.pay.gov](http://www.pay.gov)

Enter sfo 1.1 in the search field

Open form and complete required fields.

- 85. 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 Street, S.W.  
Atlanta, Georgia 30303

and to:

Chief, Hazardous Waste Enforcement and Compliance Section  
Enforcement and Compliance Branch  
RCR Division  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

- 86. Copies of all such checks and letters forwarding the checks shall be sent simultaneously to the EPA Project Coordinator.



87. Respondent may dispute EPA's assessment of stipulated penalties by invoking the dispute resolution procedures under Section XX: DISPUTE RESOLUTION. The stipulated penalties in dispute shall continue to accrue, but need not be paid, during the dispute resolution period. 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 EPA within ten (10) business days of receipt of such resolution in accordance with Paragraph 84 of this Section.

Neither the invocation of dispute resolution nor the payment of penalties shall alter in any way the Respondent's obligation to comply with the terms and conditions of this Order. The stipulated penalties set forth in this section do not preclude EPA from pursuing any other remedies or sanctions which may be available to EPA by reason of Respondent's failure to comply with any of the terms and conditions of this Order. EPA may waive any portion of the stipulated penalties that have accrued pursuant to this Order.

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

#### **XXIX. FORCE MAJEURE AND EXCUSABLE DELAY**

89. Force majeure, for purposes of this 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 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 address it before, during, and after its occurrence, such that any delay or prevention of performance is minimized to the greatest extent possible. Force majeure does not include increased costs of the work to be performed under this Order, or financial inability to complete the work.
90. If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a force majeure event, Respondent shall contact by telephone and communicate orally with EPA's Project Coordinator or, in his or her absence, his or her supervisor or second level manager or, in the event both of EPA's designated representatives are unavailable, the Deputy Director of the RCR Division, EPA Region 4, within forty-eight (48) hours of when Respondent first knew or should have known that the event might cause a delay. Within five (5) days thereafter, Respondent shall provide to 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 force majeure 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 they intend 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, welfare or the environment. Respondent shall include with any notice all available documentation supporting its claim 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. Respondent shall be deemed to have notice of any circumstances of which its contractors had or should have had notice.

91. If EPA determines that the delay or anticipated delay is attributable to a force majeure event, the time for performance of such obligation under this Order that is affected by the force majeure event will be extended by EPA for such time as 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 EPA determines that the delay or anticipated delay has been or will be caused by a force majeure event, 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.
92. If EPA disagrees with Respondent's assertion of a force majeure event, EPA will notify the Respondent in writing and the Respondent may elect to invoke the dispute resolution provision, and shall follow the time-frames set forth in Section XX. 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 time for performance of such obligation will be extended by EPA for such time as is necessary to complete such obligation.

### **XXX. RESERVATION OF RIGHTS**

93. 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 Order, including without limitation the assessment of penalties under Section 3008(h)(2) of RCRA, 42 U.S.C. § 6928(h)(2). This 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 EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States.
94. EPA reserves the right to disapprove of work performed by Respondent pursuant to this Order to the extent that such work does not satisfy the requirements of the Order and, in such event, to order that Respondent perform additional tasks consistent with this Order.
95. EPA reserves any right it may have 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. EPA may exercise its authority under CERCLA to undertake response actions at any time. In any event, EPA reserves its right to seek reimbursement from Respondent for costs incurred by the United States. Notwithstanding compliance with the terms of this Order, Respondent is not



released from liability, if any, for the costs of any response actions taken or authorized by EPA.

96. If EPA determines that activities in compliance or noncompliance with this 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, EPA may order the Respondent to stop further implementation of this Order for such period of time as EPA determines may be needed to abate any such release or threat and/or to undertake any action which EPA determines is necessary to abate such release or threat.
97. This Order is not intended to be nor shall it be construed to be a permit. Further, the parties acknowledge and agree that EPA's approval of any final Work Plan does not constitute a warranty or representation that the Work Plan will achieve the required cleanup or performance standards. Compliance by the Respondent with the terms of this Order shall not relieve the Respondent of its obligation to comply with RCRA or any other applicable local, State, or Federal laws and regulations.
98. The Respondent does not admit any of the factual or legal determinations made by the EPA and reserves all rights and defenses it may have regarding liability or responsibility for conditions at or from the Facility, with the exception of its right to contest EPA's jurisdiction to issue or enforce this Order and its right to contest the terms of this Order. The Respondent has entered into this Order in good faith without trial or adjudication of any issue of fact or law.
99. Notwithstanding any other provision of this Order, no action or decision by EPA pursuant to this Order, including without limitation, decisions of the EPA, the Director or Deputy Director of the RCR Division, or any authorized representative of EPA, shall constitute final agency action giving rise to any right of judicial review prior to EPA's initiation of a judicial action to enforce this Order, including an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this Order.
100. 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.

#### **XXXI. OTHER CLAIMS**

101. Nothing in this 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.



#### **XXXII. OTHER APPLICABLE LAWS**

102. All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable local, State, and Federal laws and regulations. Respondent shall obtain or cause their representatives to obtain all permits and approvals necessary under such laws and regulations.

#### **XXXIII. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT**

103. 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 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.

#### **XXXIV. MODIFICATION**

104. This Order may only be modified by mutual agreement of 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 EPA, and shall be incorporated into this Order.
105. 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. 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 Order.

#### **XXXV. SEVERABILITY**

106. If any provision or authority of this Order or the application of this 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 Order shall remain in force and shall not be affected thereby.

#### **XXXVI. TERMINATION AND SATISFACTION**

107. The provisions of this Order shall be deemed satisfied upon Respondent's and EPA's execution of an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Rights" ("Acknowledgment"). EPA will prepare the Acknowledgment for Respondent's signature. The Acknowledgment will specify that Respondent has



demonstrated to the satisfaction of EPA that the terms of this Order, including any additional tasks determined by EPA to be required pursuant to this Order, have been satisfactorily completed. Respondent's execution of the Acknowledgement will affirm Respondent's continuing obligation (1) to preserve all records as required under the Order and (2) to recognize EPA's reservation of rights in accordance with these respective sections of the Order after the rest of the Order is satisfactorily completed.

#### **XXXVII. SURVIVABILITY/PERMIT INTEGRATION**

108. Except as otherwise expressly provided in this section, this Order shall survive the issuance or denial of a RCRA permit for the Facility, and this Order shall continue in full force and effect after either the issuance or denial of such permit. Accordingly, the Respondent shall continue to be liable for the performance of obligations under this Order notwithstanding the issuance or denial of such permit. If the Facility is issued a RCRA permit and that permit expressly incorporates all or a part of the requirements of this Order, or expressly states that its requirements are intended to replace some or all of the requirements of this Order, Respondent may request a modification of this Order and shall, with EPA approval, be relieved of liability under this Order for those specific obligations.

#### **XXXVIII. EFFECTIVE DATE**

109. The effective date of this Order shall be five (5) days after Respondent has received notice from EPA that EPA has signed the Order.

#### **AGREED AND CONSENTED TO:**

##### **ERP Compliant Coke, LLC.**

By: Scott Castleberry  
Scott Castleberry  
General Manager  
ERP Compliant Coke, LLC

Dated: 7/5/16

##### **U.S. Environmental Protection Agency**

By: Jeffrey T. Pallas  
Jeffrey T. Pallas  
Deputy Director  
RCR Division  
US EPA, Region 4  
61 Forsyth Street S.W.  
Atlanta, Georgia 30303-3104

Dated: 7/19/16



## **Attachment A: DEFINITIONS & TERMS**

Unless otherwise expressly provided herein or listed below, terms used in this Order which are defined in RCRA or in regulations promulgated under RCRA shall have the meaning assigned to them under RCRA or in such regulations.

- a) “Administrative Record” shall mean the record compiled and maintained by EPA relative to this Order. 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.
- b) An “Area of Concern” (AOC) includes any discrete contiguous area that is not a 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.
- c) “CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, et seq.
- d) The terms “Comply” or “Compliance” may be used interchangeably and shall mean performance of work required by this Order of a quality approvable by EPA, and in the manner and the time specified in this Order or any modification thereof or its attachments or any modification thereof. 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 Order.
- e) “Contractor” shall include any subcontractor, consultant or laboratory retained to conduct or monitor any portion of the work performed pursuant to this Order.
- f) “Confirmatory Sampling” shall mean environmental sampling and analysis to confirm that hazardous waste or hazardous constituents have been released into the environment from SWMUs or AOCs at the Facility. Confirmatory Sampling may result in a determination of no further action.
- g) “Day” shall mean a calendar day unless expressly stated to be a business day.
- h) “Business Day” shall mean a day other than a Saturday, Sunday, or Federal Holiday. In computing any period of time under this 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.
- i) “EPA” or “U.S. EPA” shall mean the United States Environmental Protection Agency, and any successor departments or agencies of the United States.
- j) “Extent of Contamination” is defined as the horizontal and vertical area in which the concentrations of hazardous constituents in the environmental media being



investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the EPA.

- k) “Facility” shall mean the former Walter Coke, Inc. facility, now the ERP Compliant Coke, LLC, facility, located at 3500 35<sup>th</sup> Avenue North, Birmingham, Alabama 33618.
- l) “Hazardous Constituents” shall include mean those constituents contained within hazardous and nonhazardous solid waste that are listed in Appendix VIII of 40 C.F.R. Part 261 or in Appendix IX of 40 C.F.R. Part 264.
- m) “Interim Measures” for the purpose of this Order interim measures are actions necessary to minimize or prevent the further migration of contaminants subject to regulation under RCRA and limit actual or potential human and environmental exposure to contaminants subject to regulation under RCRA while long-term corrective action remedies are evaluated and, if necessary, implemented.
- n) “Institutional Controls and/or Land Use Restrictions” for the purpose of this Order are legal instruments that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy.
- o) “RCRA” shall mean the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. §§ 6921 et. seq.
- p) “Receptors” shall mean those humans, animals, or plants and their habitats affected by releases subject to regulation under RCRA from the Facility.
- q) “Release” for purposes of this Order shall mean any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous constituents that is subject to regulation under RCRA.
- r) A “Remedy” for the purposes of this Order, is selected actions or measures to be implemented to prevent, mitigate, and/or remediate any release of hazardous waste or hazardous constituents at or from the Facility regardless of whether the action or measure must be undertaken on the Respondent’s property or on adjacent properties impacted by hazardous wastes or hazardous constituents from the Facility.
- s) “Scope of Work” shall mean the outline of work that the Respondent must use to develop all Work Plans and reports required by this Order. All Scopes of Work and modifications or amendments thereto are incorporated by reference and are an enforceable part of this Order.
- t) “Site” shall mean the facility, as defined herein
- v) “SWMU Management Area” (SMA) means areas of SWMUs or AOCs with similar exposures, chemical drivers, and proposed remedial actions.



- w) “Solid Waste Management Unit” (SWMU) for the purpose of this Order means any unit which has been used for the treatment, storage or disposal of a solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid wastes. SWMUs include areas that have been contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding, for example, one-time accidental spills that are immediately remediated and cannot be linked to solid waste management activities (e.g., product or process spills).
- x) “State” shall mean the State of Alabama.
- y) “Submittal” shall mean any written document that Respondent is required by this Order to send to EPA.
- z) “United States” shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.
- aa) “Waste Material” shall mean (a) any hazardous substance under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any hazardous waste under Alabama Code Section 22-30-3(5).
- bb) “Work” or “Obligation” shall mean any activity Respondent must perform to comply with the requirements of this Order and its attachments.



**Attachment B:**

**(For electronic version, Maps in PDF format are separately attached but incorporated as Attachment B into the Order)**

**MAPs prepared by Terracon for the  
former Walter Coke Facility  
Birmingham, Alabama  
Project No. E1127096  
Figures 1-6  
Entitled in the Legend:**

**Figure 1: Proposed Solid Waste Management Areas (SMAs) dated 7/24/2012**

**Figure 2: BTF Process Area and Sewers - SMA 1 dated 8/16/2012**

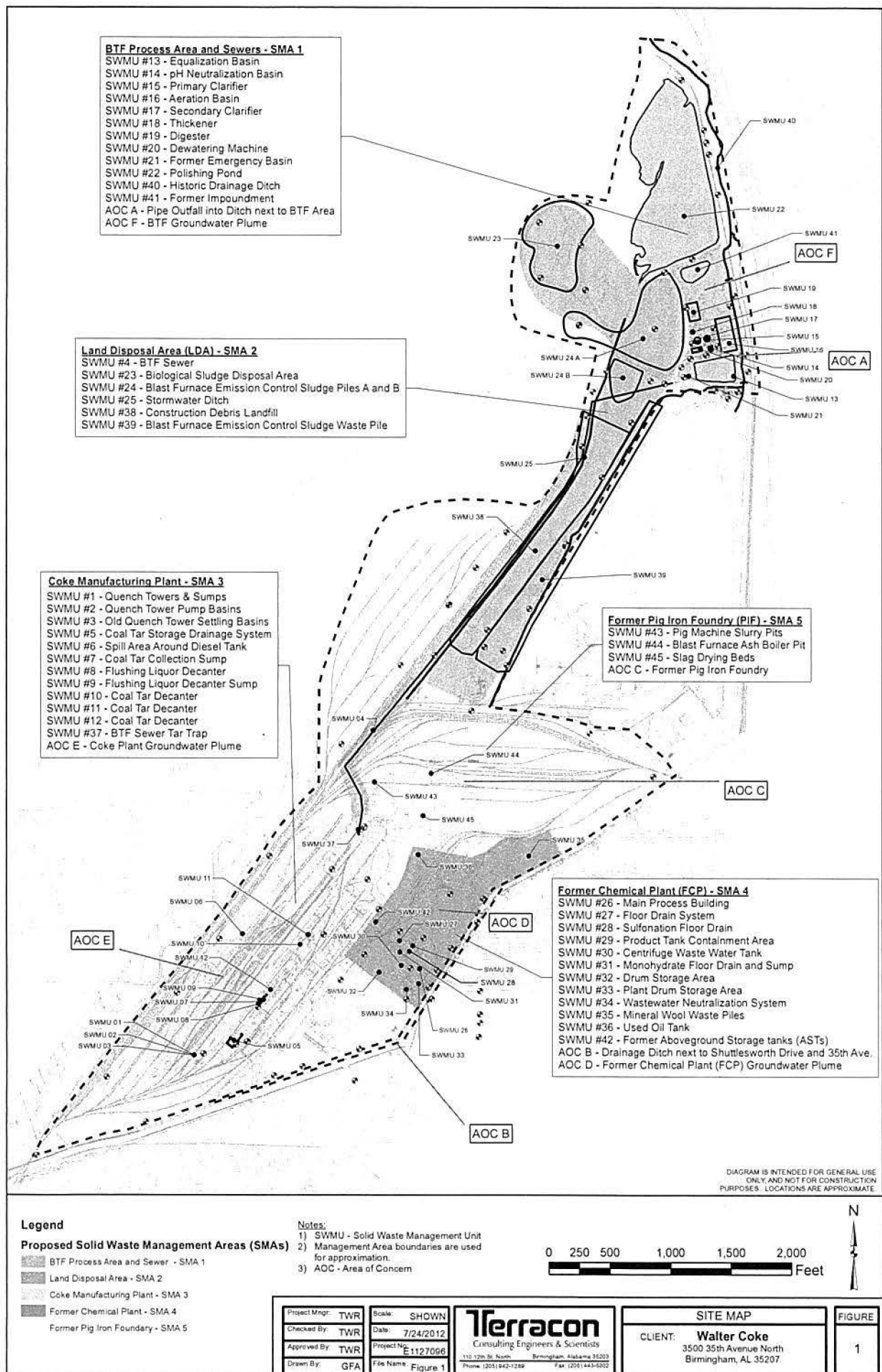
**Figure 3: Land Disposal Area - SMA 2 dated 8/16/2012**

**Figure 4: Coke Manufacturing Plant - SMA 3 dated 8/16/2012**

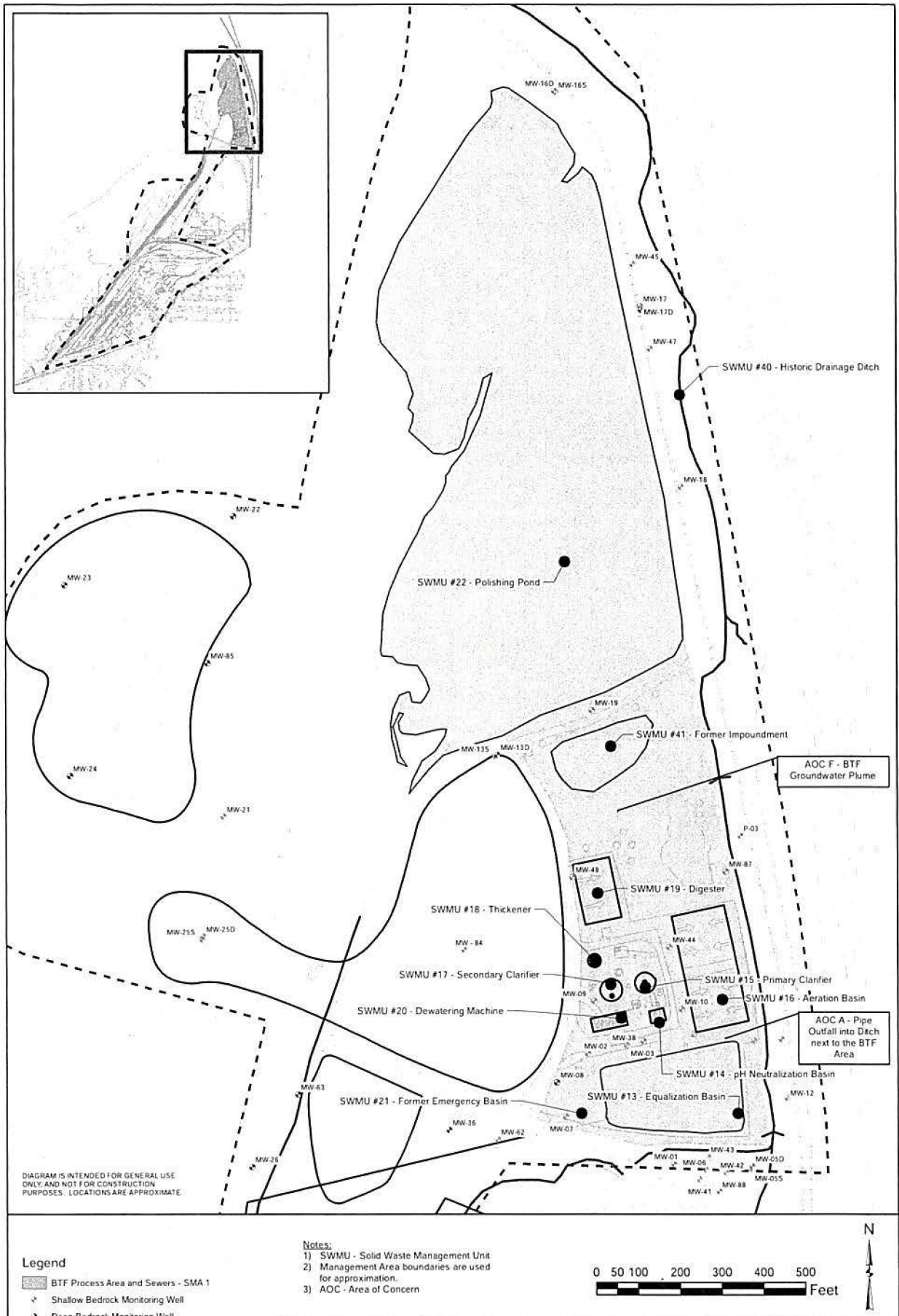
**Figure 5: Former Chemical Plant - SMA 4 dated 8/16/2012**

**Figure 6: Former Pig Iron Foundry - SMA 5 dated 8/16/2012**

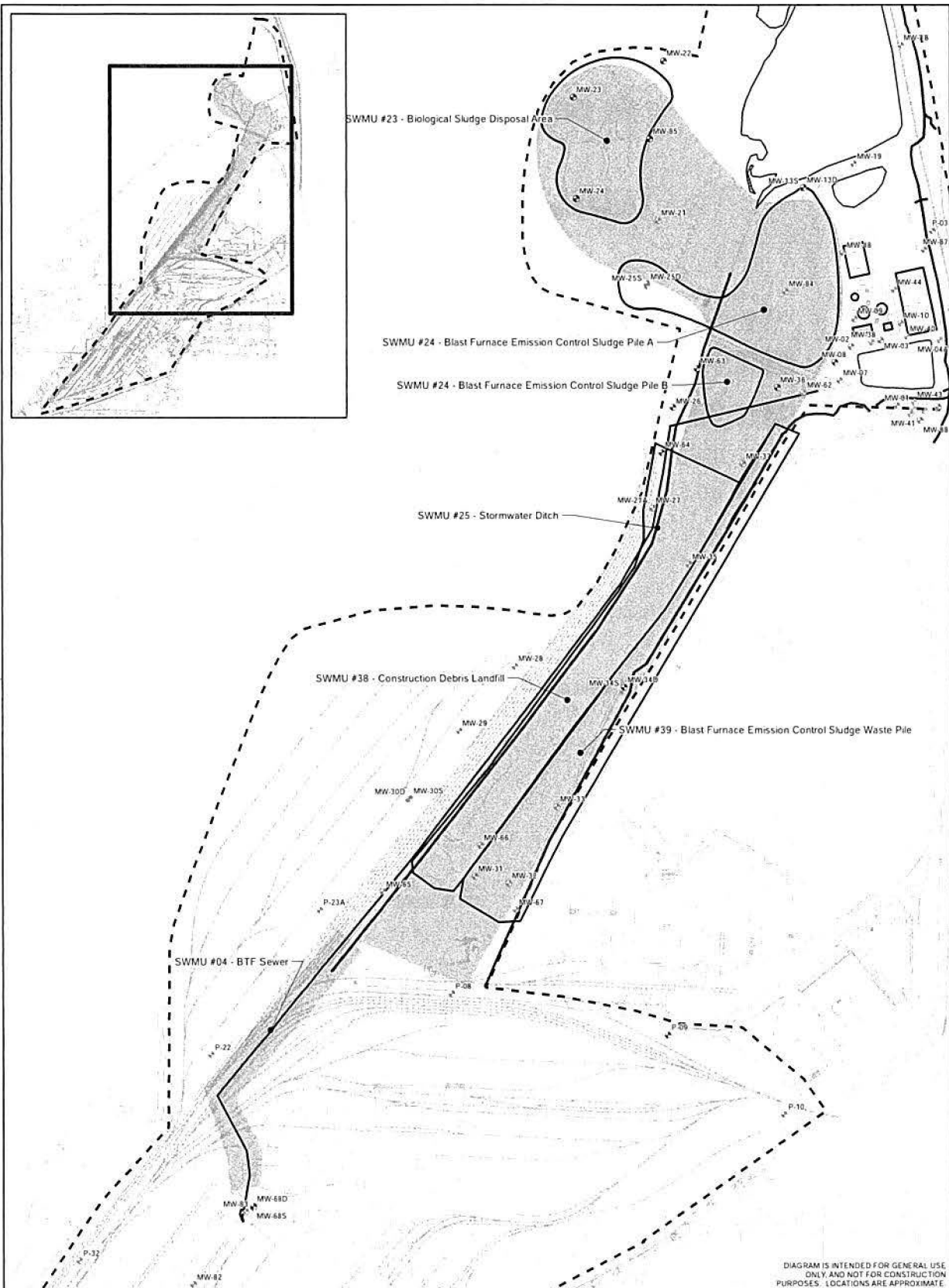












#### Legend

- Land Disposal Area - SMA 2
- Shallow Bedrock Monitoring Well
- Deep Bedrock Monitoring Well
- Residuum or Mixed Monitoring Well
- Non-Conasauga Limestone Monitoring Well

#### Notes:

- 1) SWMU - Solid Waste Management Unit
- 2) Management Area boundaries are used for approximation.
- 3) AOC - Area of Concern

0 125 250 500 750 1,000 Feet



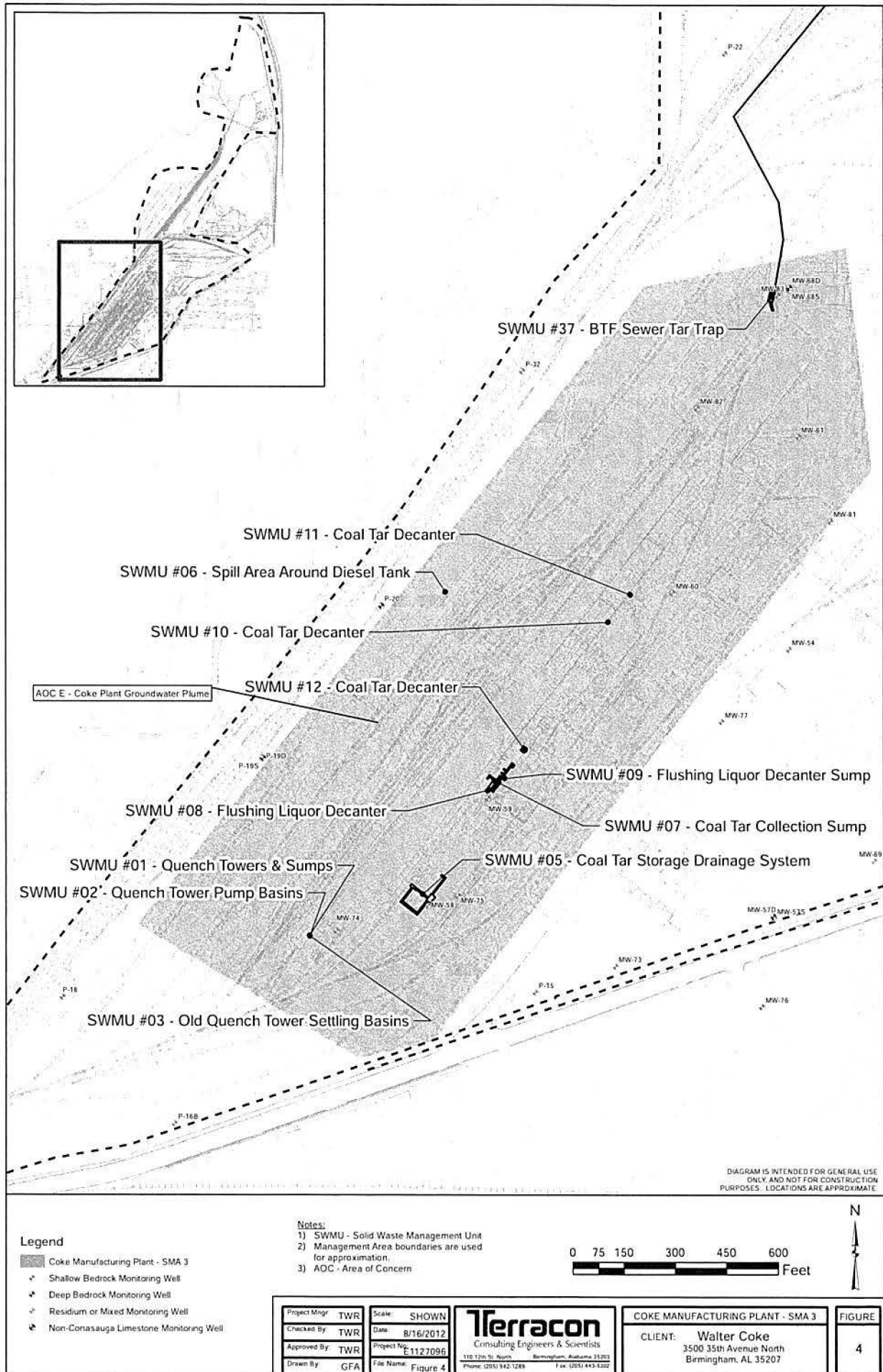
Project Mgr:	TWR	Scale:	SHOWN
Checked By:	TWR	Date:	8/16/2012
Approved By:	TWR	Project No:	1127096
Drawn By:	GFA	File Name:	Figure 3

**Terracon**  
Consulting Engineers & Scientists  
110 12th St. North Birmingham, Alabama 35203  
Phone: (205) 842-1289 Fax: (205) 842-1302

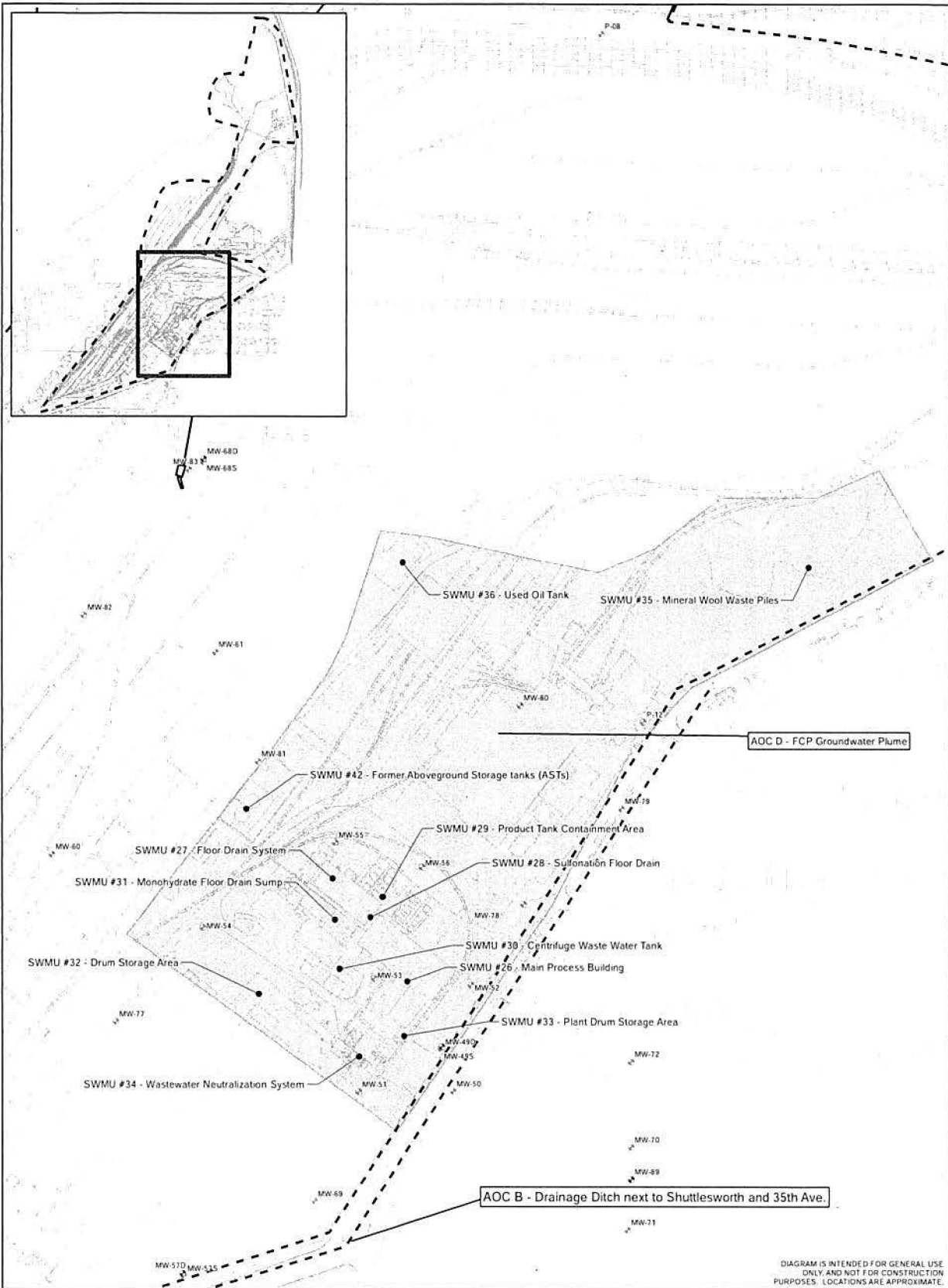
LAND DISPOSAL AREA (LDA) - SMA 2  
CLIENT: Walter Coke  
3500 35th Avenue North  
Birmingham, AL 35207

FIGURE  
3









#### Legend

- Former Chemical Plant - SMA 4
- Shallow Bedrock Monitoring Well
- Deep Bedrock Monitoring Well
- Residuum or Mixed Monitoring Well
- Non-Conasauga Limestone Monitoring Well

- Notes:
- 1) SWMU - Solid Waste Management Unit
  - 2) Management Area boundaries are used for approximation.
  - 3) AOC - Area of Concern

0 62.5 125 250 375 500 Feet



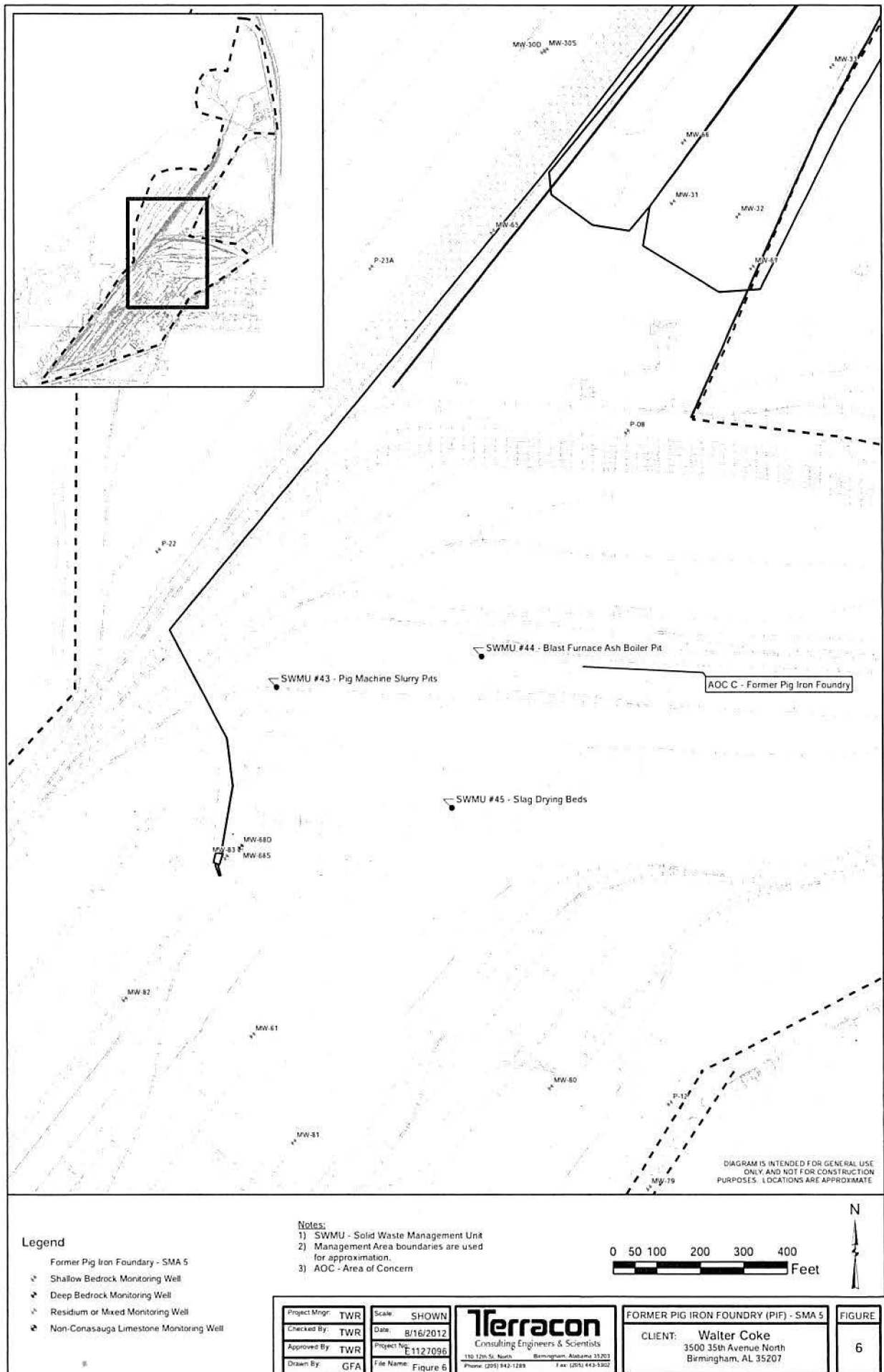
Project Mgr:	TWR	Scale:	SHOWN
Checked By:	TWR	Date:	8/16/2012
Approved By:	TWR	Project No:	E1127096
Drawn By:	GFA	File Name:	Figure 5

**Terracon**  
Consulting Engineers & Scientists  
110 12th St. North, Birmingham, Alabama 35201  
Phone: (205) 942-1285 Fax: (205) 443-1302

FORMER CHEMICAL PLANT (FCP) - SMA 4  
CLIENT: Walter Coke  
3500 35th Avenue North  
Birmingham, AL 35207

FIGURE  
5







## **Attachment C: Financial Assurance**

1. Following RTC issuance for each Remedy, the Respondent shall provide cost estimates, and demonstrate financial assurance for completing the approved Remedy. Thereafter, the Respondent shall review the Remedy cost estimates, adjust the financial assurance instrument, and submit the revised estimate and instrument to the EPA annually for each Remedy.
  - a. Within 120 calendar days of RTC issuance for each remedy, Respondent shall submit to EPA for review and approval an Estimated Cost of the Corrective Measures Work to Be Performed that includes the total third party cost of implementing the CMS remedy, including any necessary long-term CMS costs. Third-party costs are described in 40 C.F.R. § 264.142(a)(2) and shall include all direct costs and also all indirect costs (including contingencies) as described in EPA Directive No. 9476.00-6 (November, 1986), Volume III, Chapter 10. The cost estimate shall contain sufficient details to allow it to be evaluated by EPA.
  - b. Until the CMS remedy required by this Order is completed, Respondent shall annually adjust the Estimated Cost of the Corrective Measures Work for inflation within thirty (30) days after the close of Respondent's fiscal year for the Financial Test and Corporate Guarantee, or within sixty (60) days prior to the anniversary date of the establishment of all other financial assurance. In addition, the Respondent shall adjust the Estimated Cost of the Corrective Measures Work if EPA determines that any additional Work is required, pursuant to Section XXII Additional Work, or if any other condition increases the cost of the work to be performed under this Order.
  - c. The EPA shall either approve or disapprove, in writing, the Estimated Cost of the Corrective Measures Work. If the EPA disapproves the Estimated Cost of the Corrective Measures Work, the EPA shall either: (1) notify the Respondent in writing of the Estimated Cost of the Corrective Measures Work's deficiencies and specify a due date for submission of a revised Estimated Cost of the Corrective Measures Work, or (2) conditionally approve the CMS and notify the Respondent of the conditions.
  - d. The mechanism for financial assurance shall be one that is described and allowable under 40 C.F.R. §§ 264.140 through 264.151 Subpart H unless otherwise agreed to by the EPA.
  - e. Within 60 calendar days of EPA's written approval of the Estimated Cost of the Corrective Measures Work for each remedy, in order to secure the full and final completion of work in accordance with this Order, Respondent shall establish and maintain financial assurance for the benefit of EPA for the amount stated in the approved Estimated Cost of the Corrective Measures Work. Respondent may use one or more of the financial assurance instruments generally described in 40 C.F.R. § 264.151. Respondent may combine more than one instrument to demonstrate financial assurance in accordance with this Order, except that instruments guaranteeing performance (i.e. surety bond for performance, the financial test, or the



corporate guarantee) rather than payment may not be combined with other instruments.

- f. Any and all financial assurance instruments provided under this Order shall be satisfactory in form and substance as determined by EPA.
2. If the Respondent seeks to establish financial assurance by using the financial test specified in 40 C.F.R. § 264.151, Respondent shall submit to EPA within 60 days of EPA's approval of the Estimated Cost of the Corrective Measures Work all documentation required by that regulation, including the Chief Financial Officer's letter, the Respondent's most recent audited financial statements, and the special auditor's letter. Respondent's financial assurance shall be considered effective immediately upon EPA's determination that the submitted financial information appears to satisfy the financial test criteria.
3. If Respondent seeks to establish financial assurance by using a surety bond or a letter of credit, Respondent shall at the same time establish, and thereafter maintain, a standby trust fund, which meets the requirements specified in 40 C.F.R. § 264.151, into which funds from the other financial assurance instrument can be deposited, if the financial assurance provider is directed to do so by EPA.
4. (a) Respondent shall submit proposed (draft) financial assurance instruments and related required documents for review to EPA as follows:

EPA Project Coordinator  
RCRA Corrective Action and Permitting Section  
RCRA Cleanup and Brownfields Branch  
RCR Division  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

(b) Following EPA's approval of Respondent's proposed (draft) financial assurance instruments for each and every Remedy, Respondent shall execute or otherwise finalize all instruments or other required documents, and shall submit them as follows:

Regional Administrator  
Attn: RCRA & CERCLA Records Program Manager  
Atlanta Federal Center – 11<sup>th</sup> Floor  
United States Environmental Protection Agency  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303
5. Also, copies of all final financial assurance instruments and related required documents shall be sent by certified mail to the State of Alabama.



6. If at any time during the effective period of this Order, the Respondent provides financial assurance by means of a corporate guarantee or financial test pursuant to 40 C.F.R. § 264.151, Respondent shall also comply with the other relevant requirements of 40 C.F.R. § 264.143(f), 40 C.F.R. § 264.151(f), and 40 C.F.R. § 264.151(h)(1) relating to these methods, unless otherwise provided in this Order, including but not limited to, (1) initial submission of required financial reports and statements from the guarantors' chief financial officer and independent certified public accountant; (2) annual re-submission of such reports and statements within ninety (90) days after the close of each of the guarantors' fiscal years; and (3) notification of EPA within ninety (90) days after the close of any of the guarantors' fiscal years in which any such guarantor no longer satisfies the financial test requirements set forth at 40 C.F.R. § 264.143(f)(1). Respondent further agrees that if the Respondent provides financial assurance by means of a corporate guarantee or financial test, EPA may request additional information (including financial statements and accountant's reports) from the Respondent or corporate guarantor at any time.
7. For purposes of evaluating the viability of a corporate guarantee or satisfaction of the financial test described in 40 C.F.R. § 264.151, references in 40 C.F.R. § 264.143(f) or 40 C.F.R. § 264.145(f) to "the sum of current closure and post-closure costs and the current plugging and abandonment cost estimates" shall mean "the sum of all environmental remediation obligations" (including obligations under CERCLA, RCRA, Underground Injection Control (UIC), TSCA and any other state or tribal environmental obligation) guaranteed by such company or for which such company is otherwise financially obligated in addition to the cost of the work to be performed in accordance with this Order.
8. If at any time EPA determines that a financial assurance instrument provided pursuant to this Section is inadequate, or no longer satisfies the requirements set forth or incorporated by reference in the Section, whether due to an increase in the estimated cost of completing the Work or for any other reason, EPA shall so notify the Respondent in writing. If at any time the Respondent becomes aware of information indicating that any financial assurance instrument provided pursuant to this Section is inadequate or no longer satisfies the requirements set forth or incorporated by reference in the Section, whether due to an increase in the estimated cost of completing the Corrective Measures or for any other reason, then Respondent shall notify EPA in writing of such information within ten days. Within thirty (30) days of receipt of notice of EPA's determination, or within thirty (30) days of Respondent becoming aware of such information, as the case may be, Respondent shall obtain and present to EPA for approval, a proposal for a revised or alternative form of financial assurance listed in 40 C.F.R. § 264.151 that satisfies all requirements set forth or incorporated by reference in this Section.
9. Respondent's inability or failure to establish or maintain financial assurance for completion of the work shall in no way excuse performance of any other requirements of this Order, including, without limitation, the obligation of Respondent to complete the work in strict accordance with the terms of this Order.



10. If Respondent elects to establish financial assurance by using a letter of credit, a surety bond, or an insurance policy, any and all automatic renewal requirements and/or cancellation notification terms related to those instruments shall be in accordance with the regulations at 40 C.F.R. §§ 264.143, .145 and .151.
11. In the event that EPA determines that the Respondent (1) has ceased implementation of any portion of the work, (2) is significantly or repeatedly deficient or late in its performance of the work, or (3) is implementing the work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Performance Failure Notice") to both the Respondent and the financial assurance provider of Respondent's failure to perform. The notice issued by EPA will specify the grounds upon which such a notice was issued, and will provide the Respondent with a period of ten days within which to remedy the circumstances giving rise to the issuance of such notice.
12. Failure by the Respondent to remedy the relevant Performance Failure to EPA's satisfaction before the expiration of the ten-day notice period shall trigger EPA's right to have immediate access to and benefit of the financial assurance. EPA may at any time thereafter direct the financial assurance provider to immediately (1) deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument (2) or arrange for performance of the work in accordance with this Order.
13. If EPA has determined that any of the circumstances of performance failure described above have occurred, and if EPA is nevertheless unable after reasonable efforts to secure the payment of funds or performance of the work in accordance with this Order from the financial assurance provider pursuant to this Order, then, upon receiving written notice from EPA, Respondent shall within ten days thereafter deposit into the standby trust fund, or a newly created trust fund approved by 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 Order as of such date, as determined by EPA.
14. Respondent may invoke the procedures set forth in Section XX. DISPUTE RESOLUTION, to dispute EPA's determination that any of the circumstances of performance failure described above have occurred. Invoking the dispute resolution provisions shall not excuse, toll or suspend the obligation of the financial assurance provider to fund the trust fund or perform the work. Furthermore, notwithstanding Respondent's invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion direct the trustee of such trust fund to make payments from the trust fund to any person that has performed the work in accordance with this Order until the earlier of (1) the date that Respondent remedies, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Performance Failure Notice or (2) the date that a final decision is rendered in accordance with Section XX. DISPUTE RESOLUTION, that Respondent has not failed to perform the work in accordance with this Order.



15. Reduction of Amount of Financial Assurance. If the Respondent believes that the estimated cost to complete the remaining Corrective Measures has diminished below the amount covered by the existing financial assurance provided under this Order, Respondent may, at the same time that Respondent submits the annual cost adjustment, or at any other time agreed to by EPA, submit a written proposal to EPA to reduce the amount of the financial assurance provided under this Section so that the amount of the financial assurance is equal to the estimated cost of the remaining work to be performed. The written proposal shall specify, at a minimum, the cost of the remaining work to be performed and the basis upon which such cost was calculated. EPA shall notify Respondent of its decision in writing. After receiving EPA's written decision, Respondent may reduce the amount of the financial assurance only in accordance with and to the extent permitted by such written decision. In the event of a dispute, Respondent may reduce the amount of the financial assurance required hereunder only in accordance with the final EPA dispute decision resolving such dispute. No change to the form or terms of any financial assurance provided under this Section, other than a reduction in amount, is authorized except as provided below.
16. Change of Form of Financial Assurance. (1) If the Respondent desires to change the form or terms of financial assurance, Respondent may, at the same time that the Respondent submits the annual cost adjustment, or at any other time agreed to by EPA, submit a written proposal to EPA to change the form of financial assurance. The submission of such proposed revised or alternative form of financial assurance shall be as provided in paragraph (2) below. The decision whether to approve a proposal shall be made in EPA's sole and unreviewable discretion and such decision shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Order or in any other forum. (2) A written proposal for a revised or alternative form of financial assurance shall specify, at a minimum, the cost of the remaining work to be performed, the basis upon which such cost was calculated, and the proposed revised form of financial assurance, including all proposed instruments or other documents required in order to make the proposed financial assurance legally binding. The proposed revised or alternative form of financial assurance shall satisfy all requirements set forth or incorporated by reference in this Section. EPA shall notify the Respondent in writing of its decision to accept or reject a revised or alternative form of financial assurance submitted pursuant to this Paragraph. Within ten (10) days after receiving a written decision approving the proposed revised or alternative financial assurance, Respondent shall execute and/or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding in a form substantially identical to the documents submitted to EPA as part of the proposal, and such financial assurance shall be fully effective. Respondent shall submit all executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding to the RCRA & CERCLA Records Program Manager within thirty (30) days of receiving a written decision approving the proposed revised or alternative financial assurance, with a copy to the EPA Project Coordinator and the State. EPA shall release, cancel or terminate the prior existing financial assurance instruments only after Respondent has submitted all executed and/or otherwise finalized new financial assurance instruments or other required documents to EPA.



17. Release of Financial Assurance. Respondent may submit a written request to the EPA Project Coordinator that EPA releases the Respondent from the requirement to maintain financial assurance under this Section at such time as EPA and Respondent have both executed an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Right" pursuant to Section XXXVI: Termination and Satisfaction, of this Order. EPA shall notify both the Respondent and the provider(s) of the financial assurance that Respondent is released from all financial assurance obligations under this Order. Respondent shall not release, cancel or terminate any financial assurance provided pursuant to this section except as provided in this Order. In the event of a dispute, Respondent may release, cancel, or terminate the financial assurance required hereunder only in accordance with a final administrative or judicial decision resolving such dispute.



## Attachment D: SWMU Management Areas (SMAs)

### SWMU MANAGEMENT AREAS (SMAs) – SWMU List

SMA	SWMUs	Schedule for Completion and Submission of Final Report to EPA
<b>BTF PROCESS AREA &amp; SEWERS – SMA 1</b>	SWMU #13 (Equalization Basin) SWMU #14 (pH Neutralization Basin) SWMU #15 (Primary Clarifier) SWMU #16 (Aeration Basin) SWMU #17 (Secondary Clarifier) SWMU #18 (Thickener) SWMU #19 (Digester) SWMU #20 (Dewatering Machine) SWMU #21 (Former Emergency Basin) SWMU #22 (Polishing Pond) SWMU #40 (Historic Drainage Ditch) SWMU #41 (Former Impoundment) AOC A (Pipe Outfall into Ditch next to BTF Area) AOC F (BTF Groundwater Plume)	180 days
<b>Land Disposal Area (LDA) – SMA 2</b>	SWMU #4 (BTF Sewer) SWMU #23 (Biological Sludge Disposal Area) SWMU #24 (Blast Furnace Emission Control Sludge Piles A and B) SWMU #25 (Stormwater Ditch) SWMU #38 (Construction Debris Landfill) SWMU #39 (Blast Furnace Emission Control Sludge Waste Pile)	270 days
<b>Coke Manufacturing Plant (CMP) – SMA 3</b>	SWMU #1 (Quench Towers and Sumps) SWMU #2 (Quench Tower Pump Basins) SWMU #3 (Old Quench Tower Settling Basins) SWMU #5 (Coal Tar Storage Drainage System) SWMU #6 (Spill Area Around Diesel Tank) SWMU #7 (Coal Tar Collection Sump) SWMU #8 (Flushing Liquor Decanter) SWMU #9 (Flushing Liquor Decanter Sump) SWMU #10 (Coal Tar Decanter) SWMU #11 (Coal Tar Decanter) SWMU #12 (Coal Tar Decanter) SWMU #37 (BTF Sewer Tar Trap) AOC E (Coke Plant Groundwater Plume)	12 months
<b>Former Chemical Plant (FCP) – SMA 4</b>	SWMU #26 (Main Process Building) SWMU #27 (Floor Drain System) SWMU #28 (Sulfonation Floor Drain) SWMU #29 (Product Tank Containment Area) SWMU #30 (Centrifuge Waste Water Tank) SWMU #31 (Monohydrate Floor Drain and Sump) SWMU #32 (Drum Storage Area) SWMU #33 (Plant Drum Storage Area) SWMU #34 (Wastewater Neutralization System) SWMU #35 (Mineral Wool Waste Piles) SWMU #36 (Used Oil Tank) SWMU #42 (Former Aboveground Storage tanks [ASTs]) AOC B (Drainage Ditch next to Shuttlesworth Drive and 35 <sup>th</sup> Ave) AOC D (Former Chemical Plant [FCP] Groundwater Plume)	18 months
<b>Former Pig Iron Foundry (PIF) – SMA 5</b>	SWMU #43 (Pig Machine Slurry Pits) SWMU #44 (Blast Furnace Ash Boiler Pit) SWMU #45 (Slag Drying Beds) AOC C (Former Pig Iron Foundry)	24 months



## **Attachment E: 45 SWMUs and 6 AOCs**

- 
- 1 - Quench Towers & Sumps
  - 2 - Quench Tower Pump Basins
  - 3 - Old Quench Tower Settling Basins
  - 4 - BTF Sewer
  - 5 - Coal Tar Storage Drainage System
  - 6 - Spill Area Around Diesel Tank
  - 7 - Coal Tar Collection Sump
  - 8 - Flushing Liquor Decanter
  - 9 - Flushing Liquor Decanter Sump
  - 10 - Coal Tar Decanter
  - 11 - Coal Tar Decanter
  - 12 - Coal Tar Decanter
  - 13 - Equalization Basin
  - 14 - pH Neutralization Basin
  - 15 - Primary Clarifier
  - 16 - Aeration Basin
  - 17 - Secondary Clarifier
  - 18 - Thickener
  - 19 - Digester
  - 20 - Dewatering Machine
  - 21 - Former Emergency Basin
  - 22 - Polishing Pond
  - 23 - Biological Sludge Disposal Area
  - 24 - Blast Furnace Emission Control Sludge Piles A and B
  - 25 - Storm Water Ditch
  - 26 - Main Process Building
  - 27 - Floor Drain System
  - 28 - Sulfonation Floor Drain
  - 29 - Product Tank Containment Area
  - 30 - Centrifuge Waste Water Tank
  - 31 - Monohydrate Floor Drain & Sump
  - 32 - Drum Storage Area
  - 33 - Plant Drum Storage Area
  - 34 - Wastewater Neutralization System



- 35 - Mineral Wool Waste Piles
- 36 - Used Oil Tank
- 37 - BTF Sewer Tar Trap
- 38 - Construction Debris Landfill
- 39 - Blast Furnace Emission Control Sludge Waste Pile
- 40 - Historic Drainage Ditch
- 41 - Former Impoundment
- 42 - Former Aboveground Storage Tanks (ASTs)
- 43 - Pig Machine Slurry Pits
- 44 - Blast Furnace Ash Boiler Pit
- 45 - Slag Drying Beds

- AOC A - Pipe Outfall into Ditch next to the BTF Area
- AOC B - Drainage Ditch next to Shuttlesworth and 35th Ave.
- AOC C - Former Pig Iron Foundry
- AOC D - Former Chemical Plant (FCP) Groundwater Plume
- AOC E - Coke Plant Groundwater Plume
- AOC F - BTF Groundwater Plume



**CERTIFICATE OF SERVICE**

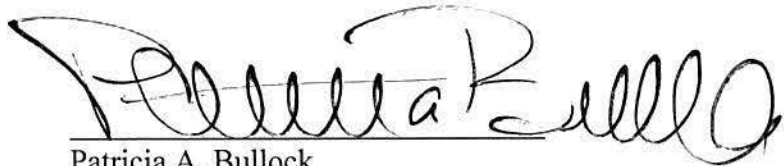
I hereby certify that I have this day filed the original and a true and correct copy of the foregoing RCRA Section 3008(h) Order on Consent, In The Matter of ERP Compliant Coke, LLC, Docket Number: RCRA-04-2016-4250, and one copy of the Administrative Record, and have served the parties listed below the Order on Consent in the manner indicated:

Joan Redleaf Durbin (Via EPA's electronic mail)  
Associate Regional Counsel  
Office of RCRA/CERCLA Legal Support  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303-8960

Quantindra Smith (Via EPA's electronic mail)  
Enforcement and Compliance Branch  
RCR Division  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303-8960

Scott Castleberry (Via Certified Mail - Return Receipt Requested)  
General Manager Coke Division  
ERP Compliant Coke, LLC  
3500 35<sup>th</sup> Avenue North  
P.O. Box 5327  
Birmingham, Alabama 35207

Date: 8-11-16




Patricia A. Bullock  
Regional Hearing Clerk  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303-8960  
(404) 562-9511



# Exhibit CX04



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---

# EPA RCRA ID: ALD000828848

**BLUESTONE COKE, L.L.C.**  
**BIRMINGHAM, AL 35207-2919**

**Disclaimer/Legal Notices** <<https://www.epa.gov/cleanups/cimc-legal-notices>>

## On this page:

- Cleanup Status
- Facility Description
- Institutional/Engineering Controls
- Enforcement and Compliance
- Related Information
- Contacts for this Facility



# Cleanup Status

Cleanup Actions or environmental indicators characterizing the entire facility are shown below. It is not intended as an exhaustive list of milestones/activities. This listing, and all the data on this page, come from EPA's RCRAInfo, which is updated by EPA, states, and tribes as they are able, and refreshed nightly to this page. For this table and the dynamic Cleanup Activities Pertaining to a Portion of the Facility table that follows, a blank in the Status column could mean the action either has not occurred or has not been reported to EPA in RCRAInfo.

## Cleanup Activities Pertaining to the Entire Facility:

Action	Status	Date of Action
<u>Human Exposure Under Control (CA 725)</u>	Yes, Controlled	09-21-2018
<u>Groundwater Migration Under Control (CA 750)</u>	No, Not Controlled	09-30-2005
<u>Remedy Decision (CA400)</u>		
<u>Remedy Construction (CA550)</u>		
<u>Ready for Anticipated Use (CA800)</u>		
<u>Performance Standards Attained (CA900)</u>		
<u>Corrective Action Process Terminated (CA999)</u>		

For definitions of the terms used, hover over or click on the term.

## Facility Facts

**EPA RCRA ID:** ALD000828848

**Location:** 3500 35TH AVENUE NORTH,  
BIRMINGHAM, AL, 35207-2919

**Approximate Property Area:** 460  
acres

**Other Names:** Alternative Site Names

**Cleanup Status:** Site has been  
Assessed

**Human Exposures under Control:**  
Yes, Controlled

**Groundwater under Control:**  
No, Not Controlled



**Cleanup Activities Pertaining to a Portion of the Facility:**

<input type="text"/>	Search	
Action	Area Name	Date of Action
<a href="#">Remedy Decision (CA400)</a>	SMA 4 - FORMER CHEMICAL PLANT	02-23-2018
<a href="#">Remedy Decision (CA400)</a>	SMA 5 - FORMER PIG IRON FOUNDRY	02-23-2018
<a href="#">Remedy Construction (CA550)</a>	SMA 5 - FORMER PIG IRON FOUNDRY	02-23-2018
<a href="#">Remedy Construction (CA550)</a>	SMA 4 - FORMER CHEMICAL PLANT	12-02-2020
<a href="#">Remedy Construction (CA550)</a>	SMA 5 - FORMER PIG IRON FOUNDRY	11-16-2020
<a href="#">Performance Standards Attained (CA900)</a>	SMA 5 - FORMER PIG IRON FOUNDRY	02-23-2018

For definitions of the terms used, hover over or click on the term.

[Top of Page](#)

## Facility Description

Link to a larger, interactive view of the map.

[<https://map22.epa.gov/cimc/specific&params=rcra\\_handler\\_id=ald000828848>](https://map22.epa.gov/cimc/specific&params=rcra_handler_id=ald000828848)

### Additional Facility Information

- [Contacts for this Clean Up](#)



- More Information from the Envirofacts database

[Top of Page](#)

---

## Institutional and Engineering Controls at this Facility

Institutional and Engineering Controls help ensure human exposure and groundwater migration are under control at a cleanup facility. Where control types have been reported by states and EPA in EPA's RCRAInfo, they are shown below. Not all control types are needed at all facilities, and some facilities do not require any controls. Where there are blanks, the control types may not be needed, may not be in place, or may not be reported in RCRAInfo.

### Are Controls in Place at this Facility?

Control(s) Type	Control(s) in Place?	Area(s) Subject to Control(s)
-----------------	----------------------	-------------------------------



<b>Institutional Controls (CA 772)</b>	<b>Information Device (ID)</b>		
	<b>Governmental Control (GC)</b>	Yes	SMA 4 - FORMER CHEMICAL PLANT SMA 5 - FORMER PIG IRON FOUNDRY
	<b>Enforcement &amp; Permit Tools (EP)</b>	Yes	SMA 4 - FORMER CHEMICAL PLANT SMA 5 - FORMER PIG IRON FOUNDRY
	<b>Proprietary Control (PR)</b>		
<b>Engineering Controls (CA 770)</b>	<b>Groundwater (GW)</b>	Yes	SMA 4 - FORMER CHEMICAL PLANT
	<b>Non-Groundwater (NG)</b>		

For definitions of the terms used, hover over or click on the term.

[Top of Page](#)



## Enforcement and Compliance at this Facility

EPA's Office of Enforcement and Compliance Assurance (OECA) provides detailed historical information about enforcement and compliance activities at each RCRA Corrective Action Site in their Enforcement and Compliance Historical Online (ECHO) system.

RCRA Enforcement and Compliance Reports from ECHO

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## Related Information

For more information about this facility, see these other EPA links:

- RCRA information in EPA's Envirofacts database
- Information about this facility submitted to EPA under different environmental programs as reported in EPA's Facility Registry Services
- Alternative Names for this facility as reported by EPA programs in EPA's Facility Registry Services
- Cleanups in My Community <<https://www.epa.gov/cleanups/cleanups-my-community>> provides an interactive map to see EPA cleanups in context with additional data, and lists for downloading data
- Search RCRA Corrective Action Sites provides a search feature for Corrective Action Sites

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---

## Contacts for this Facility

CX04 page 6 of 8



**Regional Contacts:** David Egetter (Section Chief of the RCRA Corrective Action); Phone: (404) 562-8250

All of the states in EPA Region 4, with the exception of Mississippi are authorized to implement the Corrective Action Program. As of the end of Fiscal Year 2015, EPA Region 4 had 560 facilities listed on the 2020 Corrective Action Baseline.

For further information on this corrective action site, use the Contact Information for Corrective Action Hazardous Waste Clean Ups listings that are accessible through Corrective Action Programs around the Nation <<https://www.epa.gov/hwcorrectiveactionsites/corrective-action-programs-around-nation#4>>.

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Contact Us <<https://www.epa.gov/cleanups/cleanups/forms/contact-us>> to ask a question, provide feedback, or report a problem.



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## Grants

<<https://www.epa.gov/grants>>

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## Follow.





# Exhibit CX05





**REGION 4**

ATLANTA, GA 30303

February 1, 2024

**ELECTRONIC MAIL**

**CONFIRMATION OF RECEIPT EMAIL REQUESTED**

Stephen A. Cobb, P.E., Chief  
Land Division  
Alabama Department of Environmental Management  
P.O. Box 301463  
Montgomery, Alabama 36130-1463  
sac@adem.alabama.gov

SUBJ: Intent to Pursue Formal Enforcement Action  
Pursuant to the Resource Conservation and Recovery Act (RCRA) Section 3008(a)(2)  
Bluestone Coke, LLC (EPA ID: ALD000828848)

Dear Steve Cobb:

On June 7, 2021, the U.S. Environmental Protection Agency, conducted a RCRA Financial Record Review on Bluestone Coke, LLC located in Birmingham, Alabama, to determine the Facility's compliance status with RCRA and applicable state regulations.

Pursuant to Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2), this letter shall serve as a notice to the State of Alabama, that the EPA, Region 4, intends to pursue a formal enforcement action against Bluestone Coke, LLC and Bluestone Resources, Inc., Bluestone Coke, LLC's parent company, located in Birmingham, Alabama. The EPA is seeking the imposition of civil penalties pursuant to Section 3008(a) of RCRA, 42 U.S.C. § 6982(a), for alleged violations of the Alabama Hazardous Waste Management and Minimization Act of 1978, Ala. Code § 22-30-1 et seq. (Subtitle C of RCRA, 42 U.S.C. §§ 6921 to 6939(g)], and the ADEM Admin. Code rr. 335-14-1 to 335-14-17 [40 C.F.R. Parts 260 through 270, 273 & 279].



If you should have any questions concerning this matter, please contact Brooke York, of my staff, by phone at (404) 562–8025 or by email at [York.brooke@epa.gov](mailto:York.brooke@epa.gov).

Sincerely,

**FORREST  
COVINGTON**

F. Bryce Covington

Acting Chief

Chemical Safety and Land Enforcement Branch



Digitally signed by FORREST  
COVINGTON  
Date: 2024.02.01 09:02:43 -05'00'



# Exhibit CX06



**From:** [Redleaf-Durbin, Joan \(she/her/hers\)](#)  
**To:** [Hendrix, Corey \(she/her/hers\)](#)  
**Subject:** FW: Bluestone Coke, LLC - Intent to Pursue Formal Enforcement Action  
**Date:** Monday, August 19, 2024 3:05:05 PM  
**Attachments:** [20240129 Bluestone State Noti Letter .pdf](#)

---

Joan Redleaf Durbin (she/her)  
Senior Attorney  
RCRA/FIFRA/TSCA Law Office  
US EPA, Region 4  
404/562-9544

This email is from an attorney and may contain privileged information and attorney-client communications and should not be released under FOIA or discovery to individuals or entities outside of EPA or the U.S. Department of Justice without the knowledge of the sender.

---

**From:** Chavez, Araceli <Chavez.Araceli@epa.gov>  
**Sent:** Monday, August 19, 2024 3:04 PM  
**To:** Redleaf-Durbin, Joan (she/her/hers) <Redleaf-Durbin.Joan@epa.gov>  
**Cc:** York, Brooke <York.Brooke@epa.gov>  
**Subject:** FW: Bluestone Coke, LLC - Intent to Pursue Formal Enforcement Action

---

**From:** Chavez, Araceli  
**Sent:** Thursday, February 1, 2024 12:29 PM  
**To:** [SAC@adem.alabama.gov](mailto:SAC@adem.alabama.gov)  
**Cc:** York, Brooke <[York.Brooke@epa.gov](mailto:York.Brooke@epa.gov)>; Acosta, Kayla <[Acosta.Kayla@epa.gov](mailto:Acosta.Kayla@epa.gov)>  
**Subject:** Bluestone Coke, LLC - Intent to Pursue Formal Enforcement Action

Dear Steve Cobb:

On June 7, 2021, the U.S. Environmental Protection Agency, conducted a RCRA Financial Record Review on Bluestone Coke, LLC located in Birmingham, Alabama, to determine the Facility's compliance status with RCRA and applicable state regulations. If you should have any questions concerning this matter, please contact Brooke York, of my staff, by phone at (404) 562-8025 or by email at [York.brooke@epa.gov](mailto:York.brooke@epa.gov).

Thank you,

Araceli B. Chavez, Chief  
RCRA Enforcement Section  
Chemical Safety and Land Enforcement Branch  
Enforcement and Compliance Assurance Division



USEPA-Region 4  
61 Forsyth Street  
Atlanta, GA 30303  
404-562-9790  
[chavez.araceli@epa.gov](mailto:chavez.araceli@epa.gov)

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# Exhibit CX07





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

SEP 17 2012

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Carol W. Farrell, President  
Walter Coke, Inc.  
3500 35<sup>th</sup> Avenue North  
Birmingham, AL 35207-2918

Dear Ms. Farrell:

Enclosed please find the executed RCRA Section 3008(h) Administrative Order on Consent (AOC), IN THE MATTER OF: Walter Coke, Inc., Docket No. RCRA-04-2012-4255, dated September 17, 2012. The signed and executed AOC has also been emailed to you today providing you notice that EPA has signed the AOC. Therefore, pursuant to Paragraph 109 of the AOC, the effective date of the AOC is Monday, September 24, 2012.

In addition, please note that pursuant to Section IX, INTERIM MEASURES of the enclosed AOC, Docket No. RCRA-04-2012-4255, the approved "final interim measures work plan (IWMP)" for the Former Chemical Plant, as referenced in the EPA letter to you dated April 16, 2012 (enclosed), is incorporated by reference into this AOC.

If you have any questions, feel free to contact me at (404) 562-8569. Legal inquiries should be directed to Joan Redleaf Durbin at (404) 562-9544.

Sincerely

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

Jeffrey Pallas  
Acting Deputy Director  
RCRA Division

Enclosures: 1) AOC dated September 17, 2012  
2) April 16, 2012, EPA letter  
To Walter Coke

cc: Dan Grucza, Walter Coke  
Jarry Taylor, Esq  
Phil Davis, ADEM

CX07 page 1 of 54



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HEARING CLERK

RCRA SECTION 3008(h)

ORDER ON CONSENT

ISSUED TO

Walter Coke Inc.

Docket No. RCRA-04-2012-4255



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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

IN THE MATTER OF:	)	Docket Number: RCRA-04-2012-4255
	)	
Walter Coke, Inc.	)	Proceeding under Section 3008(h)
	)	of the Resource Conservation and
	)	Recovery Act, 42 U.S.C. § 6928(h)
	)	
EPA ID No.: ALD 000 828 848	)	
	)	
Respondent	)	
_____	)	

**ADMINISTRATIVE ORDER ON CONSENT**

**I. JURISDICTION**

1. This Administrative Order on Consent ("Order") is issued 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 ("HSWA") of 1984, 42 U.S.C. § 6928(h). The authority vested in the Administrator to issue orders under Section 3008(h) of RCRA has been delegated to the Regional Administrators by EPA Delegation Nos. 8 - 31 and 8 - 32 dated April 16, 1985, and has been further delegated by the Regional Administrator for Region 4 to the Deputy Director, RCRA Division on August 18, 2010. Section 3008(h) of RCRA, 42 U.S.C. § 6928(h), authorizes the Administrator of EPA or her delegatee to issue an order requiring corrective action or such other response which she deems necessary to protect human health or the environment, if, on the basis of any information, she determines that there is or has been a release of hazardous waste or hazardous constituents into the environment from a Facility that is, was, or should have been authorized to operate under Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).
2. This Order is issued to Walter Coke, Inc., ("Respondent"), Birmingham, Alabama.
3. Respondent consents to and agrees not to contest EPA's jurisdiction to issue this Order or to enforce its terms. Accordingly, Respondent will not contest EPA's jurisdiction to: 1. compel compliance with this Order in any subsequent enforcement proceeding, either administrative or judicial; 2. require Respondent's full or interim compliance with the terms of this Order; and 3. impose sanctions for violations of this Order. In addition, Respondent agrees not to seek pre-enforcement review of this Order.



4. On September 29, 1989, EPA issued Respondent an Administrative Order pursuant to Section 3008(h) of RCRA. Following negotiations between EPA and Respondent, a modified Administrative Order was issued (hereinafter referred to as "the 1989 Order"). The 1989 Order required Respondent to perform a RCRA Facility Investigation (RFI) to evaluate whether any hazardous waste or hazardous constituents had escaped the identified solid waste management units in which they were, or suspected to be, located and, if so, the nature and extent of any release. The 1989 Order also required Respondent to develop, upon completion of the RFI, a Corrective Measures Study (CMS), if necessary, to identify remediation alternatives and to recommend any corrective measures to be taken at the Facility. By entry of this Order between EPA and the Respondent, EPA declares, and the Parties agree, that Respondent has completed all of the approved investigation tasks of the RFI Work Plans required by the 1989 Order. The Parties also agree that the CMS work and the selection and implementation of any remedy are best conducted and completed pursuant to this Order and that as a result, the 1989 Order is terminated and is no longer in force and effect.

## **II. PARTIES BOUND**

5. This Order shall apply to and be binding upon EPA, Respondent and its officers, directors, employees, agents, successors and assigns, heirs, trustees, receivers, and upon all persons, including but not limited to contractors and consultants, acting on behalf of the Respondent.
6. No change in ownership or corporate or partnership status relating to the Facility will in any way alter Respondent's responsibility under this 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 Order. Respondent will be responsible for and liable for any failure to carry out all activities required of the Respondent by the terms and conditions of the Order, regardless of the Respondent's use of employees, agents, contractors, or consultants to perform any such tasks.
7. Respondent shall provide a copy of this Order to all contractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this Order within seven (7) days of the issuance of this Order or the retention of such person(s), whichever occurs later, and shall condition all such contracts on compliance with the terms of this Order.
8. Respondent shall provide written notice of this Order within ten (10) days to any successor-in-interest prior to transfer of ownership or operation of the Facility or a portion thereof. In addition, the Respondent shall provide written notification of said transfer of ownership and/or operation to the EPA within ten (10) days prior to such transfer.
9. Respondent agrees to undertake all actions required by the terms and conditions of this Order, including any portions of this Order incorporated by reference. Respondent waives its right to request a hearing on this matter pursuant to Section 3008(b) of RCRA and 40 C.F.R. Part 24, and consents to the issuance of this Order without a hearing pursuant to



Section 3008(b) of RCRA as a Consent Order issued pursuant to Section 3008(b) of RCRA. Any noncompliance with this Order, other than noncompliance authorized by EPA, constitutes a violation of the Order.

### **III. DEFINITIONS**

10. Unless otherwise expressly provided in Attachment A: Definitions & Terms herein, terms used in this Order which are defined in RCRA or in regulations promulgated under RCRA shall have the meaning assigned to them under RCRA or in such regulations.

### **IV. STATEMENT OF PURPOSE**

11. In entering into this Order, the mutual objectives of EPA and Respondent are: (1) to perform pursuant to this Order in lieu of the 1989 Order one or more CMSs to identify and evaluate alternatives for any corrective measures (i.e., remedies) necessary to prevent, mitigate, and/or remediate any releases of hazardous wastes or hazardous constituents at or from any Solid Waste Management Units (SWMUs), Areas of Concern (AOCs) and SWMU Management Areas (SMAs) listed in Attachments D and E or identified as “new” pursuant to Section VIII; (2) to implement the remedies approved by EPA for such SWMUs, AOCs and SMAs listed in Attachments D and E or identified as “new” pursuant to Section VIII; (3) to perform any other activities necessary consistent with this Order, including additional work and interim measures (IMs), to the extent necessary to address impacted environmental media to ensure it meets protective criteria or to evaluate actual or potential threats to human health and/or the environment resulting from the release or potential release of hazardous waste or hazardous constituents at or from SWMUs, AOCs and/or SMAs; 4) to implement and maintain, as appropriate, institutional controls required by Section XV. of this Order approved by EPA; and (5) to perform any activities required pursuant to Section VIII of this Order, and to the extent otherwise consistent with this Order. A list of all SMAs is provided in Attachment D, and a list of all SWMUs and AOCs is provided in Attachment E.
12. It is the mutual objective of EPA and Respondent to streamline the process for completing the work required by this Order, and to avoid potentially unnecessary delays caused by inadequate communication, particularly in advance of formal submissions required by Respondent under this Order. To accomplish this objective, the parties will frequently and in good faith communicate orally, in writing, and face-to-face to discuss progress of the Work and upcoming tasks scheduled by Respondent, to address any concern of EPA or the Respondent, to assure EPA is kept current on the Work, and to ensure the successful and timely completion of the requirements of this Order.

### **V. EPA FINDINGS OF FACT**

13. Respondent is a company doing business in the State of Alabama and is a person as defined in Section 1004(15) of RCRA, U.S.C. § 6903(15).
14. References to “Respondent” in the description of the Facility in this Order are to Walter Coke, Inc., as well as to any predecessors which owned or operated the Facility, including



**Sloss Industries Corporation.** References to "Respondent" in this Order insofar as the obligations to perform the work required by this Order are to Walter Coke, Inc. The Facility is shown in the maps that are attached as Attachment B: Site Map and SMAs 1-5; Figures 1-6 dated 7/24/12 and 8/16/12.

15. On November 19, 1980, the applicable date which rendered facilities subject to interim status requirements or the requirement to have a permit under Sections 3004 and 3005 of RCRA, 42 U.S.C. §§ 6924 and 6925, the Facility achieved interim status as Respondent owned and operated the Facility and certain of its operations thereon qualified as hazardous waste treatment, storage, or disposal within the meaning of RCRA. In its original Part A Hazardous Waste Permit Application, dated November 17, 1980, Respondent identified itself as operating a coke plant, a chemical plant, a blast furnace and a mineral wool plant.

#### **VI. EPA DETERMINATIONS AND CONCLUSIONS OF LAW**

16. Based on the foregoing findings of fact and after consideration of the Administrative Record, the Deputy Director of the RCRA Division of EPA Region 4 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), and is a "person" as defined in 40 C.F.R. § 260.10.
  - b. Respondent is the "owner" and "operator" of an interim status Facility that is operating subject to Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).
  - c. Respondent engaged in the storage of hazardous wastes at the Facility subject to interim status requirements of 40 C.F.R. Part 265.
  - d. The Facility was subject to interim status requirements or the requirement to have a permit under Sections 3004 and 3005 of RCRA, 42 U.S.C. §§ 6924 and 6925.
  - e. Certain wastes and constituents thereof found at the Facility are hazardous waste and/or hazardous constituents thereof as defined by Section 1004(5) of RCRA, 42 U.S.C. § 6903(5). These are also hazardous wastes or hazardous constituents within the meaning of Section 3001 of RCRA, 42 U.S.C. § 6921 and 40 C.F.R. Part 261.
  - f. There is or has been a release of hazardous wastes or hazardous constituents into the environment from the Facility.
  - g. The actions required by this Order are necessary to protect human health and/or the environment.

#### **VII. WORK TO BE PERFORMED**

17. Pursuant to Section 3008(h) of RCRA, the Respondent agrees and is hereby ordered to perform the acts required by this Order. All work undertaken pursuant to this Order shall



be performed in a manner consistent with, at a minimum, 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 Order.

18. To the extent necessary to meet any of the requirements of this Order, all work previously performed and reports previously submitted by Respondent to EPA pursuant to the 1989 Order may be relied upon or referred to by Respondent in submissions to EPA by Respondent. Respondent need not re-submit such completed work or reports.
19. Unless otherwise specified, two (2) complete paper copies and two (2) complete electronic copies in portable document format, of all documents submitted pursuant to this Order, or revisions thereof, shall be hand delivered, sent by certified mail, return receipt requested, or by overnight express mail to the Project Coordinator or to other addresses he/she designates. Electronic copies can be emailed if possible.

#### **VIII. NEW AREAS OF CONCERN AND NEW SWMUS**

20. Any SWMUs and/or AOCs that are not identified in Attachment D and/or E, and that otherwise are designated by EPA and discovered after the Effective Date, are “New AOCs” or “New SWMUs”. New AOCs or New SWMUs designated by EPA or discovered during the course of environmental sampling, monitoring, field investigations, environmental audits, or other means, shall become part of this Order. As used in this Order, the terms “discover,” “discovery,” or “discovered,” refer to the date on which the Respondent or EPA either: (1) visually observes evidence of a new SWMU or AOC; (2) visually observes evidence of a previously unidentified release of hazardous waste or hazardous constituents to the environment; or (3) receives information which suggests the presence of a new release of hazardous waste or hazardous constituents to the environment.
23. Respondent shall notify EPA in writing, within fifteen (15) days of discovery, of any suspected New AOC or New SWMU as discovered under this Section VIII. The notification shall include, at a minimum, the location of the New AOC or New SWMU and all available information pertaining to the nature of the release (e.g., media affected, hazardous waste or constituents released, magnitude of the release, etc.). The notification shall also include whether the New SWMU or New AOC is contained within one of the defined SMAs which previous investigations, the CMS, or the CMI may already address. To the extent necessary to satisfy the Statement of Purpose, the following steps may be undertaken: The EPA may conduct, or require the Respondent to conduct, further assessment (i.e., Confirmatory Sampling) in order to determine the status of the suspected New AOC and/or New SWMU. EPA may also require that Respondent submit an AOC or SWMU Assessment Report (ASAR) for each New AOC and/or New SWMU. Based on the results of the ASAR, the EPA shall determine the need for further investigations of the New AOCs and/or New SWMUs covered in the ASAR.



## **IX. INTERIM MEASURES**

24. The Respondent shall evaluate data as it becomes available and assess the need for interim measures.
25. The Respondent shall report any Imminent and/or Existing Hazard (IEH) from a release of hazardous waste or hazardous constituents that may endanger human health or the environment onsite or beyond the Facility property boundary. Any such information shall be reported orally to the EPA within 24 hours from the time the Respondent becomes aware of the circumstances. This IEH Report shall include, but is not limited to:
  - a. Information concerning the release of any hazardous waste or hazardous constituents that may endanger public drinking water supplies; and,
  - b. Information concerning the release or discharge of any hazardous waste or hazardous constituents, which could threaten the environment or human health outside the Facility.
26. Pursuant to Paragraph 12. of this Order, the parties may agree that Respondent can implement an Interim Measure (IM) for any IEH, SWMU, AOC, and/or SMA, as appropriate, to eliminate, prevent, or mitigate exposure to human health or the environment at or from the Facility, without the necessity of Respondent preparing and submitting to EPA for approval a Work Plan. If the parties do not agree, and/or EPA determines an IM Work Plan submission and approval process is necessary, the Respondent shall prepare an IM Work Plan and submit it to EPA, for approval, within the time frame specified by EPA. The IM Work Plan is subject to approval by EPA and shall be developed in a manner consistent with the IM Scope of Work at:

[http://www.epa.gov/reg3wcmd/ca/pdf/RCRA\\_InterimMeasuresTTA.pdf](http://www.epa.gov/reg3wcmd/ca/pdf/RCRA_InterimMeasuresTTA.pdf)

27. The Respondent shall implement the IM in accordance with the agreement of the Parties or with any EPA required IM Work Plan.
28. The Respondent shall seek approval from the EPA for any planned changes, reductions or additions to the IM and or IM Work Plan prior to implementation (unless to prevent or mitigate an IEH).

## **X. CORRECTIVE MEASURES STUDY**

29. Respondent shall perform and complete a CMS and submit the CMS Report for the SMAs listed in Attachment D according to the schedule contained therein, or as required pursuant to Section VIII or XXII. Respondent shall follow and comply with all of EPA's guidelines and requirements for the performance of a CMS, and be consistent with:

<http://www.epa.gov/reg3wcmd/pdf/chev6.pdf>



30. EPA will review the CMS Report and notify Respondent in writing of EPA's approval/disapproval, or modification in accordance with Section XIX: APPROVAL/DISAPPROVAL OF SUBMISSION.

## **XI. REMEDY SELECTION**

31. EPA may select a Remedy Decision from the remedial alternatives evaluated during the CMS and presented in the CMS Report. EPA's selection will be based at a minimum on protection of human health and/or the environment, considering specific site conditions, and existing regulations and EPA guidance. The selected remedy may include any IM implemented to date. EPA shall select the remedy and prepare a Statement of Basis to present the proposed Remedy to the public.
32. EPA will provide the public with an opportunity to review and comment on its selection of the proposed final corrective measure(s), including the detailed written description and justification for its selection in the Statement of Basis. Following the public comment period, EPA will select the final corrective measure(s), and will notify the public and Respondent of the decision and rationale in a written Final Decision and Response to Comments (RTC). The RTC will include EPA's detailed reasons for selecting the corrective measure(s) and for rejecting the other proposed corrective measure(s).
33. Should EPA determine that none of the remedial alternatives evaluated during the CMS and presented in the CMS Report is appropriate as a remedy, EPA shall notify Respondent in writing of such decision, including the reasons. Respondent and EPA shall have thirty (30) days from Respondent's receipt of EPA's written notification to reach an agreement. Subject to Section XX, if Respondent and EPA are unable to reach an agreement, Respondent must revise the CMS Report and/or perform additional corrective measures studies in accordance with EPA's request.

## **XII. FINANCIAL ASSURANCE**

34. Following RTC issuance for each Remedy, the Respondent shall provide cost estimates, and demonstrate financial assurance for completing the approved remedy in accordance with Attachment C. Thereafter, the Respondent shall review the remedy cost estimates, adjust the financial assurance instrument, and submit the revised estimate and instrument to the EPA annually for each remedy.

## **XIII. CORRECTIVE MEASURES IMPLEMENTATION WORK PLAN**

35. Within one hundred twenty (120) days of Respondent's receipt of notification of EPA's selection of the corrective measure(s), Respondent shall submit to the EPA a Corrective Measures Implementation Work Plan (s) ("CMI Work Plan"). Each CMI Work Plan shall include a QA/QC plan as well as a schedule and date for remedy construction completion.
36. Each CMI Work Plan submission is subject to approval by EPA in accordance with Section XIX: APPROVAL/DISAPPROVAL OF SUBMISSION and shall be developed



in a manner consistent with the requirements of RCRA and its directives and implementing regulations as well as the following guidance:

[http://www.epa.gov/reg3wcmd/ca/pdf/RCRA\\_CorrectiveMeasureImpli\\_sow.pdf](http://www.epa.gov/reg3wcmd/ca/pdf/RCRA_CorrectiveMeasureImpli_sow.pdf)

#### **XIV. PUBLIC PARTICIPATION/COMMUNITY ENGAGEMENT**

37. Within thirty (30) days of the Effective Date of this Order, Respondent shall submit for approval to EPA a Public Participation/Community Engagement Plan consistent with applicable guidance in the following links:

<http://www.epa.gov/oswer/engagementinitiative/related.htm>

<http://www.epa.gov/wastes/hazard/tsd/permit/pubpart/manual.htm>

38. The administrative record supporting this Order and the administrative record in support of any remedy selected pursuant to this Order will be available for public review and maintained by the Respondent at the Facility or at a designated location (i.e., closest library to facility) near the facility, and at the U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, S.W., Atlanta, Georgia 30303.

#### **XV. INSTITUTIONAL CONTROLS**

39. Respondent must consider institutional controls and/or land use restrictions for protection of human health and the environment from contamination left in place at any SMAs, SWMUs or AOCs. Institutional controls and/or land use restrictions may also be used to protect the corrective measures if the order is terminated at the completion of corrective action.
40. A detailed listing of EPA's Institutional Controls may be found at the following EPA website:

<http://www.epa.gov/epawaste/hazard/correctiveaction/resources/guidance/ics/matrixrv3.pdf>

#### **XVI. COMPLETION OF RCRA CORRECTIVE ACTION**

41. The determination of completion of RCRA correction action at the Respondent's Facility shall be made pursuant to EPA's February 13, 2003, Guidance on Completion of Corrective Action Activities at RCRA Facilities, 68 FR 8757-8764.
42. When, upon receipt of the certification, and in consideration of public comments and any other relevant information, the EPA determines that the corrective measures have been completed in accordance with the terms and conditions of this Order and the requirements for completion, the EPA shall terminate this Order. Upon termination of the Order or modification of the Order for completion of corrective action at the entire Facility, EPA shall release the Respondent from the financial assurance requirements of this Order.



## **XVII. SCHEDULES OF COMPLIANCE**

43. Respondent is required to adhere to each of the deadlines and schedules set out in this Order. Respondent may request an extension to any deadline in this Order. Any extension request must be submitted to the EPA project manager for approval within a minimum of fourteen (14) days prior to the deadline. Failure to adhere to any deadline may be considered a violation of this Order.

## **XVIII. PROJECT COORDINATOR**

44. EPA and Respondent have each designated a Project Coordinator as set out below. Each Project Coordinator shall be responsible for overseeing the implementation of this Order and for designating a person to act in his/her absence. The EPA Project Coordinator will be EPA's designated representative for the Facility. To the maximum extent practicable, all communications between Respondent and EPA, and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to this Order shall be directed through the Project Coordinators.
45. The parties may change their Project Coordinators, but agree to provide at least ten (10) days written notice prior to changing a Project Coordinator.

- a. The EPA Project Coordinator is:

Meredith Anderson, Environmental Engineer  
RCRA Corrective Action Section  
RCRA and Underground Storage Tank Branch, RCRA Division  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

- b. The Facility Project Coordinator is:

Don Wiggins  
Manager of Technical Services  
Walter Coke, Inc.  
3500 35<sup>th</sup> Avenue North  
Birmingham, Alabama 35207

46. The absence of a designated EPA Project Coordinator for overseeing the implementation of this Order shall not be cause for the stoppage of work.

## **XIX. AGENCY APPROVAL/DISAPPROVAL OF SUBMISSION.**

### **A. EPA APPROVALS**

47. EPA will provide Respondent with its written approval, approval with conditions and/or modifications, or disapproval for any submission (or resubmission) requiring such



approval required by this Order. Any disapproval or any approval with conditions and/or modifications shall be consistent with this Order and the Statement of Purpose.

48. In connection with an EPA action under paragraph 47 other than approval of a submission, Respondent shall revise any submission required by this Order in accordance with EPA's written comments within thirty (30) calendar days of Respondent's receipt of EPA's written comments, unless EPA has specified an alternative due date. Revised submittals are also subject to EPA approval, approval with conditions and/or modifications, or disapproval. Any revised submittal that is disapproved or is not approved with conditions and/or modifications is considered noncompliant with the terms of this Order. For purposes of Respondent's submissions, dispute resolution shall apply only to submissions disapproved and revised by the EPA, or that have been disapproved by the EPA, then revised and re-submitted by the Respondent, and again disapproved by the EPA.
49. Subject to Section XX, upon receipt of EPA's written approval, Respondent shall commence work and implement any approved Work Plan in accordance with the schedule and provisions contained therein. If no schedule is contained in an approved Work Plan, then Respondent shall commence work and implementation of the Work Plan within fifteen (15) calendar days of receipt of EPA's written approval of the Work Plan.
50. Subject to Section XX, any EPA-approved or EPA-approved with conditions and/or modifications to any submission required by this order shall be incorporated by reference into this Order as set forth fully herein. Prior to EPA's written approval, no submission required by this Order shall be construed as approved and final. Oral advice, suggestions, or comments given by EPA representatives will not constitute an official approval, nor shall any oral approval or oral assurance of approval be considered binding.
51. Subject to Section XX, noncompliance with any requirement of this Order shall be considered a violation of this Order and shall subject Respondent to the statutory penalty provisions and enforcement actions pursuant to Section 3008(h)(2) of RCRA, 42 U.S.C. § 6928(h), and any other applicable sanctions, including the stipulated penalties provisions agreed to in Section XXVIII Delay in Performance/Stipulated Penalties of this Order.
52. Any changes or modifications proposed by Respondent to the EPA-approved Documents and schedules submitted pursuant to and required by this Order must be approved by EPA prior to implementation.

#### B. PROGRESS REPORTS

53. Unless otherwise specified in an EPA approved document pursuant to this Order, beginning with the first full month following the effective date of this Order, and through the period that this Order is effective, Respondent shall provide EPA with quarterly progress reports. Progress reports are due by the fifteenth (15) day of the month following the end of the previous quarter. The progress reports for specific deliverables shall conform to requirements in any relevant EPA guidance referenced in this Order.



## **XX. DISPUTE RESOLUTION**

54. 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 Order.
55. Notwithstanding any other provision in this Order, in the event the Respondent disagrees in whole or in part with any written decision by EPA, or revision of a submission or disapproval of any revised submission required by the Order, the following may, at the Respondent's discretion apply:

Any dispute concerning EPA written decisions, or revisions or disapprovals of deliverables required under this Order (including required revisions for, disapprovals of, or approvals with conditions and/or modifications of any deliverable required under this Order), excluding any EPA final agency action, shall be raised to EPA within 15 days after receiving the written decision or comments on the deliverables. Disputes will be resolved as follows: EPA and Respondent shall expeditiously and informally attempt to resolve any disagreements. The Project Coordinators shall first confer in an effort to resolve the dispute. If the Project Coordinators are unable to informally resolve the dispute within 14 days, Respondent shall notify EPA's Chief, Restoration and Underground Storage Tank Branch, RCRA Division, in writing of its objections. The Respondent's written objections shall define the dispute and state the basis of Respondent's objections. EPA and Respondent then have an additional 14 days to reach agreement. If an agreement is not reached within 14 days, Respondent may request a determination by EPA Region 4's RCRA Division Director. The RCRA Division Director's determination is EPA's final decision, and shall be incorporated into and become an enforceable part of this Order to the extent it is otherwise consistent with this Order. If Respondent does not agree to perform or does not actually perform the Work in accordance with EPA's final decision, EPA reserves the right in its sole discretion to conduct the work itself, to seek reimbursement from Respondent, to seek enforcement of this Order on the issue subject to EPA's decision, to seek stipulated penalties, and/or to seek any other appropriate relief. Notwithstanding any other provision of this Order, Respondent retains the right to contest the validity of or assert any defenses it may have with respect to any EPA written decision it claims was taken or made pursuant to this Order, including with respect to any EPA written decision that was subject to the dispute resolution procedure set forth in this Paragraph.

56. If EPA and Respondent reach agreement on a dispute at any stage, the agreement shall be set forth in writing, and shall upon signature of EPA and Respondent, be incorporated into and become an enforceable part of this Order.
57. The existence of a dispute and EPA's consideration of matters placed in dispute shall not excuse, toll, or suspend any compliance obligation or deadline required pursuant to the Order during the pendency of the dispute resolution process except as provided in



Section XXVIII, Delay in Performance/Stipulated Penalties or agreed to by EPA in writing. With the exception of those conditions under dispute, the Respondent shall proceed to take any action required by those portions of the submission and of the Order that the EPA determines are not affected by the dispute. The invocation of dispute resolution does not stay accrual of stipulated penalties under this Order, unless the delay is a result of EPA's failure to timely issue a written resolution of the dispute

#### **XXI. PROPOSED CONTRACTOR/CONSULTANT**

58. All work performed pursuant to this Order shall be under the direction and supervision of a professional engineer, hydrologist, geologist, or environmental scientist, with expertise in hazardous waste cleanup. Respondent's contractor or consultant shall have the technical expertise sufficient to adequately perform all aspects of the work for which it is responsible. Within forty-five (45) days of the effective date of this Order, Respondent shall notify the EPA Project Coordinator in writing of the name, title, and qualifications of the engineer, hydrologist, geologist, or environmental scientist and of any contractors or consultants and their personnel to be used in carrying out the terms of this Order. EPA reserves the right to disapprove Respondent's contractor and/or consultant. If EPA disapproves a contractor or consultant, then Respondent must, within forty-five (45) days of receipt from EPA of written notice of disapproval, notify EPA, in writing, of the name, title, and qualifications of any replacement.
59. Respondent shall provide at least ten (10) days written notice prior to changing professional engineer/geologist/hydrologist/environmental scientist or contractor/subcontractor.

#### **XXII. ADDITIONAL WORK**

60. EPA may determine or Respondent may propose that certain tasks, including investigatory work, engineering evaluation and design work plan, remediation, procedure/methodology modifications, or community engagement documents are necessary in addition to or in lieu of the tasks included in any EPA approved Work Plan, when such additional work is otherwise consistent with this Order and necessary to meet the purposes set forth in Section IV. Statement of Purpose. If EPA determines that Respondent shall perform additional work, EPA will notify Respondent in writing and specify the basis for its determination that the additional work is necessary. Consistent with Paragraph 12 of this Order, Respondent may confer with EPA to discuss the additional work. If required by EPA, subject to Section XX, Respondent shall submit for EPA approval a Work Plan for the additional work. EPA will specify the contents of such Work Plan. Such Work Plan shall be submitted within sixty (60) days of receipt of EPA's determination that additional work is necessary, or at a later date according to an alternative schedule established by EPA. Upon approval of a Work Plan by EPA, Respondent shall implement it in accordance with the schedule and provisions contained therein.

#### **XXIII. QUALITY ASSURANCE**



61. Respondent shall follow EPA guidance for sampling and analysis. Work Plans 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 EPA prior to implementation; must be documented, including reasons for the deviations; and must be reported in the applicable report (e.g., CMS).
62. The name(s), addresses, and telephone numbers of the analytical laboratories Respondent propose to use must be specified in the applicable Work Plan(s).
63. Respondent shall monitor to ensure that high quality data is obtained by its consultant or contract laboratories. All investigation activities shall be done in accordance with the USEPA, Region 4, Science and Ecosystem Support Division’s (SESD’s) “Field Branches Quality System and Technical Procedures” which is available on the SESD website. The direct link to the website is:

<http://www.epa.gov/region4/sesd/fbqstp/>

Any RCRA Work Plan submitted pursuant to this Order (e.g., IM, RFI, CMS, CMI) shall include data quality objectives and guidance which 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>

and the March 2001 “U.S. EPA Requirements for Quality Assurance Project Plan” (EPA QA/R-5) for achieving the Data Quality Objectives available at:

<http://www.epa.gov/QUALITY/qs-docs/r5-final.pdf>

Samples are to be collected and analyzed in accordance with EPA publication SW# 846 “Test Methods for Evaluating Solid Waste,” 3<sup>rd</sup> Edition. A National Environmental Laboratory Accreditation Program (NELAP) certified laboratory is to be used to analyze the samples. If methods other than EPA methods are to be used, Respondent shall specify all such protocols in the applicable Work Plan (e.g., CMS). EPA may reject any data that does not meet the requirements of the approved Work Plan or EPA analytical methods and may require re-sampling and additional analysis.

64. Respondent shall ensure that laboratories they use for analyses participate in a quality assurance/quality control program equivalent to that which is followed by EPA. EPA may conduct a performance and quality assurance/quality control audit of the laboratories chosen by Respondent before, during, or after sample analyses. Upon request by EPA, Respondent shall have any such laboratory perform analyses of samples provided by EPA to demonstrate laboratory performance. If the audit reveals deficiencies in a laboratory's performance or quality assurance/quality control, re-sampling and additional analysis may be required.



#### **XXIV. DATA AND DOCUMENT AVAILABILITY**

65. Respondent shall submit (i.e., in hardcopy and in an electronic copy in appropriate standard business format) to EPA upon request the results of all sampling and/or tests or other data generated by divisions, agents, consultants, or contractors pursuant to this Order.
66. Notwithstanding any other provisions of this 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.
67. Respondent shall notify EPA in writing at least ten (10) days before engaging in any field activities and/or corrective measures, such as well sampling, installation of equipment, and/or sampling. 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 management, to commence such activities immediately. At the request of EPA, Respondent shall provide or allow EPA or its authorized representative to take split or duplicate samples of all samples collected by Respondent pursuant to this Order. Similarly, at the request of Respondent, EPA shall allow Respondent or its authorized representative(s) to take split or duplicate samples of all samples collected by EPA under this Order.
68. Respondent may assert a business confidentiality claim covering all or part of any information submitted to EPA pursuant to this Order. Any assertion of confidentiality must be accompanied by information that satisfies the items listed in 40 C.F.R. § 2.20(e)(4) or such claim shall be deemed waived. Information determined by EPA to be confidential shall be disclosed only to the extent permitted by 40 C.F.R. Part 2. If no such confidentiality claim accompanies the information when it is submitted to EPA, the information may be made available to the public by EPA without further notice to Respondent. Respondent agrees not to assert any confidentiality claim with regard to any physical or analytical data.

#### **XXV. ACCESS**

69. EPA, its contractors, employees, and/or any duly designated EPA representatives are authorized to enter and freely move about the Facility accompanied by Respondent's representative pursuant to this Order for the purposes of, inter alia: interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts related to the Facility; reviewing the progress of Respondent in carrying out the terms of this Order; conducting such tests, sampling, or monitoring as EPA deems necessary for purposes of this Order; using a camera, sound recording, or other documentary type equipment for purposes of this Order, and verifying the reports and data submitted to EPA by Respondent. EPA agrees to provide Respondent with copies of any such tests, sampling, or monitoring, including photographs, sound recordings or other documentary type equipment. Furthermore, upon Respondent's request, EPA shall provide Respondent the



opportunity to receive a split of any sample taken by EPA for purposes of this Order. Respondent agrees to provide EPA and its representatives access at all reasonable times to the Facility and subject to the next Paragraph below, to any other property to which access is required for implementation of this Order. Subject to Paragraph 68, 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 Order and that are within the possession or under the control of Respondent or their contractors or consultants, excluding any attorney-client privileged or attorney work product privileged documents.

70. To the extent that work being performed pursuant to this 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 Order from the present owner(s) of such property within thirty (30) days of approval of any Work Plan for which access is required. Best efforts, as used in this Paragraph 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 as necessary and appropriate the payment of reasonable compensation in consideration of granting access. Any such access agreement shall provide for access by EPA and its representatives. Respondent shall insure that EPA's Project Coordinator has a copy of any access agreement(s). In the event that agreements for access are not obtained within thirty (30) 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 EPA in writing within fourteen (14) days thereafter of both the efforts undertaken to obtain access and the failure to obtain access agreements. EPA may, at its discretion, assist Respondent in obtaining access. In the event EPA obtains access, Respondent shall undertake EPA- approved work on such property.
71. The Respondent agrees to indemnify the United States to the extent provided in Section XXXIII. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT, for any and all claims arising from activities on such property.
72. Nothing in this section limits or otherwise affects EPA's right of access and entry pursuant to applicable law, including RCRA and CERCLA.
73. Nothing in this section shall be construed to limit or otherwise affect Respondent's liability and obligation, if any, to perform corrective action including corrective action beyond the Facility boundary. In case of transfer or lease of any portion of the Facility, Respondent shall retain a right of access to the extent required to fully implement the terms of this Order.

#### **XXVI. RECORD PRESERVATION**

74. Respondent shall retain, during the pendency of this Order and for a minimum of six (6) years after its termination, all 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 Order. Respondent shall notify EPA in writing ninety (90) days prior to the destruction of any



such records, and shall provide EPA with the opportunity to take possession of any such records, including those over which a CBI claim has been made pursuant to Paragraph 68, but excluding any attorney-client privileged or attorney work product privileged documents. Such written notification shall reference the effective date, caption, and docket number of this Order and shall be addressed to:

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

75. Respondent agrees that within thirty (30) days of retaining or employing any agent, consultant, or contractor for the purpose of carrying out the terms of this Order, Respondent will enter into an agreement with any such agents, consultants, and/or contractors whereby such agents, consultants, and/or contractors will be required to provide the Respondent a copy of all documents produced pursuant to this Order.
76. All documents required under this Order shall be stored by the Respondent in a centralized location to afford ease of access by EPA or its representatives.

#### **XXVII. NOTIFICATION AND DOCUMENT CERTIFICATION**

77. Unless otherwise specified, all reports, correspondence, approvals, disapprovals, notices, or other submittals relating to or required under this Order shall be in writing and shall be hand delivered, sent by certified mail, return receipt requested, or by overnight express mail as follows:
- a. Two hardcopies and one electronic copy on a disk and by email in an appropriate standard business format, of all documents to be submitted to the EPA shall be sent to the:  
  
Project Coordinator  
RCRA Corrective Action Section  
Restoration and Underground Storage Tank Branch  
RCRA Division  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303
  - b. One electronic copy on a disk and email in an appropriate standard business format to:

Chief,  
RCRA Corrective Action Section



Restoration and Underground Storage Tank Branch  
RCRA Division  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303.

- c. One hardcopy and one electronic copy on a disk and email in an appropriate standard business format, of all documents to be submitted to ADEM shall be sent to:

Chief, Engineering Services Section  
Industrial Hazardous Waste Branch  
Land Division  
Alabama Dept. of Environmental Mgmt.  
1400 Coliseum Blvd.  
Montgomery, AL 36110

- d. Documents to be submitted to Respondent shall be sent to:

President & COO *ca 4/12/12*  
Walter Coke  
3500 35<sup>th</sup> Avenue North  
P.O. Box 5327  
Birmingham, Alabama 35207

and

Dan Gruzca  
Vice President & Sr. Counsel – Environmental  
Walter Energy, Inc.  
3000 Riverchase Galleria  
Suite 1700  
Birmingham, Alabama 35244

78. Any report or other document submitted by a Respondent pursuant to this Order which makes any representation concerning the Respondent's compliance or noncompliance with any requirement of this Order shall be certified by a responsible corporate officer of the 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.
79. The certification required by Paragraph 78 above, shall be in the following form:

"I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to evaluate the information submitted. I certify that to the best of my knowledge and belief the information



contained in or accompanying this submittal is true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, or the immediate supervisor of such person(s), 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:

#### **XXVIII. DELAY IN PERFORMANCE/STIPULATED PENALTIES**

80. Unless there has been a written modification by EPA of a compliance date, a written modification by EPA of an approved Work Plan condition, or excusable delay as defined in Section XXIX: Force Majeure and Excusable Delay, if Respondent fails to comply with any term or condition set forth in this Order in the time or manner specified herein, 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 EPA or at the time required pursuant to this Order: \$1,500.00 per day for the first ten business days of such violation, \$2,000.00 per day for the eleventh through twenty-first business day of such violation, and \$2,500.00 per day for each business day of such violation thereafter
  - b. For failure to complete and submit, other written submittals not included in Paragraph 80 (a) of this section in a manner acceptable to EPA or at the time required pursuant to this Order: \$1,000.00 per day for the first ten business days of such violation, \$1,500.00 per day for the eleventh through twenty-first business day of such-violation, and \$2,000.00 per day for each business day of such violation thereafter;
  - c. For failure to comply with any other provisions of this Order in a manner acceptable to EPA: \$1,000.00 per day for the first ten business days of such violation, \$1,500.00 per day for the eleventh through twenty-first business day of such violation, and \$2,000.00 per day for each business day of such violation thereafter.
81. 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 Order. Penalties shall continue to accrue regardless of whether EPA has notified the Respondent of a violation.

82. All penalties owed to the United States under this Section shall be due and payable within thirty (30) days of the Respondent's receipt from EPA of a written demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XX: Dispute Resolution. Such a written demand will describe the violation and will indicate the amount of penalties due.
83. Interest shall begin to accrue on any unpaid stipulated penalty balance beginning on the thirty-first day after Respondent's receipt of 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 days.
84. All penalties shall be made by cashier's check or certified check payable to: **"Treasurer, United States of America"** or by one of the other payment options set out below: The Facility name and the docket number for this matter shall be referenced on the face of the check or noted if possible on the other payment options. The payment options are:

- a. Check Payment By U.S. Postal Service:

US 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  
US EPA Fines & Penalties  
1005 Convention Plaza  
SL-MO-C2-GL  
St. Louis, Missouri 63101  
(314) 418-1028

- c. Wire Transfer:

Federal Reserve Bank of New York  
ABA: 021030004  
Account Number: 68010727  
SWIFT address: FRNYUS33  
33 Liberty Street



New York, New York 10045

Field Tag 4200 of the Fedwire message should read:

"D 68010727 Environmental Protection Agency

- d. Automated Clearinghouse (ACH) for receiving US currency (also known as REX or remittance express):

PNC Bank

US Treasury REX / Cashlink ACH Receiver

ABA: 051036706

Account Number: 310006, Environmental Protection Agency

CTX Format Transaction Code 22 – checking

Environmental Protection Agency

808 17<sup>th</sup> Street, N.W.

Washington, DC 20074

Contact: Jesse White, (301) 887-6548

- e. On line payment:

There is now an On Line Payment Option, available through the Dept. of Treasury. This payment option can be accessed from the information below:

[www.pay.gov](http://www.pay.gov)

Enter sfo 1.1 in the search field

Open form and complete required fields.

- 85. 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 Street, S.W.

Atlanta, Georgia 30303

and to:

Chief, South Section

Enforcement and Compliance Branch

RCRA Division

U.S. Environmental Protection Agency, Region 4

61 Forsyth Street, S.W.

Atlanta, Georgia 30303

- 86. Copies of all such checks and letters forwarding the checks shall be sent simultaneously to the EPA Project Coordinator.



87. Respondent may dispute EPA's assessment of stipulated penalties by invoking the dispute resolution procedures under Section XX: DISPUTE RESOLUTION. The stipulated penalties in dispute shall continue to accrue, but need not be paid, during the dispute resolution period. 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 EPA within ten (10) business days of receipt of such resolution in accordance with Paragraph 84 of this Section.

Neither the invocation of dispute resolution nor the payment of penalties shall alter in any way the Respondent's obligation to comply with the terms and conditions of this Order. The stipulated penalties set forth in this section do not preclude EPA from pursuing any other remedies or sanctions which may be available to EPA by reason of Respondent's failure to comply with any of the terms and conditions of this Order. EPA may waive any portion of the stipulated penalties that have accrued pursuant to this Order.

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

#### **XXIX. FORCE MAJEURE AND EXCUSABLE DELAY**

89. Force majeure, for purposes of this 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 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 address it before, during, and after its occurrence, such that any delay or prevention of performance is minimized to the greatest extent possible. Force majeure does not include increased costs of the work to be performed under this Order, or financial inability to complete the work.
90. If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a force majeure event, Respondent shall contact by telephone and communicate orally with EPA's Project Coordinator or, in his or her absence, his or her supervisor or second level manager or, in the event both of EPA's designated representatives are unavailable, the Deputy Director of the RCRA Division, EPA Region 4, within forty-eight (48) hours of when Respondent first knew or should have known that the event might cause a delay. Within five (5) days thereafter, Respondent shall provide to 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 force majeure 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 they intend 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, welfare or the environment. Respondent shall include with any notice all available documentation supporting its claim 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. Respondent shall be deemed to have notice of any circumstances of which its contractors had or should have had notice.

91. If EPA determines that the delay or anticipated delay is attributable to a force majeure event, the time for performance of such obligation under this Order that is affected by the force majeure event will be extended by EPA for such time as 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 EPA determines that the delay or anticipated delay has been or will be caused by a force majeure event, 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.
92. If EPA disagrees with Respondent's assertion of a force majeure event, EPA will notify the Respondent in writing and the Respondent may elect to invoke the dispute resolution provision, and shall follow the time-frames set forth in Section XX. 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 time for performance of such obligation will be extended by EPA for such time as is necessary to complete such obligation.

### **XXX. RESERVATION OF RIGHTS**

93. 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 Order, including without limitation the assessment of penalties under Section 3008(h)(2) of RCRA, 42 U.S.C. § 6928(h)(2). This 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 EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States.
94. EPA reserves the right to disapprove of work performed by Respondent pursuant to this Order to the extent that such work does not satisfy the requirements of the Order and, in such event, to order that Respondent perform additional tasks consistent with this Order.
95. EPA reserves any right it may have 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. EPA may exercise its authority under CERCLA to undertake response actions at any time. In any event, EPA reserves its right to seek reimbursement from Respondent for costs incurred by the United States. Notwithstanding compliance with the terms of this Order, Respondent is not



released from liability, if any, for the costs of any response actions taken or authorized by EPA.

96. If EPA determines that activities in compliance or noncompliance with this 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, EPA may order the Respondent to stop further implementation of this Order for such period of time as EPA determines may be needed to abate any such release or threat and/or to undertake any action which EPA determines is necessary to abate such release or threat.
97. This Order is not intended to be nor shall it be construed to be a permit. Further, the parties acknowledge and agree that EPA's approval of any final Work Plan does not constitute a warranty or representation that the Work Plan will achieve the required cleanup or performance standards. Compliance by the Respondent with the terms of this Order shall not relieve the Respondent of its obligation to comply with RCRA or any other applicable local, State, or Federal laws and regulations.
98. The Respondent does not admit any of the factual or legal determinations made by the EPA and reserves all rights and defenses it may have regarding liability or responsibility for conditions at or from the Facility, with the exception of its right to contest EPA's jurisdiction to issue or enforce this Order and its right to contest the terms of this Order. The Respondent has entered into this Order in good faith without trial or adjudication of any issue of fact or law.
99. Notwithstanding any other provision of this Order, no action or decision by EPA pursuant to this Order, including without limitation, decisions of the EPA, the Director or Deputy Director of the RCRA Division, or any authorized representative of EPA, shall constitute final agency action giving rise to any right of judicial review prior to EPA's initiation of a judicial action to enforce this Order, including an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this Order.
100. 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.

#### **XXXI. OTHER CLAIMS**

101. Nothing in this 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.



#### **XXXII. OTHER APPLICABLE LAWS**

102. All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable local, State, and Federal laws and regulations. Respondent shall obtain or cause their representatives to obtain all permits and approvals necessary under such laws and regulations.

#### **XXXIII. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT**

103. 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 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.

#### **XXXIV. MODIFICATION**

104. This Order may only be modified by mutual agreement of 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 EPA, and shall be incorporated into this Order.
105. 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. 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 Order.

#### **XXXV. SEVERABILITY**

106. If any provision or authority of this Order or the application of this 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 Order shall remain in force and shall not be affected thereby.

#### **XXXVI. TERMINATION AND SATISFACTION**

107. The provisions of this Order shall be deemed satisfied upon Respondent's and EPA's execution of an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Rights" ("Acknowledgment"). EPA will prepare the Acknowledgment for Respondent's signature. The Acknowledgment will specify that Respondent has



demonstrated to the satisfaction of EPA that the terms of this Order, including any additional tasks determined by EPA to be required pursuant to this Order, have been satisfactorily completed. Respondent's execution of the Acknowledgement will affirm Respondent's continuing obligation (1) to preserve all records as required under the Order and (2) to recognize EPA's reservation of rights in accordance with these respective sections of the Order after the rest of the Order is satisfactorily completed.

#### **XXXVII. SURVIVABILITY/PERMIT INTEGRATION**

108. Except as otherwise expressly provided in this section, this Order shall survive the issuance or denial of a RCRA permit for the Facility, and this Order shall continue in full force and effect after either the issuance or denial of such permit. Accordingly, the Respondent shall continue to be liable for the performance of obligations under this Order notwithstanding the issuance or denial of such permit. If the Facility is issued a RCRA permit and that permit expressly incorporates all or a part of the requirements of this Order, or expressly states that its requirements are intended to replace some or all of the requirements of this Order, Respondent may request a modification of this Order and shall, with EPA approval, be relieved of liability under this Order for those specific obligations.

#### **XXXVIII. EFFECTIVE DATE**

109. The effective date of this Order shall be five (5) days after Respondent has received notice from EPA that EPA has signed the Order.

#### **AGREED AND CONSENTED TO:**

Walter Coke, Inc.

By: Carol W. Farrell  
Name: Carol W. Farrell  
Title: President

Dated: September 12, 2012  
(Typed or Printed)  
(Typed or Printed)

#### **U.S. Environmental Protection Agency**

By: Jeffrey T. Pallas

Jeffrey T. Pallas  
Acting Deputy Director  
RCRA Division  
US EPA, Region 4  
61 Forsyth Street S.W.  
Atlanta, Georgia 30303-3104

Dated: September 17, 2012



## **Attachment A: DEFINITIONS & TERMS**

Unless otherwise expressly provided herein or listed below, terms used in this Order which are defined in RCRA or in regulations promulgated under RCRA shall have the meaning assigned to them under RCRA or in such regulations.

- a) “Administrative Record” shall mean the record compiled and maintained by EPA relative to this Order. 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.
- b) An “Area of Concern” (AOC) includes any discrete contiguous area that is not a 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.
- c) “CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, et seq.
- d) The terms “Comply” or “Compliance” may be used interchangeably and shall mean performance of work required by this Order of a quality approvable by EPA, and in the manner and the time specified in this Order or any modification thereof or its attachments or any modification thereof. 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 Order.
- e) “Contractor” shall include any subcontractor, consultant or laboratory retained to conduct or monitor any portion of the work performed pursuant to this Order.
- f) “Confirmatory Sampling” shall mean environmental sampling and analysis to confirm that hazardous waste or hazardous constituents have been released into the environment from SWMUs or AOCs at the Facility. Confirmatory Sampling may result in a determination of no further action.
- g) “Day” shall mean a calendar day unless expressly stated to be a business day.
- h) “Business Day” shall mean a day other than a Saturday, Sunday, or Federal Holiday. In computing any period of time under this 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.
- i) “EPA” or “U.S. EPA” shall mean the United States Environmental Protection Agency, and any successor departments or agencies of the United States.
- j) “Extent of Contamination” is defined as the horizontal and vertical area in which the concentrations of hazardous constituents in the environmental media being



investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the EPA.

- k) “Facility” shall mean the Walter Coke, Inc. facility located at 3500 35<sup>th</sup> Avenue North, Birmingham, Alabama 33618.
- l) “Hazardous Constituents” shall include mean those constituents contained within hazardous and nonhazardous solid waste that are listed in Appendix VIII of 40 C.F.R. Part 261 or in Appendix IX of 40 C.F.R. Part 264.
- m) “Interim Measures” for the purpose of this Order interim measures are actions necessary to minimize or prevent the further migration of contaminants subject to regulation under RCRA and limit actual or potential human and environmental exposure to contaminants subject to regulation under RCRA while long-term corrective action remedies are evaluated and, if necessary, implemented.
- n) “Institutional Controls and/or Land Use Restrictions” for the purpose of this Order are legal instruments that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy.
- o) “RCRA” shall mean the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. §§ 6921 et. seq.
- p) “Receptors” shall mean those humans, animals, or plants and their habitats affected by releases subject to regulation under RCRA from the Facility.
- q) “Release” for purposes of this Order shall mean any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous constituents that is subject to regulation under RCRA.
- r) A “Remedy” for the purposes of this Order, is selected actions or measures to be implemented to prevent, mitigate, and/or remediate any release of hazardous waste or hazardous constituents at or from the Facility regardless of whether the action or measure must be undertaken on the Respondent’s property or on adjacent properties impacted by hazardous wastes or hazardous constituents from the Facility.
- s) “Scope of Work” shall mean the outline of work that the Respondent must use to develop all Work Plans and reports required by this Order. All Scopes of Work and modifications or amendments thereto are incorporated by reference and are an enforceable part of this Order.
- t) “Site” shall mean the facility, as defined herein
- v) “SWMU Management Area” (SMA) means areas of SWMUs or AOCs with similar exposures, chemical drivers, and proposed remedial actions.



- w) “Solid Waste Management Unit” (SWMU) for the purpose of this Order means any unit which has been used for the treatment, storage or disposal of a solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid wastes. SWMUs include areas that have been contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding, for example, one-time accidental spills that are immediately remediated and cannot be linked to solid waste management activities (e.g., product or process spills).
- x) “State” shall mean the State of Alabama.
- y) “Submittal” shall mean any written document that Respondent is required by this Order to send to EPA.
- z) “United States” shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.
- aa) “Waste Material” shall mean (a) any hazardous substance under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any hazardous waste under Alabama Code Section 22-30-3(5).
- bb) “Work” or “Obligation” shall mean any activity Respondent must perform to comply with the requirements of this Order and its attachments.



**Attachment B:**

**(For electronic version, Maps in PDF format are separately attached but incorporated as Attachment B into the Order)**

**MAPs prepared by Terracon for the  
Walter Coke Facility  
Birmingham, Alabama  
Project No. E1127096  
Figures 1-6  
Entitled in the Legend:**

**Figure 1: Proposed Solid Waste Management Areas (SMAs) dated 7/24/2012**

**Figure 2: BTF Process Area and Sewers - SMA 1 dated 8/16/2012**

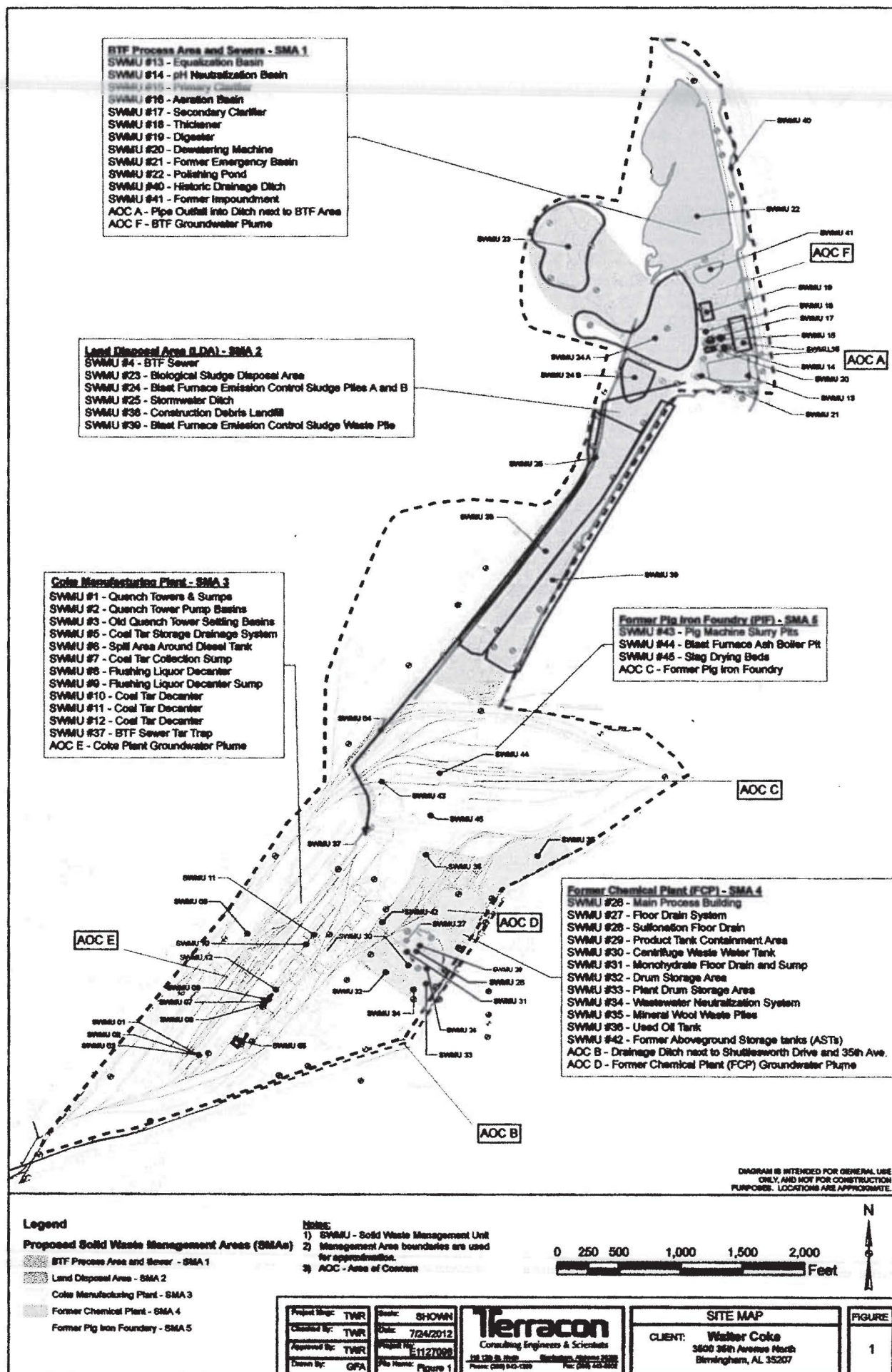
**Figure 3: Land Disposal Area - SMA 2 dated 8/16/2012**

**Figure 4: Coke Manufacturing Plant - SMA 3 dated 8/16/2012**

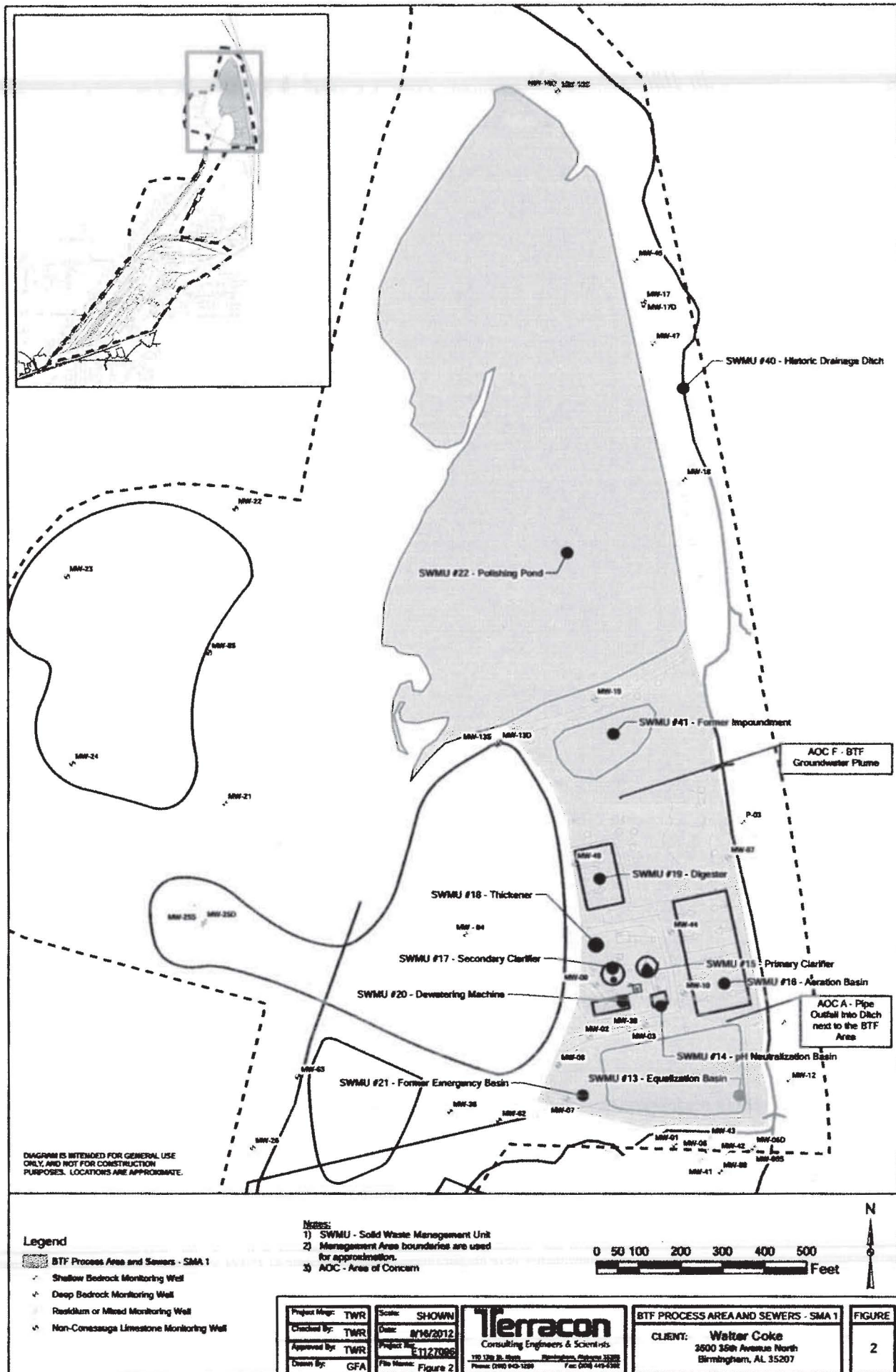
**Figure 5: Former Chemical Plant - SMA 4 dated 8/16/2012**

**Figure 6: Former Pig Iron Foundry - SMA 5 dated 8/16/2012**

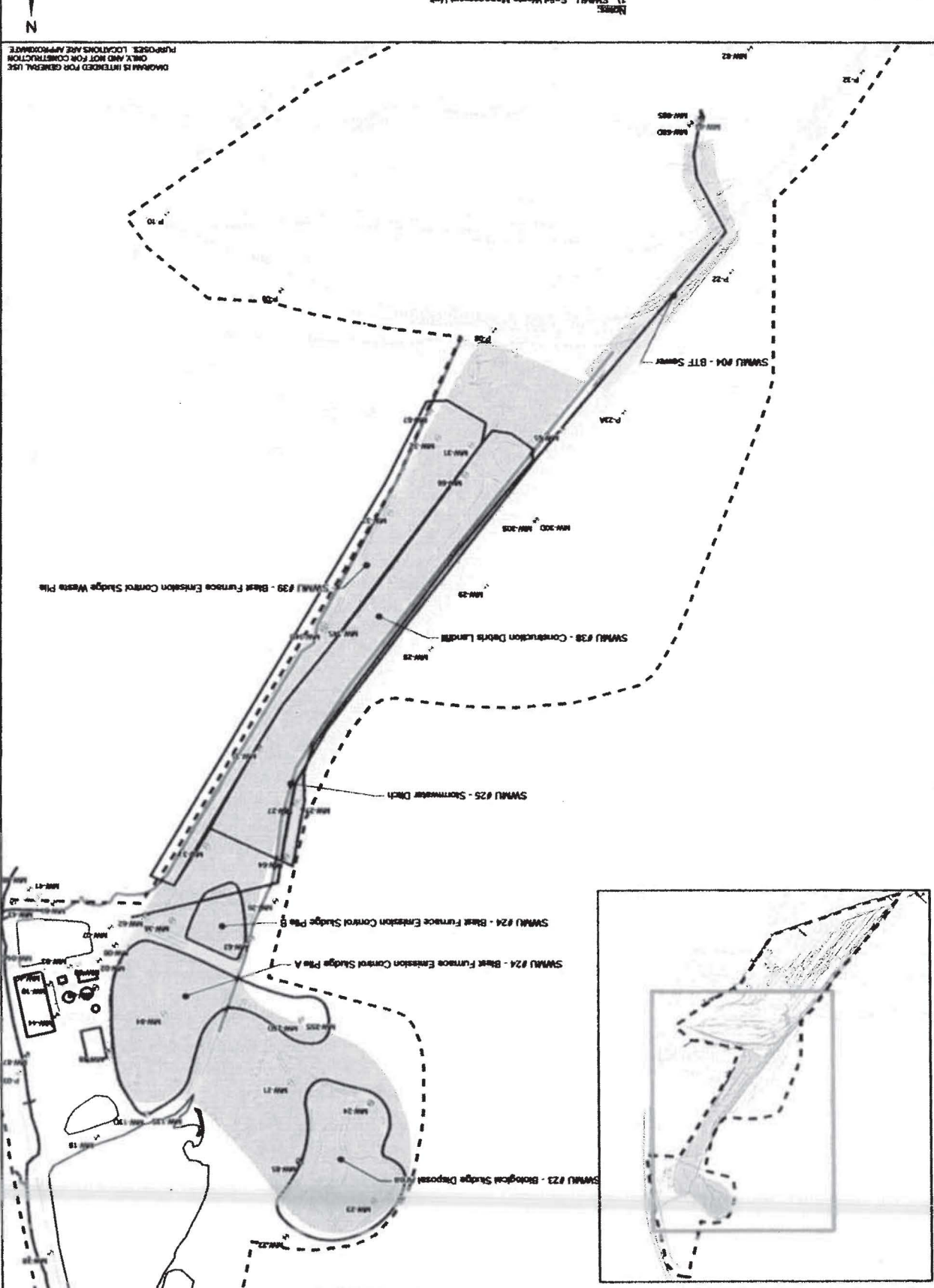




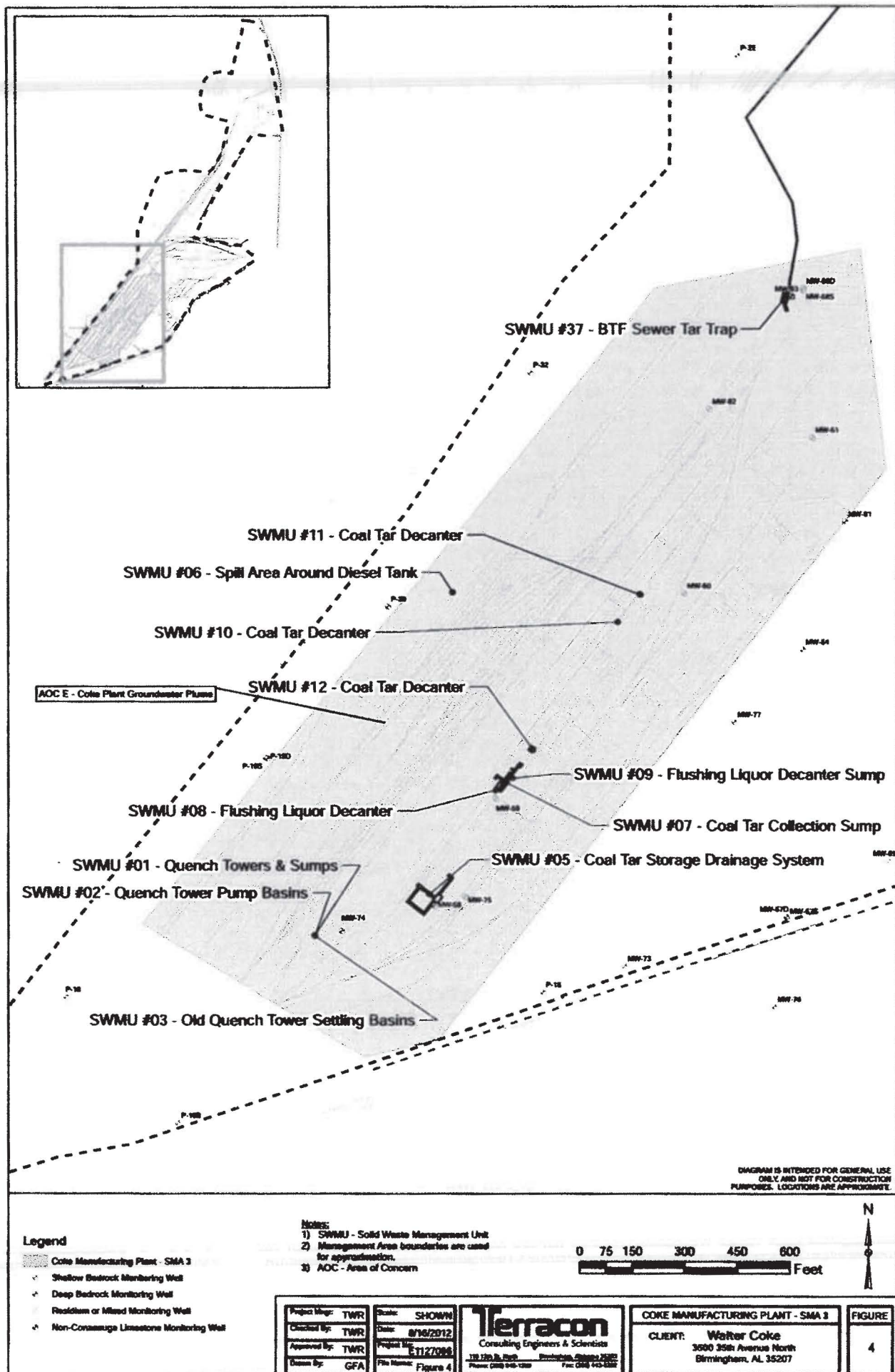




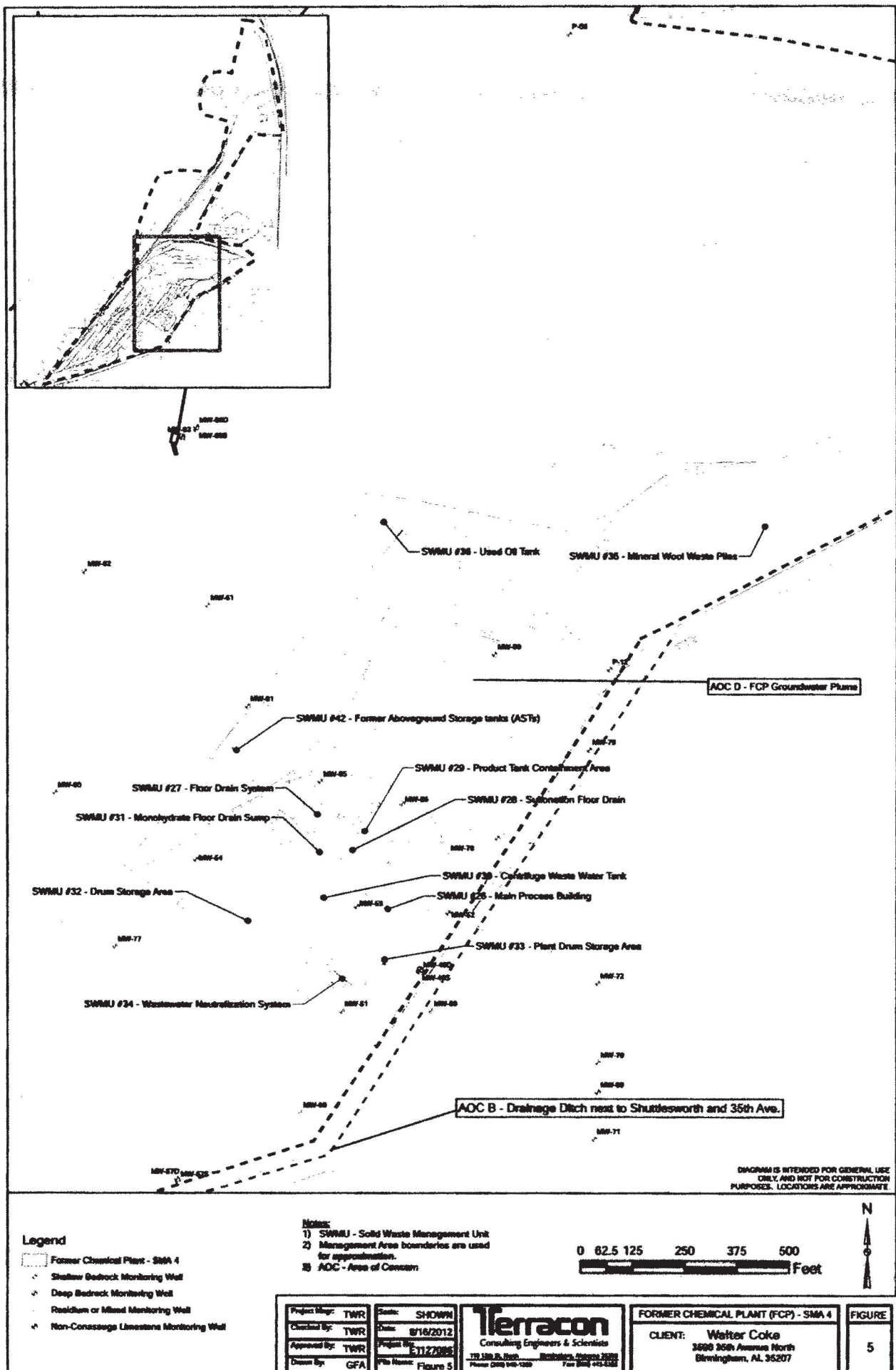




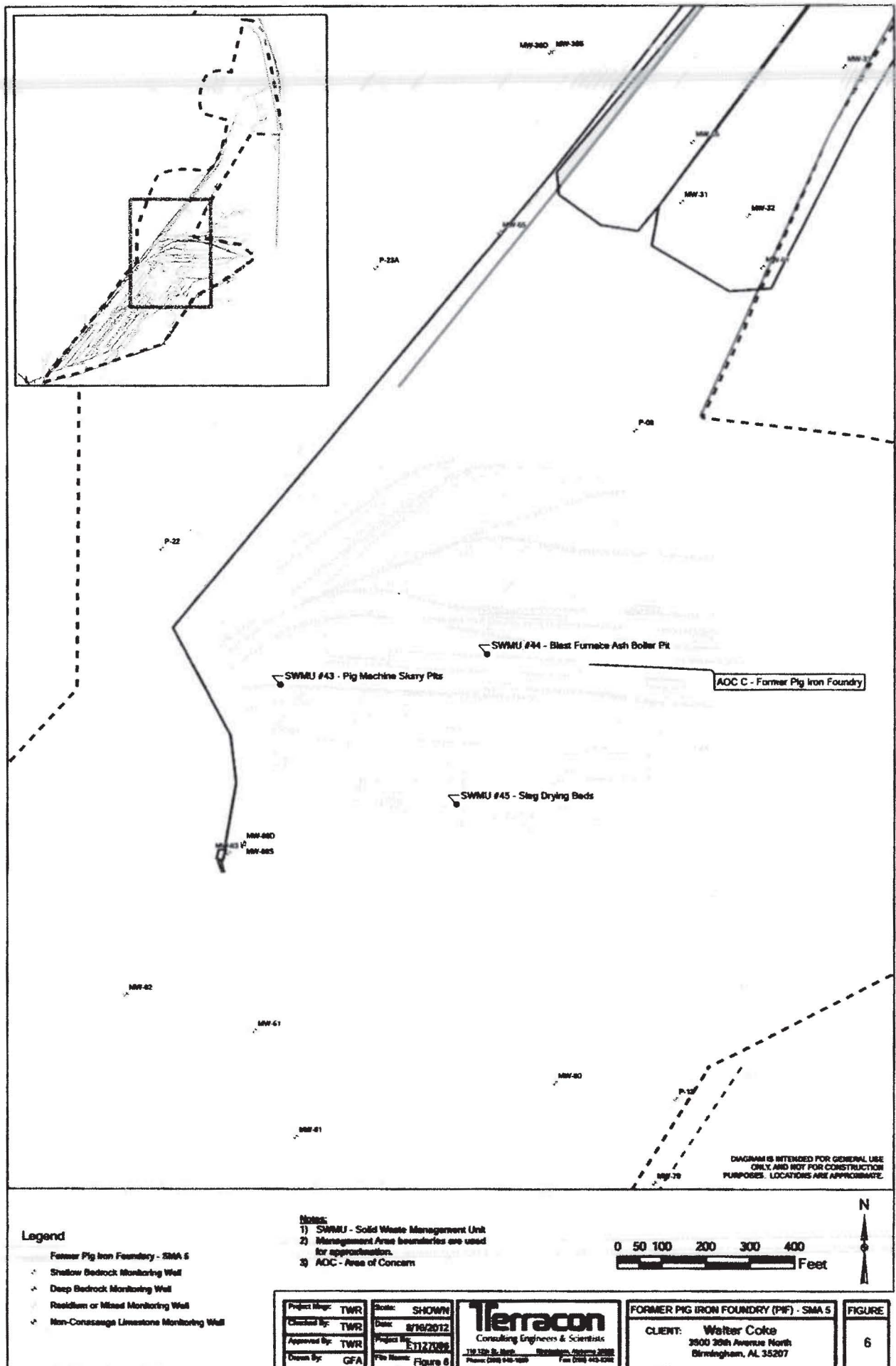














## **Attachment C: Financial Assurance**

1. Following RTC issuance for each Remedy, the Respondent shall provide cost estimates, and demonstrate financial assurance for completing the approved Remedy. Thereafter, the Respondent shall review the Remedy cost estimates, adjust the financial assurance instrument, and submit the revised estimate and instrument to the EPA annually for each Remedy.
  - a. Within 120 calendar days of RTC issuance for each remedy, Respondent shall submit to EPA for review and approval an Estimated Cost of the Corrective Measures Work to Be Performed that includes the total third party cost of implementing the CMS remedy, including any necessary long-term CMS costs. Third-party costs are described in 40 C.F.R. § 264.142(a)(2) and shall include all direct costs and also all indirect costs (including contingencies) as described in EPA Directive No. 9476.00-6 (November, 1986), Volume III, Chapter 10. The cost estimate shall contain sufficient details to allow it to be evaluated by EPA.
  - b. Until the CMS remedy required by this Order is completed, Respondent shall annually adjust the Estimated Cost of the Corrective Measures Work for inflation within thirty (30) days after the close of Respondent's fiscal year for the Financial Test and Corporate Guarantee, or within sixty (60) days prior to the anniversary date of the establishment of all other financial assurance. In addition, the Respondent shall adjust the Estimated Cost of the Corrective Measures Work if EPA determines that any additional Work is required, pursuant to Section XXII Additional Work, or if any other condition increases the cost of the work to be performed under this Order.
  - c. The EPA shall either approve or disapprove, in writing, the Estimated Cost of the Corrective Measures Work. If the EPA disapproves the Estimated Cost of the Corrective Measures Work, the EPA shall either: (1) notify the Respondent in writing of the Estimated Cost of the Corrective Measures Work's deficiencies and specify a due date for submission of a revised Estimated Cost of the Corrective Measures Work, or (2) conditionally approve the CMS and notify the Respondent of the conditions.
  - d. The mechanism for financial assurance shall be one that is described and allowable under 40 C.F.R. §§ 264.140 through 264.151 Subpart H unless otherwise agreed to by the EPA.
  - e. Within 60 calendar days of EPA's written approval of the Estimated Cost of the Corrective Measures Work for each remedy, in order to secure the full and final completion of work in accordance with this Order, Respondent shall establish and maintain financial assurance for the benefit of EPA for the amount stated in the approved Estimated Cost of the Corrective Measures Work. Respondent may use one or more of the financial assurance instruments generally described in 40 C.F.R. § 264.151. Respondent may combine more than one instrument to demonstrate financial assurance in accordance with this Order, except that instruments guaranteeing performance (i.e. surety bond for performance, the financial test, or the



corporate guarantee) rather than payment may not be combined with other instruments.

- f. Any and all financial assurance instruments provided under this Order shall be satisfactory in form and substance as determined by EPA.
2. If the Respondent seeks to establish financial assurance by using the financial test specified in 40 C.F.R. § 264.151, Respondent shall submit to EPA within 60 days of EPA's approval of the Estimated Cost of the Corrective Measures Work all documentation required by that regulation, including the Chief Financial Officer's letter, the Respondent's most recent audited financial statements, and the special auditor's letter. Respondent's financial assurance shall be considered effective immediately upon EPA's determination that the submitted financial information appears to satisfy the financial test criteria.
3. If Respondent seeks to establish financial assurance by using a surety bond or a letter of credit, Respondent shall at the same time establish, and thereafter maintain, a standby trust fund, which meets the requirements specified in 40 C.F.R. § 264.151, into which funds from the other financial assurance instrument can be deposited, if the financial assurance provider is directed to do so by EPA.
4. (a) Respondent shall submit proposed (draft) financial assurance instruments and related required documents for review to EPA as follows:

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

(b) Following EPA's approval of Respondent's proposed (draft) financial assurance instruments for each and every Remedy, Respondent shall execute or otherwise finalize all instruments or other required documents, and shall submit them as follows:

Regional Administrator  
Attn: RCRA & CERCLA Records Program Manager  
Atlanta Federal Center – 11<sup>th</sup> Floor  
United States Environmental Protection Agency  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303
5. Also, copies of all final financial assurance instruments and related required documents shall be sent by certified mail to the State of Alabama.



6. If at any time during the effective period of this Order, the Respondent provides financial assurance by means of a corporate guarantee or financial test pursuant to 40 C.F.R. § 264.151, Respondent shall also comply with the other relevant requirements of 40 C.F.R. § 264.143(f), 40 C.F.R. § 264.151(f), and 40 C.F.R. § 264.151(h)(1) relating to these methods, unless otherwise provided in this Order, including but not limited to, (1) initial submission of required financial reports and statements from the guarantors' chief financial officer and independent certified public accountant; (2) annual re-submission of such reports and statements within ninety (90) days after the close of each of the guarantors' fiscal years; and (3) notification of EPA within ninety (90) days after the close of any of the guarantors' fiscal years in which any such guarantor no longer satisfies the financial test requirements set forth at 40 C.F.R. § 264.143(f)(1). Respondent further agrees that if the Respondent provides financial assurance by means of a corporate guarantee or financial test, EPA may request additional information (including financial statements and accountant's reports) from the Respondent or corporate guarantor at any time.
7. For purposes of evaluating the viability of a corporate guarantee or satisfaction of the financial test described in 40 C.F.R. § 264.151, references in 40 C.F.R. § 264.143(f) or 40 C.F.R. § 264.145(f) to "the sum of current closure and post-closure costs and the current plugging and abandonment cost estimates" shall mean "the sum of all environmental remediation obligations" (including obligations under CERCLA, RCRA, Underground Injection Control (UIC), TSCA and any other state or tribal environmental obligation) guaranteed by such company or for which such company is otherwise financially obligated in addition to the cost of the work to be performed in accordance with this Order.
8. If at any time EPA determines that a financial assurance instrument provided pursuant to this Section is inadequate, or no longer satisfies the requirements set forth or incorporated by reference in the Section, whether due to an increase in the estimated cost of completing the Work or for any other reason, EPA shall so notify the Respondent in writing. If at any time the Respondent becomes aware of information indicating that any financial assurance instrument provided pursuant to this Section is inadequate or no longer satisfies the requirements set forth or incorporated by reference in the Section, whether due to an increase in the estimated cost of completing the Corrective Measures or for any other reason, then Respondent shall notify EPA in writing of such information within ten days. Within thirty (30) days of receipt of notice of EPA's determination, or within thirty (30) days of Respondent becoming aware of such information, as the case may be, Respondent shall obtain and present to EPA for approval, a proposal for a revised or alternative form of financial assurance listed in 40 C.F.R. § 264.151 that satisfies all requirements set forth or incorporated by reference in this Section.
9. Respondent's inability or failure to establish or maintain financial assurance for completion of the work shall in no way excuse performance of any other requirements of this Order, including, without limitation, the obligation of Respondent to complete the work in strict accordance with the terms of this Order.



10. If Respondent elects to establish financial assurance by using a letter of credit, a surety bond, or an insurance policy, any and all automatic renewal requirements and/or cancellation notification terms related to those instruments shall be in accordance with the regulations at 40 C.F.R. §§ 264.143, .145 and .151.
11. In the event that EPA determines that the Respondent (1) has ceased implementation of any portion of the work, (2) is significantly or repeatedly deficient or late in its performance of the work, or (3) is implementing the work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice (“Performance Failure Notice”) to both the Respondent and the financial assurance provider of Respondent’s failure to perform. The notice issued by EPA will specify the grounds upon which such a notice was issued, and will provide the Respondent with a period of ten days within which to remedy the circumstances giving rise to the issuance of such notice.
12. Failure by the Respondent to remedy the relevant Performance Failure to EPA’s satisfaction before the expiration of the ten-day notice period shall trigger EPA’s right to have immediate access to and benefit of the financial assurance. EPA may at any time thereafter direct the financial assurance provider to immediately (1) deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument (2) or arrange for performance of the work in accordance with this Order.
13. If EPA has determined that any of the circumstances of performance failure described above have occurred, and if EPA is nevertheless unable after reasonable efforts to secure the payment of funds or performance of the work in accordance with this Order from the financial assurance provider pursuant to this Order, then, upon receiving written notice from EPA, Respondent shall within ten days thereafter deposit into the standby trust fund, or a newly created trust fund approved by 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 Order as of such date, as determined by EPA.
14. Respondent may invoke the procedures set forth in Section XX. DISPUTE RESOLUTION, to dispute EPA’s determination that any of the circumstances of performance failure described above have occurred. Invoking the dispute resolution provisions shall not excuse, toll or suspend the obligation of the financial assurance provider to fund the trust fund or perform the work. Furthermore, notwithstanding Respondent’s invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion direct the trustee of such trust fund to make payments from the trust fund to any person that has performed the work in accordance with this Order until the earlier of (1) the date that Respondent remedies, to EPA’s satisfaction, the circumstances giving rise to EPA’s issuance of the relevant Performance Failure Notice or (2) the date that a final decision is rendered in accordance with Section XX. DISPUTE RESOLUTION, that Respondent has not failed to perform the work in accordance with this Order.



15. Reduction of Amount of Financial Assurance. If the Respondent believes that the estimated cost to complete the remaining Corrective Measures has diminished below the amount covered by the existing financial assurance provided under this Order, Respondent may, at the same time that Respondent submits the annual cost adjustment, or at any other time agreed to by EPA, submit a written proposal to EPA to reduce the amount of the financial assurance provided under this Section so that the amount of the financial assurance is equal to the estimated cost of the remaining work to be performed. The written proposal shall specify, at a minimum, the cost of the remaining work to be performed and the basis upon which such cost was calculated. EPA shall notify Respondent of its decision in writing. After receiving EPA's written decision, Respondent may reduce the amount of the financial assurance only in accordance with and to the extent permitted by such written decision. In the event of a dispute, Respondent may reduce the amount of the financial assurance required hereunder only in accordance with the final EPA dispute decision resolving such dispute. No change to the form or terms of any financial assurance provided under this Section, other than a reduction in amount, is authorized except as provided below.
16. Change of Form of Financial Assurance. (1) If the Respondent desires to change the form or terms of financial assurance, Respondent may, at the same time that the Respondent submits the annual cost adjustment, or at any other time agreed to by EPA, submit a written proposal to EPA to change the form of financial assurance. The submission of such proposed revised or alternative form of financial assurance shall be as provided in paragraph (2) below. The decision whether to approve a proposal shall be made in EPA's sole and unreviewable discretion and such decision shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Order or in any other forum. (2) A written proposal for a revised or alternative form of financial assurance shall specify, at a minimum, the cost of the remaining work to be performed, the basis upon which such cost was calculated, and the proposed revised form of financial assurance, including all proposed instruments or other documents required in order to make the proposed financial assurance legally binding. The proposed revised or alternative form of financial assurance shall satisfy all requirements set forth or incorporated by reference in this Section. EPA shall notify the Respondent in writing of its decision to accept or reject a revised or alternative form of financial assurance submitted pursuant to this Paragraph. Within ten (10) days after receiving a written decision approving the proposed revised or alternative financial assurance, Respondent shall execute and/or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding in a form substantially identical to the documents submitted to EPA as part of the proposal, and such financial assurance shall be fully effective. Respondent shall submit all executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding to the RCRA & CERCLA Records Program Manager within thirty (30) days of receiving a written decision approving the proposed revised or alternative financial assurance, with a copy to the EPA Project Coordinator and the State. EPA shall release, cancel or terminate the prior existing financial assurance instruments only after Respondent has submitted all executed and/or otherwise finalized new financial assurance instruments or other required documents to EPA.



17. Release of Financial Assurance. Respondent may submit a written request to the EPA Project Coordinator that EPA releases the Respondent from the requirement to maintain financial assurance under this Section at such time as EPA and Respondent have both executed an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Right" pursuant to Section XXXVI: Termination and Satisfaction, of this Order. EPA shall notify both the Respondent and the provider(s) of the financial assurance that Respondent is released from all financial assurance obligations under this Order. Respondent shall not release, cancel or terminate any financial assurance provided pursuant to this section except as provided in this Order. In the event of a dispute, Respondent may release, cancel, or terminate the financial assurance required hereunder only in accordance with a final administrative or judicial decision resolving such dispute.



## Attachment D: SWMU Management Areas (SMAs)

### SWMU MANAGEMENT AREAS (SMAs) – SWMU List

SMA	SWMUs	Schedule for Completion and Submission of Final Report to EPA
<b>BTF PROCESS AREA &amp; SEWERS – SMA 1</b>	SWMU #13 (Equalization Basin) SWMU #14 (pH Neutralization Basin) SWMU #15 (Primary Clarifier) SWMU #16 (Aeration Basin) SWMU #17 (Secondary Clarifier) SWMU #18 (Thickener) SWMU #19 (Digester) SWMU #20 (Dewatering Machine) SWMU #21 (Former Emergency Basin) SWMU #22 (Polishing Pond) SWMU #40 (Historic Drainage Ditch) SWMU #41 (Former Impoundment) AOC A (Pipe Outfall into Ditch next to BTF Area) AOC F (BTF Groundwater Plume)	180 days
<b>Land Disposal Area (LDA) – SMA 2</b>	SWMU #4 (BTF Sewer) SWMU #23 (Biological Sludge Disposal Area) SWMU #24 (Blast Furnace Emission Control Sludge Piles A and B) SWMU #25 (Stormwater Ditch) SWMU #38 (Construction Debris Landfill) SWMU #39 (Blast Furnace Emission Control Sludge Waste Pile)	270 days
<b>Coke Manufacturing Plant (CMP) – SMA 3</b>	SWMU #1 (Quench Towers and Sumps) SWMU #2 (Quench Tower Pump Basins) SWMU #3 (Old Quench Tower Settling Basins) SWMU #5 (Coal Tar Storage Drainage System) SWMU #6 (Spill Area Around Diesel Tank) SWMU #7 (Coal Tar Collection Sump) SWMU #8 (Flushing Liquor Decanter) SWMU #9 (Flushing Liquor Decanter Sump) SWMU #10 (Coal Tar Decanter) SWMU #11 (Coal Tar Decanter) SWMU #12 (Coal Tar Decanter) SWMU #37 (BTF Sewer Tar Trap) AOC E (Coke Plant Groundwater Plume)	12 months
<b>Former Chemical Plant (FCP) – SMA 4</b>	SWMU #26 (Main Process Building) SWMU #27 (Floor Drain System) SWMU #28 (Sulfonation Floor Drain) SWMU #29 (Product Tank Containment Area) SWMU #30 (Centrifuge Waste Water Tank) SWMU #31 (Monohydrate Floor Drain and Sump) SWMU #32 (Drum Storage Area) SWMU #33 (Plant Drum Storage Area) SWMU #34 (Wastewater Neutralization System) SWMU #35 (Mineral Wool Waste Piles) SWMU #36 (Used Oil Tank) SWMU #42 (Former Aboveground Storage tanks [ASTs]) AOC B (Drainage Ditch next to Shuttlesworth Drive and 35 <sup>th</sup> Ave) AOC D (Former Chemical Plant [FCP] Groundwater Plume)	18 months
<b>Former Pig Iron Foundry (PIF) – SMA 5</b>	SWMU #43 (Pig Machine Slurry Pits) SWMU #44 (Blast Furnace Ash Boiler Pit) SWMU #45 (Slag Drying Beds) AOC C (Former Pig Iron Foundry)	24 months



Attachment E: 45 SWMUs and 6 AOCs

- 
- 1 - Quench Towers & Sumps
  - 2 - Quench Tower Pump Basins
  - 3 - Old Quench Tower Settling Basins
  - 4 - BTF Sewer
  - 5 - Coal Tar Storage Drainage System
  - 6 - Spill Area Around Diesel Tank
  - 7 - Coal Tar Collection Sump
  - 8 - Flushing Liquor Decanter
  - 9 - Flushing Liquor Decanter Sump
  - 10 - Coal Tar Decanter
  - 11 - Coal Tar Decanter
  - 12 - Coal Tar Decanter
  - 13 - Equalization Basin
  - 14 - pH Neutralization Basin
  - 15 - Primary Clarifier
  - 16 - Aeration Basin
  - 17 - Secondary Clarifier
  - 18 - Thickener
  - 19 - Digester
  - 20 - Dewatering Machine
  - 21 - Former Emergency Basin
  - 22 - Polishing Pond
  - 23 - Biological Sludge Disposal Area
  - 24 - Blast Furnace Emission Control Sludge Piles A and B
  - 25 - Storm Water Ditch
  - 26 - Main Process Building
  - 27 - Floor Drain System
  - 28 - Sulfonation Floor Drain
  - 29 - Product Tank Containment Area
  - 30 - Centrifuge Waste Water Tank
  - 31 - Monohydrate Floor Drain & Sump
  - 32 - Drum Storage Area
  - 33 - Plant Drum Storage Area
  - 34 - Wastewater Neutralization System



- 35 - Mineral Wool Waste Piles
- 36 - Used Oil Tank
- 37 - BTF Sewer Tar Trap
- 38 - Construction Debris Landfill
- 39 - Blast Furnace Emission Control Sludge Waste Pile
- 40 - Historic Drainage Ditch
- 41 - Former Impoundment
- 42 - Former Aboveground Storage Tanks (ASTs)
- 43 - Pig Machine Slurry Pits
- 44 - Blast Furnace Ash Boiler Pit
- 45 - Slag Drying Beds

- AOC A - Pipe Outfall into Ditch next to the BTF Area
- AOC B - Drainage Ditch next to Shuttlesworth and 35th Ave.
- AOC C - Former Pig Iron Foundry
- AOC D - Former Chemical Plant (FCP) Groundwater Plume
- AOC E - Coke Plant Groundwater Plume
- AOC F - BTF Groundwater Plume



## 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 Walter Coke, Inc., Docket No. RCRA-04-2012-4255, on the parties listed below in the manner indicated:

Joan Redleaf Durbin  
Associate Regional Counsel  
Office of Environmental Accountability  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

(Via EPA's internal mail)

Jeffrey T. Pallas  
Acting Deputy Director  
RCRA Division  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

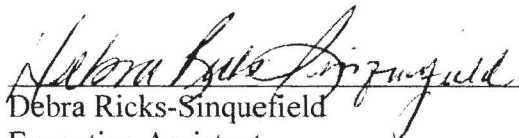
(Via EPA's internal mail)

Carol W. Farrell  
President  
Walter Coke, Inc.  
3500 35th Avenue North  
Birmingham, Alabama 35207-2918

(Via Certified Mail)

I also hereby certify that I have this day filed the original and one true and correct copy of foregoing RCRA Section 3008(h) Administrative Order on Consent, Docket No. RCRA-04-2012-4255, with the Regional Hearing Clerk, United States Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, GA 30303.

Dated this 17 day of September, 2012.

  
Debra Ricks-Sinquefeld  
Executive Assistant  
RCRA Division  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8960





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

APR 16 2012

Carol Farrell, President  
Walter Energy, Inc.  
P.O. Box 5327  
3500 35<sup>th</sup> Avenue  
Birmingham, Alabama 33618

SUBJECT: Approval of February 20, 2002, RCRA Facility Investigation Interim Remedial Measures Work Plan (IRMWP) – Groundwater Interim Measures Work Plan prepared by Arcadis, and the February 11, 2011, Groundwater Interim Measures Work Plan Addendum for the former Chemical Plant (Addendum IMWP) prepared by CH2MHill  
Walter Coke, Inc., Birmingham, Alabama  
EPA ID No. AL 000 828 848

Dear Ms. Farrell:

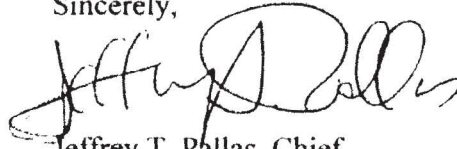
The U.S. Environmental Protection Agency has reviewed the above subject documents for the groundwater interim measures of the Former Chemical Plant submitted by Walter Coke, Birmingham, Alabama in February 2002 and revised in February 2011. Pursuant to Section VI of the RCRA Section 3008(h) Administrative Order dated September 29, 1989, EPA is hereby approving the groundwater interim measures Work Plan for the off-site migration of contaminated groundwater for the Former Chemical Plant.

This approval for the groundwater interim measures includes approval of Sections 2.0 and 5.0 of the above referenced IRMWP prepared by Arcadis, dated February 20, 2002, the above referenced Addendum IMWP prepared by CH2MHill, dated February 11, 2011, and the modifications to both documents as specified in the Enclosure entitled "EPA Final Comments on the Interim Measures Work Plan for the Off-site Migration of Contaminated Groundwater from the Former Chemical Manufacturing Plant." Together, these constitute the final interim measures work plan (IWMP) and the IWMP is considered effective on the date of this letter. Pursuant to the schedule contained in the Enclosure, Walter Coke is required to resubmit a final IWMP (to have everything in one document) for the Former Chemical Plant incorporating all of the changes to EPA within 30 days of the date of this letter.



If you have any questions regarding this correspondence, please feel free to contact me at (404) 562-8569 or by electronic mail at [pallas.jeff@epa.gov](mailto:pallas.jeff@epa.gov), or Karen Knight, Chief of the RCRA Corrective Action Section, at (404) 562-8885 or by electronic mail at [knight.karen@epa.gov](mailto:knight.karen@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey T. Pallas". The signature is fluid and cursive, with the first name "Jeffrey" and last name "Pallas" clearly distinguishable.

Jeffrey T. Pallas, Chief  
Restoration and Underground Storage Tank  
Branch  
RCRA Division

Enclosure

cc: Metz Duites, ADEM



## **Enclosure**

**EPA Final Comments on the Interim Measures Work Plan  
for the Off-site Migration of Contaminated Groundwater from the  
Former Chemical Manufacturing Plant  
Walter Coke, Inc., Birmingham, Alabama  
EPA ID No. AL 000 828 848  
Revised April 13, 2012**

### **Introduction**

EPA has completed its review of the Interim Remedial Measures Work Plan (IRMWP) for the Chemical Manufacturing Plant, dated February 20, 2002, and the Groundwater Interim Measures Work Plan Addendum (Addendum IMWP) for the former Chemical Manufacturing Plant dated February 11, 2011. Sections 2.0 and 5.0 of the IRMWP and the Addendum IMWP represent the proposed groundwater interim measures. The facility has proposed an interim measure for addressing off-site migration of contaminated groundwater from the former Chemical Manufacturing Plant. The interim measure is hydraulic containment with the secondary benefit of chemical mass reduction via groundwater recovery.

### **Comment #1 Objective of the Interim Measures (IM)**

Please add to the Scope in the final Interim Measures Work Plan (IMWP) for Groundwater Interim Measures the following objective: As a secondary benefit, the IM will reduce the mass of VOCs and SVOCs in the groundwater under the former Chemical Manufacturing Plant with the understanding that the final remedy goal for meeting the groundwater protection standards is to achieve the MCLs, regional screening levels (RSLs), and/or the Corrective Measures Study (CMS) risk-based standards.

### **Comment #2 Performance Objectives- Addendum IMWP**

The IM stated, "[t]he performance objective of the hydraulic containment IM is to maintain an inward gradient at those locations along the down gradient property boundary where chemical concentrations have been detected above the EPA's tap water regional screening levels (RSLs). The specific area being targeted is "around" monitoring wells MW-49S, MW-50, and MW-51."

- Revise the final IMWP to restate the performance objectives as follows: 1) Establish pumping rates in the recovery wells to maintain the inward gradient along the property line of MW-49S and MW 51. 2) Evaluate hydraulic interaction and capture for the interior wells (CW-3, CW-4, CW-5, and CW-6); and
- Revise the final IMWP to specify that Walter Coke will quantify the secondary benefits of chemical mass reduction by: 1) Determining on a quarterly basis, the mass of VOCs and SVOCs removed from the aquifer system-wide; and 2) Describe how Walter Coke will measure and calculate mass removal of VOCs and SVOCs.



### **Comment #3 - Down Gradient Well from CW-1- Addendum IMWP**

As Walter Coke proposes to install CW-1 down gradient of MW-51, Walter Coke needs a new down gradient monitoring well from CW-1 to monitor the effectiveness of CW-1. The down gradient hydraulic radius and chemical concentrations will need to be monitored. EPA recommends installing a down gradient monitoring well approximately 170 feet south of MW-50 and approximately 150 feet from CW-1.

### **Comment #4 - System Performance Monitoring 2<sup>nd</sup> Bullet – Addendum IMWP**

*Once the entire groundwater IM is operational, monthly water levels will be collected manually for six months in the wells listed in Table 1, followed by quarterly monitoring for the remainder of the year.*

- Provide a description of how the system data will be evaluated.
- Add quarterly routine sampling and chemical analysis to allow the calculation of mass removal. EPA may allow annual sampling after a minimum of 4 quarterly sampling events if Walter Coke can demonstrate, with EPA approval, system effectiveness.

### **General Comment #5 Interim Measures System Objective**

Report the total mass and volume of the VOCs and SVOCs recovered in pounds and gallons, respectively.

Specify that the facility will routinely calculate the mass of constituents removed from the system for reporting to EPA and ADEM.

### **Comment #6 Schedule - Addendum IMWP**

Amend the schedule in the work plan as follows:

- A. A final IMWP incorporating these comments must be resubmitted to EPA within 30 days of Walter Coke's receipt of these comments.
- B. Planning, design, and acquisition of subcontracts to support the final IMWP must be submitted within 90 days of Walter Coke's receipt of these comments.
- C. An Interim Measures Groundwater Sampling and Analysis Plan (IM GWSAP) and an Indoor Air Vapor Intrusion Work Plan (IAVIWP) must be submitted to EPA within 75 days of Walter Coke's receipt of these comments.
- D. Preconstruction monitoring must begin within 30 days of EPA approval of the IM GW-SAP.
- E. Construction will be completed and system start-up will begin within 120 days of the completion of preconstruction monitoring.
- F. Construction Progress Reports should be submitted bi-monthly until the system is operationally ready.
- G. After the system is operationally ready, quarterly monitoring reports should be submitted to document system performance. Quarterly reports are due 60 days after the end of the



quarter, and should continue to be submitted for two years.

- a. Quarterly monitoring reports should include:
  - i. Report Narrative
  - ii. Groundwater elevation data
  - iii. System Evaluation
    - a. Flow direction and magnitude, containment, potentiometric surface and chemical concentration maps, and data trend plots.
    - b. Well Performance (trend line plotted).
  - iv. Quarterly Groundwater Monitoring Results
    - a. Chemical concentrations from CW system sampling port
    - b. Chemical concentrations from monitoring wells (until EPA approves demonstrated system effectiveness)
    - c. Groundwater elevation tables.
  - v. Mass removal calculations system wide from the single combined system wide sample port.
  - vi. Recommendations for system improvement.
- H. The fourth quarter monitoring report shall include an "annual system effectiveness" report to include the calculated contaminant mass removal; and, if necessary, corrective measures with a schedule for implementation for EPA's concurrence.
- I. EPA may allow annual sampling after a minimum of 4 quarterly sampling events if Walter Coke can demonstrate, with EPA Approval, system effectiveness.

#### References:

Bair, Scott E. and George S. Roadcap, Comparison of Flow Models Used to Delineate Capture Zones of Wells: 1. Leaky-Confined Fractured-Carbonate Aquifer. Groundwater, Vol. 30, No. 2, March-April 1992, p. 199-211.

A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems, EPA 600/R-08/003.

Elements for Effective Management of Operating Pump and Treatment System. 542-R-02-009 OSWER 9355.4-27FS-A December 2002.

Insitu Remediation Technology Status Report: Hydraulic and Pneumatic Fracturing. EPA542-K-94-005 April 1995.

Frank U. and N. Barkley, Remediation of Low Permeability Subsurface Formations by Fracturing Enhancement of Soil Vapor Extraction. Journal of Hazardous Materials, Vol. 40. 1995, p.191-201.



# Exhibit CX08



UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION IV

IN THE MATTER OF:

Sloss Industries Corporation  
P.O. Box 5327  
3500 35th Avenue North  
Birmingham, AL 35207

EPA ID No. ALD 000 828 848

RESPONDENT

)  
) ADMINISTRATIVE ORDER  
)  
)  
) U.S. EPA Docket No. 89-39-R  
)  
) Proceeding under Section  
) 3008(h) of the Resources  
) Conservation and Recovery  
) Act, as amended, 42 U.S.C.  
) Section 6928(h)

I. JURISDICTION

This Administrative Order (Order) is issued 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. Section 6928(h). The authority vested in the Administrator has been delegated to the Regional Administrators by EPA Delegation Nos. 8-31 and 8-32 dated April 16, 1985, and has been further delegated to the Director of the Waste Management Division of the EPA, Region IV.

This Order is issued to Sloss Industries Corporation ["Respondent"], Birmingham, Alabama. (This facility was formerly known as Jim Walters Resources, Inc.) This Order is based upon the administrative record compiled by EPA and incorporated herein by reference. The record is available for review by Respondent and the public at EPA's Region IV office located at 345 Courtland Street, N.E., Atlanta, Georgia 30365.

II. PARTIES BOUND

1. This Order shall apply to and be binding upon the Respondent and its officers, directors, employees, agents, successors and assigns, and



upon all persons, independent contractors, contractors, and consultants acting under or for Respondent.

2. No change in ownership, corporate or partnership status relating to the Facility will in any way alter Respondent's responsibility under this Order.

3. Respondent shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants retained to conduct or monitor any portion of work performed pursuant to this Order within one (1) week of the effective date of this Order or date of such retention, and shall condition all such contracts on compliance with the terms of this Order.

4. Respondent shall give notice of this Order to any successor in interest prior to transfer of ownership or operation of the Facility and shall notify EPA within ninety (90) days prior to such transfer.

### III. STATEMENT OF PURPOSE

The issuance of this Order requires Respondent to: (1) perform a RCRA Facility Investigation (RFI) to determine fully the nature and extent of any release of hazardous waste and hazardous constituents at or from solid waste management units (SWMUs) at its facility, and (2) perform a Corrective Measure Study (CMS) to identify and evaluate alternatives for the corrective action necessary to prevent or mitigate any migration or releases of hazardous wastes or hazardous constituents at or from the Facility.

### IV. FINDINGS OF FACT

1. Respondent is a company doing business in the State of Alabama and is a person as defined in Section 1004(15) of RCRA, 42 U.S.C. Section 6903(15) and Section 22-30-3(10) of the Alabama Hazardous Waste Management Act (AHWMA).

2. Respondent is a generator, and an owner/operator of a hazardous waste management facility located at 3500 35th Avenue North, Birmingham, Alabama, and was engaged in the treatment and storage of hazardous waste at the Facility subject to interim status requirements [40 CFR Part 265]. Pursuant to Section 3006 of RCRA, the State of Alabama was granted final authorization for its hazardous waste program on December 23, 1987. The Alabama Department of Environmental Management (ADEM) is authorized to enforce the Hazardous Waste Management Regulations promulgated pursuant to the Environmental Management Act, Section 22-22A-5(1). However, any applicable requirement imposed by the Hazardous and Solid Waste Amendments



of 1984 (HSWA), Public Law 98-616 (November 8, 1984), is effective in all states regardless of their authorization status and will be carried out by EPA until the State is granted final authorization with respect to such requirement. RCRA Section 3306(g), 42 U.S.C. 6926(g)

3. Respondent owned and operated its facility as a hazardous waste management facility on and after November 19, 1980, the applicable date which renders facilities subject to interim status requirements and the requirement to have a permit under Sections 3004 and 3005 of RCRA, 42 U.S.C. Sections 6924 and 6925.

4. Pursuant to Section 3010 of RCRA, 42 U.S.C. Section 6930, Respondent sent EPA its Notification of Hazardous Waste Activity, dated August 15, 1980. Respondent identified itself as a generator of hazardous waste and an owner/operator of a treatment, storage, and disposal facility for hazardous waste. This notification listed four hazardous waste codes: D002, D003, F016 and K087. (F016 subsequently was dropped by the EPA as a listed hazardous waste.)

5. In its original Part A Hazardous Waste Permit Application, dated November 17, 1980, Respondent identified itself as operating a coke plant, a chemical plant, a blast furnace and a mineral wool plant. Respondent described its facility as engaging in the production of foundry and furnace coke, pig iron, specialty organic chemicals for industry, processed mineral fibers, mineral fibers for ceiling tile and insulating products, and by-product chemicals. Its coke by-products include such chemicals as ammonium sulfate, light oil and coal tar, while specialty organic chemicals include sulfonyl bisphenol. Respondent also acknowledged, in its original Part A, handling the following hazardous wastes at its facility:

- K087 - decanter tank tar sludge from coking operations
- U019 - benzene
- U188 - phenol
- U220 - methylbenzene
- U239 - xylene (dimethylbenzene)

On April 7, 1982, the four U waste codes were deleted by the facility from Respondent's Part A as being covered by the facility's NPDES permit. In late 1984, Respondent requested that its Part A be withdrawn, and on November 30, 1984 this request was denied. On October 2, 1985, Respondent submitted a revised Part A Application, and listed the D002 (corrosive) and K087 waste codes.

6. Respondent generates waste streams which contain a wide variety of organic constituents included, but not limited to: methylene chloride; dichloroethene; chloroform; benzene; chlorobenzene; toluene; phenol; nitrophenol; 4 nitrophenol; 2,4 dinitrophenol; 2,4,6 trichlorophenol; pentachlorophenol; and 4-chloro-3-methylphenol.



7. On May 9 and 10, 1989, EPA conducted a Visual Site Inspection (VSI) of Respondent's facility as part of a RCRA Facility Assessment (RFA). Facility representatives present throughout this inspection were Charles Jones (Director, Environmental Affairs) and Kent Roberts (Manager, Technical Services). During the VSI, 39 RCRA SWMUs were identified and are summarized below:

SWMU #1: Quench Towers and Quench Tower Sumps

The Facility operates two quench towers, one located at the north end and the other located at the south end of the coke oven batteries. Hot (2,000 degree F) coke product loaded onto a locomotive-driven rail car is brought into a quench tower to be cooled to approximately 100 degrees F. This rapid quenching is accomplished by spraying the hot coke with water from above. This generates contact cooling water which runs off of the coke and into a sump directly beneath the quench tower. Coke particles entrained in the quenching water settle in this sump. This water then flows into the Quench Tower Pump Basin (SWMU #2). Water loss resulting from evaporation is compensated for by adding plant service water to the system. Baffles have been installed in the top of each quench tower to minimize the carry-over of coke dust entrained in the steam generated by quenching. Wastes accumulated in this unit include: 1) contact cooling water from the quenching operation, 2) rainfall from the coke wharf, and 3) runoff from the surrounding area. Releases into the environment are in the form of steam emissions from the quench tower. These emissions carry particulate matter which can be seen settling in the surrounding area. Pitting of the concrete sides of the sump is visible and may indicate a release into the soil and groundwater.

SWMU #2: Quench Tower Pump Basins

Each quench tower at the Facility is connected to a pump basin immediately adjacent to it. These concrete, partially inground, holding basins contain water which has been used in the quenching process. Quench water from both the Quench Tower Sump (SWMU #1) and the Old Quench Tower Settling Basin (SWMU #3) flow into this unit before it is recirculated and sprayed on the coke. As the volume of water in this basin decreases due to evaporation, plant service water is added from cooling spray ponds located elsewhere. The waste generated by this process is contact cooling water from the quenching operation. Releases into the environment could result from the badly deteriorated concrete containment wall which has cracks and is missing pieces.

SWMU #3: Old Quench Tower Settling Basins

These partially inground, concrete basins were presumably the primary quench tower sumps prior to the construction of the current quench towers (SWMU #1). Presently, they provide increased contact cooling



water capacity for the quench tower sump/pump basin system. Water from this unit flows to the Quench Tower Pump Basin (SWMU #2) for reuse. The waste managed in this unit is contact cooling water from the Quench Tower Sump (SWMU #1). Releases into the environment could result from pitting in the sides of the concrete basins.

SWMU #4: Biological Treatment Facility (BTF) Sewer

The BTF Sewer is a facility-wide network comprising both inground open-to-the-surface troughs, and underground clay piping. Tile troughs are found inside chemical process buildings, and receive any fluids spilled onto the floor. Concrete troughs are found outside in the coke process areas, and receive fluids generated by the coke process. The underground piping is used outside chemical process buildings and has storm drains connecting it to the ground surface at various points. Runoff from the coke process area, and other areas around the Facility, flows into these drains and into the underground piping network. This unit originally emptied directly into the Polishing Pond (SWMU #22). In 1975, this sewer was diverted for chemical and biological treatment to the recently built Biological Treatment Facility (BTF). During the VSI Mr. Roberts said that the only information they had concerning the design and construction of the system was that the sewer is constructed of clay pipe. Wastes managed by this unit are surface runoff from the coke process area of the plant, material collected in various sumps and drains in the coke process area, material discharged to floor drains in the chemical manufacturing plant, the centrifuge wastewater from the production of sulfones, and wastewater from the production of benzenesulfonyl chloride (BSC). Additionally, this unit receives an effluent from the U.S. Pipe and Foundry Company facility located across 35th Avenue from the Respondent. U.S. Pipe and Foundry effluent is composed of wastewater mixed with sand and cement from the cement lining of pipe operations, wastewater mixed with sand from core molds and carbon block from casting operations, wastewater mixed with sand from the core shop, and drainage water from powerhouse compressors. These waste streams pass through a series of settling basins and ponds before being discharged to the Sloss BTF Sewer. Mr. Roberts acknowledged that a break and subsequent leak have occurred in the pipe in the area of the BTF.

SWMU #5: Coal Tar Storage Area Drain System

This unit consists of an inground concrete trough surrounding two above-ground steel tanks containing coal tar. The top of the trough is covered by steel plates, and it discharges to the BTF Sewer (SWMU #4). The wastes managed by this unit are spillage from the coal tar tanks and surface runoff from the immediate area. Releases into the environment could occur if the integrity of the unit is impaired.



SWMU #6: Spill Area Around Diesel Tank

This unit consists of an area adjacent to a 10,000 gallon, steel, above-ground diesel tank. The tank is underlain by concrete and surrounded by a continuous concrete containing wall. Spillage of diesel fuel on the outside of the concrete containing wall, and on the ground immediately outside of this wall, was observed during the VSI. Ron Schoen, Coke Plant Quality Control Engineer, stated that the tank is filled every 7-10 days, and that diesel fuel was probably spilled during the unloading of fuel from the delivery truck into the tank.

SWMU #7: Coal Tar Collection Sump in #1 Pump House

The #1 Pump House contains pumps and valves for the transferring of coal tar. The building has a concrete floor with an inground concrete sump which receives drippage from the pumps and valves. The material collected in the sump is pumped to the Flushing Liquor Decanter (SWMU #8). The wastes handled by this unit are coal tar and flushing liquor drippage. Releases into the environment could not be determined during the VSI because the unit was too heavily covered with coal tar.

SWMU #8: Flushing Liquor Decanter

Flushing liquor is the term for contact cooling water used to cool exhaust gases from coke ovens. As the water comes into contact with the exhaust gases, coke fines and organics are entrained. The flushing liquor is then sent to the decanter where the heavier organic fractions and coke fines settle out. The decanter consists of an above-ground steel tank resting on a concrete base. The material managed by this unit contains many organic and inorganic constituents, including those found in K087 and K060. Some staining of the concrete base and surrounding soil was noted during the VSI.

SWMU #9: Flushing Liquor Decanter Sump

This unit is an inground concrete sump which runs between Coal Tar Tank T-61 and the back of the Flushing Liquor Decanter (SWMU #8). The unit appeared to receive surface runoff and drippage from the coal tar tanks and Flushing Liquor Decanter (SWMU #8). During the VSI this unit was observed to contain some liquid.

SWMU #10: Coal Tar Decanter for Number 3 and 4 Coke Batteries

This unit consists of an above-ground steel tank positioned on a concrete pad. As solid material settles out of the coal tar in the decanter, it is removed via a drag conveyor. This solid material is decanter tank tar sludge and is accumulated on steel catch pans at the



rate of approximately 5 cubic feet per 8-hour shift. It is then placed in coke ovens, which operate at 2700 to 2900 degrees F. [Decanter tank tar sludge (K087) is a listed hazardous waste generated by the coal tar decanting process and contains the hazardous constituents phenol and naphthalene. If not recycled, this material is considered a hazardous waste.] During the VSI, it appeared that the catch pans may have been overtopped. This was evidenced by sludge on the exterior of the pans and staining in the area. None of the facility personnel present during the VSI could state whether or not steel pans had always been used to catch the sludge.

SWMU #11: Coal Tar Decanter for Coke Battery 5

This unit consists of an above-ground steel tank positioned on a concrete pad. As solid material settles out of the coal tar in the decanter, it is removed via a drag conveyor. This solid material is decanter tank tar sludge and is accumulated on steel catch pans at the rate of approximately 5 cubic feet per 8-hour shift. It is then placed in coke ovens, which operate at 2700 to 2900 degrees F. [Decanter tank tar sludge (K087) is a listed hazardous waste generated by the coal tar decanting process and contains the hazardous constituents phenol and naphthalene. If not recycled, this material is considered a hazardous waste.] During the VSI, it appeared that the catch pans may have been overtopped. This was evidenced by sludge on the exterior of the pans and staining in the area. None of the facility personnel present during the VSI could state whether or not steel pans had always been used to catch the sludge.

SWMU #12: Coal Tar Decanter for 1 and 2 Coke Batteries

This unit was taken out of service in 1979. It currently consists of an above-ground steel tank positioned on a concrete pad. As solid material settled out of the coal tar in the decanter, it was removed via a drag conveyor. This solid material was decanter tank tar sludge. [Decanter tank tar sludge (K087) is a listed hazardous waste generated by the coal tar decanting process and contains the hazardous constituents phenol and naphthalene. If not recycled, this material is considered a hazardous waste.] During the VSI, there was no evidence of a catch pan to accumulate the sludge. Steve McCay, Chief Engineer, Coke Plant, stated that a steel pan or board may have been used.

SWMU #13: The Equalization Basin at the Biological Treatment Facility (BTF)

The Equalization Basin is a surface impoundment designed for the collection, physical mixing, and transfer of process wastewaters. This basin was constructed in 1975 of earthen materials, and has a



compacted clay liner of unknown thickness. With a minimum of 2 feet of freeboard, this basin has a maximum storage capacity of approximately 4 million gallons. All of the wastes collected by the BTF Sewer (SWMU #4) are discharged into this impoundment. It is the first in sequence at the BTF to receive process wastewaters from the facility, and it holds these wastewaters prior to pH adjustment and biological treatment. ADEM conducted sampling in this basin on November 28, 1984, and tested its influent at a pH of 0.55 SU and its effluent at a pH of 0.80 SU. In a February 1, 1985 letter, ADEM provided the Respondent with notice that the the Equalization Basin was a regulated unit because it contained the characteristic hazardous waste D002 (corrosivity). According to the "Surface Impoundment Closure Plan" prepared by Robinson and Layton, Inc., and dated April 30, 1987, the wastewater from the production of benzenesulfonyl chloride is the sole source of the low pH. (According to Mr. Roberts, no listed hazardous wastes have been placed in the Equalization Basin.) The basin has held process wastewater with a pH less than 2 SU for more than a decade, rendering the long-term integrity of the compacted clay liner questionable. This is evidenced by samples taken from the six groundwater monitoring wells installed around the basin. Samples from these wells were collected by ADEM on April 17, 1986 as part of a Comprehensive Monitoring Evaluation. Analyses of groundwater samples taken from these wells revealed the following hazardous waste constituents: Well #1: chromium (over primary drinking water standards), phenol, cyanide, copper and arsenic; Well #2: chromium (over primary drinking water standards), arsenic (at a concentration of more than twice of any of the other wells), and copper; Well #3: fluorene, phenanthrene and cyanide; Well #4: phenol, naphthalene, cyanide, acenaphthylene, arsenic, copper, chromium, and 2,4 dimethyl phenol; Well #5: arsenic and cyanide; and Well #6: chromium (over primary drinking water standards), phenol, naphthalene, phenanthrene, cyanide, anthracene, fluoranthene, copper, arsenic, pyrene, benzo anthracene, and chrysene. U.S. EPA Region IV Environmental Services Division (ESD) collected samples from the Equalization Basin on February 11, 1986. A sample of the effluent contained the following: 15 volatile organic compounds (including benzene, toluene and chlorobenzene), 36 extractable organic compounds (including naphthalene, and phenol), total phenol, cyanide, and arsenic. A sludge sample collected and composited from 10 locations around the basin contained the following: benzene, tetrachloroethylene, toluene, chlorobenzene, ethyl benzene, total xylenes, cyanide, arsenic, barium, lead, and 31 extractable organic compounds (EOC's). These EOC's were detected at concentrations ranging from an estimated 300,000 ug/kg to 15,000,000 ug/kg, with 18 of the EOC's exceeding 1,000,000 ug/kg.



SWMU #14: pH Neutralization Basin at the BTF

This unit is next in the process sequence at the BTF. This unit consists of an inground concrete tank in which lime slurry is introduced from a steel, above-ground tank beside the basin. Three mixers mix the lime slurry with the wastewater in order to raise the pH from approximately 2.5 SU to 10 SU. The waste managed in this unit is the effluent from the Equalization Basin (SWMU #13). Since no active treatment takes place in the Equalization Basin (SWMU #13), the wastewater in this unit would be expected to contain the same constituents.

SWMU #15: Primary Clarifier at the BTF

The primary clarifier consists of a circular, inground concrete tank containing a skimmer arm and a sludge scraper to remove floating and settled solids. This unit receives pH-adjusted wastewater from the pH Neutralization Basin (SWMU #14). Effluent goes to the Aeration Basins (SWMU #16).

SWMU #16: Aeration Basins at the BTF

There are two aeration basins at the BTF, and each receives wastewater from the Primary Clarifier (SWMU #15). Both consist of an inground concrete tank with four mechanical aerators. The wastewater is aerated to provide oxygen for the microorganisms used to degrade organic matter.

SWMU #17: Secondary Clarifier at the BTF

The secondary clarifier receives wastewater from the Aeration Basins (SWMU #16). This unit consists of a circular, inground concrete tank with a skimmer arm and sludge scraper to remove floating and settled solids. Effluent from this unit was sampled on February 11, 1986 by ESD and found to contain 10 extractable organic compounds, total phenols, and cyanide. Any effluent produced by this unit goes to the Polishing Pond (SWMU #22).

SWMU #18: BTF Thickener

The thickener consists of a circular, inground concrete tank. It receives sludge from the primary and secondary clarifiers (SWMUs #15 and #17) where the volume is reduced by gravity thickening. The thickened sludge then goes to the Aerobic Digester (SWMU #19).



SWMU #19: Aerobic Digester at the BTF

The digester consists of an inground concrete tank with two mechanical aerators. Sludge enters the digester from the Aeration Basins (SWMU #16), the Thickener (SWMU #18), and the clarifiers (SWMUs #15 and #17). Aeration of this material in the absence of nutrients results in mineralization of the sludge. The sludge goes to the Sludge Dewatering Machine (SWMU #20).

SWMU #20: Sludge Dewatering Machine

This unit is essentially a filter press. Sludge received from the Aerobic Digester (SWMU #19) is compressed on a fine mesh screen and fluid is forced out. The fluid goes to the Polishing Pond (SWMU #22) and the sludge is then screw-fed into the back of a dump truck. (This unit produces approximately 12 tons of sludge per day.) When a sufficient quantity of sludge has accumulated, it is taken to the Biological Sludge Disposal Area (SWMU #23). On February 11, 1986, ESD sampled the sludge produced by this unit and detected the following: cyanide, arsenic, toluene, chlorobenzene, chromium, lead, zinc, mercury, and 13 extractable organic compounds.

SWMU #21: BTF Emergency Basin

The Emergency Basin was located immediately west of the Equalization Basin (SWMU #13) and was connected to it. The Emergency Basin (now backfilled) was a surface impoundment of approximately half the area of the Equalization Basin (SWMU #13). The Emergency Basin was designed to serve as a reservoir into which highly concentrated wastewater would be diverted in the event of a sudden chemical spill in one of the process areas. This would protect the microbes in the BTF from being shocked by a sudden influx of undiluted chemical wastes. This unit has never been reported to have been used for its intended purpose, however it occasionally received overflow wastes from the Equalization Basin (SWMU #13) during periods of heavy rainfall. Since the Emergency Basin received the same wastes as the Equalization Basin (SWMU #13), it would be expected to have the same constituents of concern.

SWMU #22: Polishing Pond

This unit is an unlined, 17-acre surface impoundment built in 1919 and constructed of earthen materials. It currently provides tertiary treatment of wastewaters so that the quality of its effluent will meet NPDES discharge requirements. It receives wastewaters from the Secondary Clarifier (SWMU #17) and effluent from the Storm Water Runoff Sewer (SWMU #25). Additionally, runoff from the Blast Furnace



Emission Control Sludge Waste Pile (SWMU #24) goes into the Polishing Pond. This unit was in operation prior to the start-up of the Biological Treatment Facility and received untreated wastewaters from the process areas. On February 11, 1985, ESD conducted sampling at this unit. Sludge samples collected from three different locations adjacent to the influent structure to this pond contained the following: four volatile organic compounds, 10 extractable organic compounds (including sulfonylbisbenzene detected at a concentration of up to 60,000,000 ug/kg), cyanide, arsenic, barium, lead, zinc and mercury. Barium and 10 extractable organic compounds were found in samples of the final effluent to this pond. Due to the unlined condition of the impoundment and the presence of hazardous constituents in the sediment, this unit has a high probability for releasing to soil and groundwater.

SWMU #23: Biological Sludge Disposal Area

This land disposal site is an unlined, two-acre cleared area surrounded by a soil dike. The sludge disposed of here is generated by the Sludge Dewatering Machine (SWMU #20). Mr. Jones indicated that the sludge is covered with soil monthly. Additionally, sludge had also been poured onto the ground outside of the diked area. On February 11, 1986, ESD sampled this sludge and discovered the following: cyanide, arsenic, chromium, lead, zinc, mercury, volatile organic compounds, and extractable organic compounds. The presence of hazardous constituents and the unlined condition of the unit indicate a high probability of release to soil and groundwater.

SWMU #24: Blast Furnace Emission Control Sludge Waste Pile

*F016. resubmitted*

This unit is adjacent to the BTF, and is composed of a material which was formerly a listed hazardous waste with EPA hazardous waste code F016. (F016 is dewatered air pollution control scrubber sludges from coke ovens and blast furnaces. Originally it was listed as hazardous due to its cyanide content.) On February 11, 1986, ESD sampled this unit and detected the following: cyanide, chromium, lead, and zinc. Runoff from this pile goes into the 17 acre Polishing Pond (SWMU #22). This unit covers several acres, and consists of a black granular material. It is partially vegetated on one side, with material being removed from its other side. During the VSI, Mr. Roberts stated that the sludge was being sold.

SWMU #25: Storm Water Runoff Sewer

This unit consists of concrete pipes and drains, and collects runoff from various areas of the plant, such as the coal storage area and parking lots. The maintenance shop drain system also empties into this sewer. No sampling of the liquids in this system has taken place. These various fluids empty into the Polishing Pond (SWMU #22).



SWMU #26: Chemical Manufacturing Plant Main Process Building Floor Drain

Sulfonic acid is manufactured here in reactors and tanks situated on a raised, tile-covered platform. Tile-lined troughs collect primarily non-contact cooling water, and in the event of a leak or spill, would receive material from the production of sulfonic acid. All fluids collected are discharged to floor drains connected to the BTF Sewer (SWMU #4). Mr. Roberts stated that a tile lining is required because the spilled material is corrosive. During the VSI it was observed that some tiles were chipped and some had been patched.

SWMU #27: TSA 94 Building Floor Drain System

The reactors and tanks in this building are used in the production of toluene sulfonic acid 94% (TSA 94). The floor beneath the process units is lined with tile, as are the collection troughs. This drain system receives primarily non-contact cooling water, however, leaks or spills from the process units would collect in this system. Waste collected in this drain system is discharged to the BTF Sewer (SWMU #4). During the VSI, a separation between the drain and the floor was noted, which resulted in a breach in the drain.

SWMU #28: Sulfonation Building Floor Drain

This unit consists of a stainless steel lined trough in the floor of the Sulfonation Building, and receives contact and non-contact cooling water. Any spills or leaks from the sulfonation process unit would be collected in the trough. This unit discharges to the BTF Sewer (SWMU #4). According to Mr. Roberts, a fire occurred in this area in 1980 or 1981. Water or chemicals generated in fighting the fire would have entered the trough and been discharged to the BTF Sewer (SWMU #4).

SWMU #29: Chemical Product Tank Containment Area

Adjacent to the TSA 94 Building, chemical products are stored in tanks situated on a concrete pad with concrete dikes and a sump. The sump collects rainwater and any spilled material in the containment area, and then discharges these fluids to the BTF Sewer (SWMU #4). Chemical products stored in this area include: TSA 94, sulfuric acid, phenol sulfonic acid 65%, and orthoxylene. During the VSI, the outer linings on the TSA 94 and phenol sulfonic acid 65% tanks were observed to have rusted through. The concrete in the area of the sump is corroded.



SWMU #30: Centrifuge Wastewater Tank

This unit manages centrifuge wastewater from the production of sulfones, and is temporarily stored in a steel, above-ground tank situated in a concrete containment area. This wastewater is gradually released to the BTF Sewer (SWMU #4). During the VSI, a white residue was observed in the containment area.

SWMU #31: Monohydrate Building Floor Drain and Sump

This building houses the centrifuge used in the production of sulfones. This process generates the wastewater stored in the Centrifuge Wastewater Tank (SWMU #30). The floor in this building contains a concrete drain that leads to a concrete sump on the outside of the building. Any spills, or fluids generated by washing the centrifuge, go into the BTF Sewer (SWMU #4).

SWMU #32: Benzenesulfonyl Chloride (BSC) Drum Storage Area

This unit consists of approximately 400 plastic, 55 gallon drums which contain or have contained BSC. The drums were stacked one drum high on wooden pallets on gravel-covered ground. Most drums had their bungs closed during the VSI, but some were left open. No leaks or spills were observed during the VSI.

SWMU #33: Benzenesulfonyl Chloride (BSC) Plant Drum Storage Area

This unit consists of approximately 100 plastic 55 gallon drums of BSC stored both inside and outside of the BSC Plant. Most drums were closed while some were open. Several of the drums showed signs of deterioration such as splitting and bulging.

SWMU #34: Benzenesulfonyl Chloride (BSC) Wastewater Neutralization System

This unit is comprised of a series of above-ground tanks and mixing units where lime is added to the BSC wastewater to raise the pH to approximately 2.5 SU. The effluent enters the BTF Sewer (SWMU #4); a sludge is generated by the addition of lime. The sludge is disposed of at the Biological Sludge Disposal Area (SWMU #23).

SWMU #35: Old Waste Pile at Mineral Wool Plant

This unit consists of a large, unlined, sparsely vegetated waste pile adjacent to the Mineral Wool Plant. The material in this waste pile consists of flue dust and waste material generated from the mineral wool process. The waste generated in the process is chemically identical to the finished product, but does not have the appropriate



texture to be sold as mineral wool. The primary constituents of mineral wool and flue dust (as supplied during the VSI by R. B. Russell, Mineral Fiber Plant Manager) are listed below:

Mineral Wool

SiO<sub>2</sub>  
CaO  
Al<sub>2</sub>O<sub>3</sub>  
MgO  
Fe<sub>2</sub>O<sub>3</sub>  
S  
MnO  
P<sub>2</sub>O<sub>5</sub>

Flue Dust

SiO<sub>2</sub>  
CaO  
S  
K<sub>2</sub>O  
Al<sub>2</sub>O<sub>3</sub>  
MgO  
Fe<sub>2</sub>O<sub>3</sub>  
MnO  
Na<sub>2</sub>O  
TiO<sub>2</sub>  
P<sub>2</sub>O<sub>5</sub>

Waste from the plant is placed on the pile daily. During the VSI, Mr. Russell stated that they are currently looking into methods for returning this material to the plant process. Some of the material has been removed for this purpose.

SWMU #36: Maintenance Shop Used Oil Tank

This unit is an above-ground, rectangular steel tank used to manage approximately 300 gallons of waste oil generated by the Maintenance Shop. The tank rests on two railroad cross ties on a gravel base. Waste oil is accumulated here prior to pick up for recycling by a contractor.

SWMU #37: BTF Sewer Tar Trap

This unit is an inground concrete basin functioning as an oil/water separator. The trap is designed to remove and accumulate coal tar generated in the coking process and collected by the BTF Sewer (SWMU #4). According to Mr. Jones, this tar trap is cleaned approximately every six (6) months, and the material is placed in the coke ovens.

SWMU #38: Landfill

This unit is a northeast-southwest trending ridge-shaped plateau, approximately 60 feet high, containing a variety of debris. The different types of debris observed during the VSI included concrete rubble, wood and other construction debris, conveyor belts, empty metal 55 gallon drums, blast furnace flue dust and coal that had been degraded by weathering. A Solid Waste Disposal - Geohydrologic



Evaluation of this landfill conducted in October of 1980 by the Environmental Division of the Geological Survey of Alabama (EDGSA) indicated that flue dust, decanter tank tar, tar trap residue, mineral wool slag waste and construction debris may have been disposed of in this unit. The EDGSA recommended that: 1) disposal of waste material at this site be discontinued, 2) the unit be capped and 3) monitoring wells be installed. The unit is not capped and no containment controls were apparent during the VSI. This unit is still in use.

SWMU #39: Blast Furnace Emission Control Sludge Waste Pile Near Landfill

This waste pile is composed of blast furnace emission control sludge. (At one time this waste was a listed hazardous waste with EPA hazardous waste code F016. It was listed as hazardous because of its cyanide content.) This waste pile is a partially vegetated, elongated ridge parallel to and adjacent to the landfill, and consists of a black granular material. The pile is partially vegetated. No release controls were noted during the VSI.

8. The geographical and geological setting of the Respondent's facility is as follows;

According to a September 26, 1986 ADEM Memorandum, Respondent's facility is located in Jefferson County, Alabama, in the NE 1/4 of the NW 1/4 of Section 7, T17S, R2W of the Birmingham North Quadrangle. The original Part A places the Facility at latitude 33°34'30" and longitude 86°47'30".

The ADEM Memorandum describes Jefferson County as lying in the southernmost extension of the Appalachian Valley and Ridge and the Appalachian Plateaus physiographic provinces. The Alabama Valley and Ridge section of the Appalachian Valley and Ridge Province is comprised of northeast to southwest trending valleys and ridges. This Memorandum states that most of the Respondent's facility lies in the Birmingham Valley District of the Alabama Valley and Ridge section, and is located in the northern flank of the Blount Mountain Syncline on the upper plate of the Opossum Valley thrust fault.

The ADEM Memorandum describes rocks in the Appalachian Valley and Ridge Province as being characterized by intense faulting, folding and fracturing. The Alabama Valley and Ridge section is characterized by northeast trending anticlinal and synclinal structures which are generally cut longitudinally by thrust faults. Normal, reverse and wrench faults are locally abundant. The ADEM Memorandum further states that the Respondent's Equalization Basin (SWMU #13) lies within 2,000 feet of the Opossum Valley thrust fault.



The ADEM Memorandum stated that joints and joint sets occur throughout the rocks of Jefferson County with angles of dip ranging from 70 to 90 degrees, although lower angles (10 to 30 degrees) have been recorded. The linear extent of most joint sets ranges from a few feet to several hundred feet, with greater joint spacing occurring in thicker-bedded rocks. Joints generally are confined to one bed in thin-bedded rocks, but may extend vertically through several beds of thick-bedded rocks, according to the ADEM Memorandum. The number of joint sets increases in areas contiguous to large folds and major faults.

The ADEM Memorandum described the rock and soil beneath the Respondent's facility as follows. The Facility lies atop the Cambrian Conasauga Formation, which is composed of limestone with thin partings of shale and dolomite. The Conasauga typically weathers to a clayey or silty-clay soil that ranges from 5 to 20 feet thick. Such soils usually have an infiltration rate of one inch per 20 to 60 minutes. Sediments penetrated by the installation of Respondent's present RCRA monitoring wells consist of between 13 to 20 feet of sandy clay, (which necessarily would have a faster rate of infiltration). Beneath the soil covering, bedrock surfaces are irregular and pinnacles may project to the surface.

Pinnacles, whether they reach to the ground surface or not, have a decreased thickness of soil cover relative to the surrounding, lower portions of the same bedrock. As such, they would have little or no soil protection to either slow down the movement of contaminants, or dilute its hazardous nature once it was spilled on the ground or left a surface impoundment. Therefore, contaminants would reach the fractured, faulted and/or jointed limestone bedrock more quickly, and in a more concentrated form. Upon reaching these various types of openings or channels in the bedrock, the contaminants or contaminated groundwater could travel through the rock and thence on into the groundwater more rapidly. This situation would be greatly aggravated in the event of a low pH waste [such as the very acidic wastes in the Equalization Basin (SWMU #13)] entering the limestone bedrock since limestone ( $\text{CaCO}_3$ ) is easily dissolved by even dilute acids. In this case, the acidic waste would begin dissolving the limestone upon contact and enlarging the natural channels in the bedrock created by fracturing, faulting or jointing. This enlargement would permit an even greater flow of wastes into the groundwater and offsite.

9. The hydrogeological characteristics in the area of Respondent's facility are described below:

According to an ADEM Memorandum dated September 26, 1986, the most productive formations in the area for groundwater include the Conasauga (upon which Respondent's facility lies), the Ketona Dolomite, the Knox Group, Ordovician limestones, the Chickamauga Limestone, the Fort Payne Chert-Tuscumbia Limestone, the Hartsville Sandstone and the Bangor Limestone. This Memorandum also stated that groundwater in Jefferson County, Alabama is used to a limited degree, and sources for industrial and domestic use are not widely developed.



The ADEM Memorandum noted that the availability of groundwater in Jefferson County is affected by the relationship of topography to geologic and hydrologic conditions such as structure, the nature of the rock units, faults, fractures, joint sets, and solution cavities. Ground Engineering and Testing Service, Inc., a contractor hired by Respondent to conduct groundwater flow studies at Respondent's facility, stated in their August 27, 1986 Report that at Respondent's site, the underlying rock generally contains channels and open voids near the rock/soil interface where groundwater flow is concentrated. This contractor acknowledged that the Conasauga Formation underlying the Facility "often contains fractures and solution channels through which groundwater easily flows."

According to the September 26, 1986 ADEM Memorandum, the Facility is bordered on the south and west by a small intermittent stream, and two large, deep limestone quarries which lie within 1,000 feet of the Equalization Basin (SWMU #13). Potentiometric maps compiled by ADEM from groundwater elevation data from the Facility's monitoring wells indicate that groundwater flow is radial toward the intermittent stream. Localized groundwater flow is also toward the two quarries and could be affected by quarrying activities and any large quantities of water removed from the quarries. The ADEM Memorandum quotes Facility representatives as having acknowledged removing large volumes of water from at least one of the quarries.

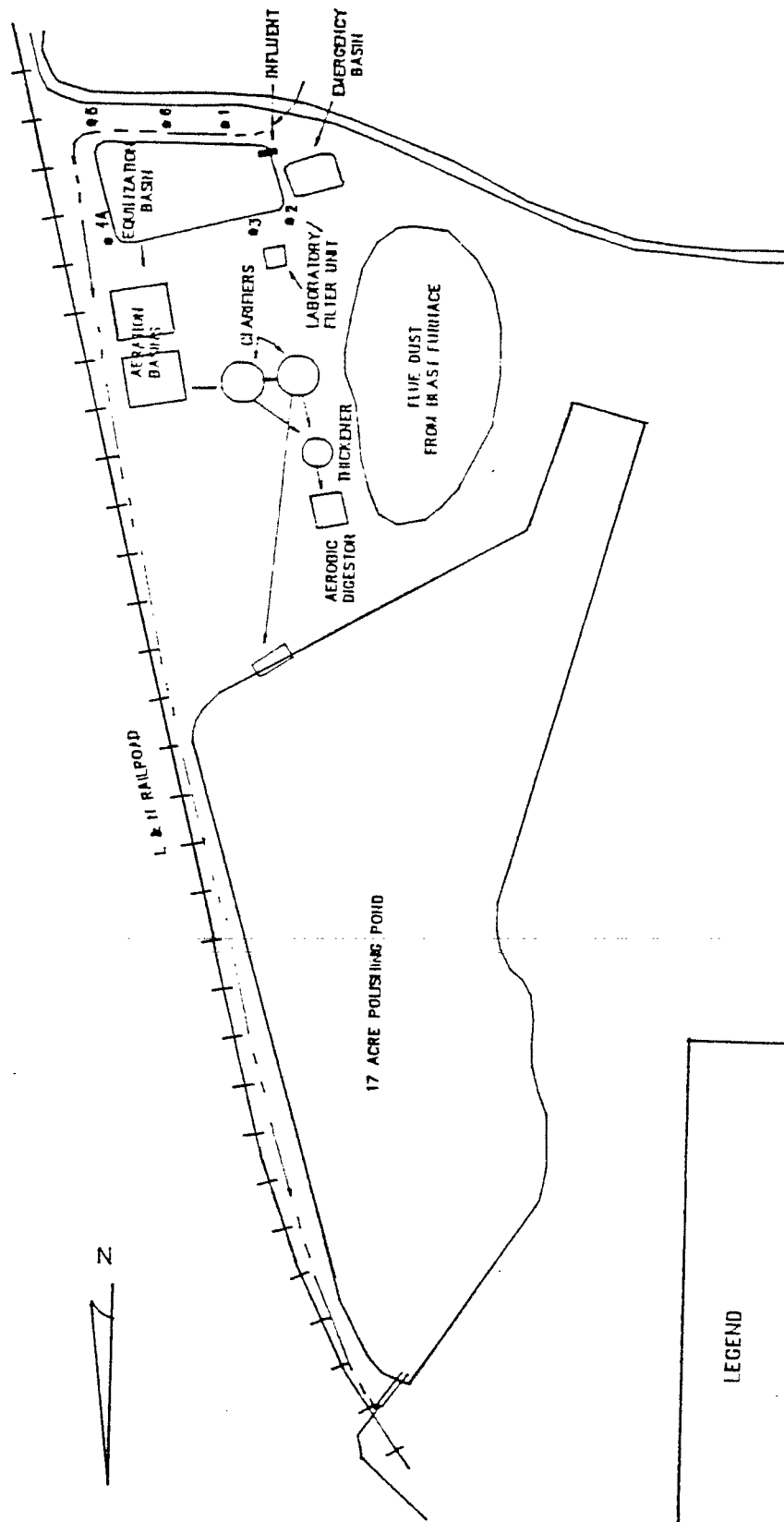
The ADEM Memorandum describes the water table in areas underlain by the Conasauga Formation as being generally shallow, about 6 to 30 feet below ground surface. The Conasauga Formation, upon which Respondent's Equalization Basin (SWMU #13) is located, is an aquifer. A "Progress/Status Report" issued by Respondent and dated February 6, 1987 stated that Respondent discovered in October 1986 that a spring had been tapped and rerouted through a pipe when the Biological Treatment Facility was initially constructed in 1975. This Report stated that this spring originated near the Control Building and was drained, via a cast iron pipe, along the side of the Equalization Basin (SWMU #13) to an adjacent creek. The presence of groundwater so close to the ground surface increases the risk of rapid groundwater contamination in the event of a release from one of the SWMUs.

10. Respondent's groundwater monitoring well system is described below:

On March 2 - 3, 1987, the Environmental Services Division (ESD) of EPA conducted a Comprehensive Groundwater Monitoring Evaluation (CME) at Respondent's facility. According to the CME Report, Respondent installed six monitoring wells around the Equalization Basin (SWMU #13) in August 1985. (See Figure 1.) These monitoring wells were required here



(figure taken from ESD Comprehensive Groundwater Monitoring Evaluation Report dated March 23, 1987)





because the industrial wastewater entering the Equalization Basin (SWMU #13) exhibited the characteristic of corrosivity as defined by 40 CFR 261.22. The CME Report stated that because the Equalization Basin (SWMU #13) had a pH of 2.0 SU or less it was a RCRA regulated unit, and therefore a RCRA groundwater monitoring system should have been installed by November 1981. When the groundwater monitoring system was originally installed, groundwater flow was assumed to be to the north. Well #1 was designated the upgradient well and Wells #2, #3, and #4 were designated as downgradient wells. After the initial four wells were installed, it was determined that groundwater flow was toward the intermittent stream (to the southeast) and Wells #5 and #6 were installed as downgradient wells. Well #4 was abandoned as a RCRA monitoring well because Respondent concluded that the contamination found in it was due to a nearby leaky pipe carrying waste. In its place Well #4A was installed in February 1987. Presently, Well #2 is designated as the upgradient well, and Wells #1, #3, #4A, #5, and #6 are designated as downgradient.

The September 26, 1986 ADEM Memorandum stated that Respondent's groundwater monitoring wells are located approximately 70 feet from the toe of the Equalization Basin (SWMU #13). This ADEM Memorandum further stated that liquid hazardous wastes influenced by bedding plane or fracture flow potentially could allow contaminated groundwater to flow into the lower limestone aquifer and under the detection interval of the present monitoring wells. This would preclude the immediate detection of contamination issuing from this basin. The ADEM Memorandum further stated that the wells are partially hydraulically separated from the Equalization Basin (SWMU #13) by an intermittent stream which intercepts near surface groundwater before it reaches the wells. The combination of the above characteristics potentially could allow contaminated groundwater to not be accurately represented in the Respondent's monitoring wells. The March 2 - 3, 1987 CME Report stated that there has not been any site-specific hydrologic data collected to determine if the well screens are properly placed. The CME Report concluded that the wells do not appear adequate to satisfy the requirements of 40 CFR 265.91.

11. Releases of hazardous wastes and constituents at the Respondent's facility have been documented and are discussed below. The U.S. EPA Region IV Environmental Services Division (ESD) conducted sampling at Respondent's facility on February 11, 1986.

ESD collected two sets of samples from the Equalization Basin (SWMU #13). A sample of the influent contained the following: 15 volatile organic compounds (including benzene, toluene and chlorobenzene), 36 extractable organic compounds (including



naphthalene and phenol), total phenol, cyanide, and arsenic. A sludge sample collected and composited from 10 locations around the basin contained the following: benzene, tetrachloroethylene, toluene, chlorobenzene, ethyl benzene, total xylenes, cyanide, arsenic, barium, lead, and 31 extractable organic compounds (EOC's). These EOC's were detected at concentrations ranging from an estimated 300,000 ug/kg to 15,000,000 ug/kg, with 18 of the EOC's exceeding 1,000,000 ug/kg.

On April 17, 1986, ADEM Field Operations conducted sampling of Respondent's six RCRA monitoring wells as part of a Comprehensive Monitoring Evaluation. Analyses of groundwater samples taken from these wells detected the following hazardous waste constituents: Well #1: chromium (over primary drinking water standards), phenol, cyanide, copper and arsenic; Well #2: chromium (over primary drinking water standards), arsenic (at a concentration of more than twice that of any of the other wells), and copper; Well #3: fluorene, phenanthrene and cyanide; Well #4: phenol, naphthalene, cyanide, acenaphthylene, arsenic, copper, chromium, and 2,4 dimethyl phenol; Well #5: arsenic and cyanide; and Well #6: chromium (over primary drinking water standards), phenol, naphthalene, phenanthrene, cyanide, anthracene, fluoranthene, copper, arsenic, pyrene, benzo anthracene, and chrysene. On August 4, 1986, Respondent discovered a statistically significant increase in Total Organic Carbon and in Specific Conductance parameters in monitoring Well #4. Additionally, total phenols, naphthalene, acenaphthylene, cyanide and 2,4 dimethyl phenol were detected. On August 25, 1986, Respondent notified EPA and ADEM of these findings.

Respondent hired Ground Engineering and Testing Service, Inc. of Birmingham, Alabama, a private engineering firm, to investigate the Facility's Equalization Basin (SWMU #13). On August 25, 1986, the engineering firm excavated around the weir leading from this basin and discovered that an 18 inch diameter, vitrified clay pipe connected to the weir was leaking "raw waste" from two joints. Ground Engineering also noted in its letter of August 27, 1986, to Robison and Layton of Birmingham, Alabama, that the soil in the immediate vicinity of the leaking joints was discolored, and that Well #4 is located near this leaking pipe. Ground Engineering concluded that the contamination in Well #4 was due to leaking joints in this pipe. A "Groundwater Assessment Plan for the Equalization Basin" (prepared by Robison and Layton, Inc. of Birmingham, Alabama, and dated September 4, 1986) acknowledged that the leaking vitrified clay pipe "does not explain the waste specific constituents present in Well #6," or their absence in Wells #1 and #5. In the same report, Robison and Layton, Inc. speculated that the waste specific constituents in Well #6 could be due to a condensate trap on an adjacent buried coke oven gas line from a nearby facility. According



to a "Progress/Status Report Groundwater Assessment/Remedial Action Plan" generated by Respondent and dated February 6, 1987, the basin's weir and discharge pipe were removed, relocated and replaced with a "welded joint stainless line." This was completed in late October 1986.

The effluent from the Secondary Clarifier (SWMU #17) was sampled by ESD on February 11, 1986 and found to contain 10 extractable organic compounds, total phenols, and cyanide.

ESD sampled the sludge produced by the Sludge Dewatering Machine (SWMU #20) and detected the following: 13 extractable organic compounds, arsenic, cyanide, chromium, lead, mercury, zinc, chlorobenzene, and toluene.

The Polishing Pond (SWMU #22) was sampled twice by ESD (February 11, 1985). Sludge samples collected from three different locations adjacent to the influent structure to this pond contained the following: 10 extractable organic compounds (including sulfonylbisbenzene detected at a concentration of up to 60,000,000 ug/kg), 4 volatile organic compounds, cyanide, arsenic, barium, lead, zinc and mercury. Samples of the final effluent to this pond contained 10 extractable organic compounds and barium.

The Blast Furnace Emission Control Sludge Waste Pile (SWMU #24) was also sampled by ESD (February 11, 1986). Samples taken from two locations contained cyanide, chromium, lead, and zinc.

The previously referenced RFA identifies the the hazardous constituents and hazardous waste release potential for the 39 SWMUs as follows:

Low Potential for Release: SWMUs # 8, 14, 15, 16, 17, 18, 19, 20, 28, 30, 32, 33, 34, 35, and 36;

Moderate Potential for Release: SWMUs # 1, 2, 3, 5, 7, 9, 24, 25, 26, 27, 29, 31, 37, 38, and 39;

High Potential for Release: SWMUs # 4, 6, 10, 11, 12, 13, 21, 22, and 23. SWMU #13 has already experienced a significant release.

12. Hazardous wastes and/or constituents may further migrate from the Facility into the environment in the following pathways:

The September 26, 1986 ADEM Memorandum stated that the Equalization Basin (SWMU #13) and the Emergency Basin (SWMU #21) rest directly on the steeply dipping limestones of the Conasauga Formation. The bedding planes or fractures of this formation potentially could permit liquid contaminants to flow into the lower limestone aquifer. Additionally, the very low pH of the wastewater in the Equalization Basin (SWMU #13) could readily dissolve the underlying limestone ( $\text{CaCO}_3$ ) along



any flowpath taken by the acidic waste and thereby increase the amount of wastewater that could migrate offsite. The presence of limestone pinnacles reaching to the surface increases the opportunity for acidic wastes to migrate rapidly offsite. This would be due to the absence of the mitigating effects of soil cover to retard the acidic wastes both chemically and physically. (See paragraph #8.) No evidence of surface runoff of wastes was observed during the VSI of May 9 and 10, 1989.

Sampling conducted by ADEM Field Operations on April 17, 1986, indicates that all of the downgradient wells are contaminated. The September 26, 1986 ADEM Memorandum stated that apparently seepage from the Equalization Basin (SWMU #13) has proceeded long enough that contaminants have migrated well beyond the point where a proper interim status monitoring system should have been installed. (See paragraph 10.) The ADEM Memorandum further stated that vertical flow produced by a combination of a breach in the clay liner and the relatively high basin hydraulic head might easily have allowed contaminants to pass under the nearby stream and apparent groundwater discharge point.

13. The hazardous wastes and hazardous waste constituents identified in paragraph 11 above may pose a threat to human health and the environment. The hazardous effects of substances identified in Respondet's SWMUs are described below from the Handbook of Toxic and Hazardous Chemicals and Carcinogens by Marshall Sittig (1985) and from Dangerous Properties of Industrial Materials, Seventh Edition, by N. Irving Sax and Richard J. Lewis, Sr. (1989):

Anthracene is a skin irritant and an allergen. It is also an experimental tumorigen and neoplastigen. It has been reported in the EPA TSCA Inventory, and is on the Community Right to Know List (40 CFR Part 300).

Arsenic is listed by EPA as a priority toxic pollutant, and some of its compounds are listed as hazardous substances. It is also listed by EPA as a contaminant (EPA hazardous waste number D004) when it meets the criteria for being EP Toxic (40 CFR 261.24). Arsenic is a carcinogen, having been cited as a cause of skin cancer, although the incidence is low. Skin cancer in humans is causally associated with exposure to inorganic arsenic compounds in drugs, drinking water and the occupational environment. Harmful effects and symptoms are as follows: trivalent arsenic compounds are corrosive to the skin, especially the moist mucous membranes which are most sensitive to its irritant action; conjunctiva, moist and macerated areas of the skin, eyelids, the angles of the ears, nose, mouth, and respiratory mucosa are vulnerable to the irritant effects; arsenic trioxide and pentoxide are capable of producing skin sensitization and contact dermatitis.



Barium is listed by EPA as a contaminant (EPA hazardous waste number D005) when it meets the criteria for being EP Toxic (40 CFR 261.24). When ingested or given orally, the soluble, ionized compounds exert a profound effect on all muscles (especially smooth muscles) markedly increasing their contractility. The heart rate is slowed and may stop in systole. Other effects include increased intestinal peristalsis, vascular constriction, bladder contraction, and increased voluntary muscle tension.

Benzene is listed by EPA as a hazardous waste (U019) when discarded, a priority toxic pollutant and a carcinogen. Acute exposure to benzene results in central nervous system depression; headache, dizziness, nausea, convulsions, coma, and death may result. Death has occurred from large acute exposure or as a result of ventricular fibrillation. Benzene is basically a myelotoxic agent. Recent research has shown increases in the rate of chromosomal aberrations associated with benzene myelotoxicity.

Chlorobenzene is a constituent of the listed hazardous waste F002. It is also listed by EPA as a hazardous substance and as a priority toxic pollutant. Harmful effects and symptoms include: irritation of the eyes and nose, drowsiness, incoherence, skin irritation, and liver damage.

Chromium is listed by EPA as a contaminant (EPA hazardous waste number D007) when it meets the criteria for being EP Toxic (40 CFR 261.24), and as a priority toxic pollutant. Chromium compounds in the +3 state are of low order of toxicity. In the +6 state, chromium compounds are irritants and corrosive, and can enter the body by ingestion, inhalation, and through the skin.

Chrysene is a listed hazardous waste (U050) when discarded. It is an experimental carcinogen, neoplastigen and tumorigen by skin contact.

Cyanides are listed by EPA as hazardous wastes (P030) when discarded, hazardous substances, and priority toxic pollutants. Harmful effects and symptoms include: weakness, headaches, confusion, nausea, vomiting, eye and skin irritation, and slow gasping respiration.

Inorganic Lead is listed by EPA as a contaminant (EPA hazardous waste number D008) when it meets the criteria for being EP Toxic (40 CFR 261.24), a priority toxic pollutant and (various compounds) as hazardous substances. Harmful effects and symptoms include: decreased physical fitness, fatigue, sleep disturbance, headache, aching bones and muscles, digestive symptoms (particularly constipation), abdominal pains and decreased appetite, anemia, pallor, a "lead line" on the gums, and decreased hand-grip strength.



Elemental Mercury is listed by EPA as a contaminant (EPA hazardous waste number D009) when it meets the criteria for being EP Toxic (40 CFR 261.24). Harmful effects and symptoms include: coughing, chest pains, dyspnea, bronchitis, pneumonia, tremors, insomnia, irritability, indecision, headaches, fatigue, weakness, stomatitis, salivation, gastrointestinal disturbance, anorexia, weight loss, proteinuria, and irritation of eyes and skin.

Inorganic Mercury is listed by EPA as a contaminant (EPA hazardous waste number D009) when it meets the criteria for being EP Toxic (40 CFR 261.24), and a priority toxic constituent pollutant. Mercury is a primary irritant of skin and mucous membranes. It may occasionally be a skin sensitizer. Harmful effects and symptoms are as follows. Exposure to lower levels over prolonged periods produces symptom complexes that can vary widely from individual to individual. These may include weakness, loss of appetite, loss of weight, insomnia, indigestion, diarrhea, metallic taste in the mouth, increased salivation, soreness of mouth or throat, inflammation of gums, black line on the gums, loosening of teeth, irritability, loss of memory, and tremors of fingers, eyelids, lips, or tongue. More extensive exposures, either daily or one-time exposures, can produce extreme irritability, excitability, anxiety, delirium with hallucinations, melancholia, or manic depressive psychosis. Either acute or chronic exposure may produce permanent changes to affected organs and organ systems.

Naphthalene is listed by EPA as a hazardous waste (U165) when discarded, a hazardous substance, and a priority toxic pollutant. Harmful systemic effects and symptoms are as follows. Inhaling high concentrations of naphthalene vapor or ingesting naphthalene may cause intravascular hemolysis and its consequences. Initial symptoms include eye irritation, headache, confusion, excitement, malaise, profuse sweating, nausea, vomiting, abdominal pain, and irritation of the bladder. There may be progressive jaundice, hematuria, hemoglobinuria, renal tubular blockage, and acute renal shutdown. Locally, naphthalene is a primary irritant and causes erythema and dermatitis upon repeated contact. It is also an allergen and may produce dermatitis in hypersensitive individuals.

Phenanthrene is moderately toxic by ingestion. It is also a human skin photosensitizer, and an experimental neoplastigen and tumorigen by skin contact.

Phenol is listed by EPA as a hazardous waste (U188) when discarded, a constituent in EPA hazardous waste K087, a hazardous substance, and a priority toxic pollutant. Harmful effects and



symptoms are as follows. Systemic effects may occur from any route of exposure. These include paleness, weakness, sweating, headache, ringing of the ears, shock, cyanosis, excitement, frothing of the nose and mouth, dark colored urine, and death. If death does not occur, kidney damage may occur. Locally, phenol has a marked corrosive effect on any tissue. When it comes in contact with the eyes it may cause severe damage and blindness. If the chemical is not removed promptly, it may cause a severe burn or systemic poisoning.

Pyrene is moderately toxic by ingestion and intraperitoneal routes. It is also a skin irritant and an experimental tumorigen.

Tetrachloroethylene is a constituent of the listed hazardous waste F001, a priority toxic pollutant and a carcinogen. Acute exposure to tetrachloroethylene may cause central nervous system depression, hepatic injury, and anesthetic death. Signs and symptoms of overexposure include malaise, dizziness, headache, increased perspiration, fatigue, staggering gait, and slowing of mental ability. Locally, repeated contact may cause a dry, scaly, and fissured dermatitis.

Toluene is a constituent of the listed hazardous waste F005, a hazardous substance, and a priority toxic pollutant. Acute exposure to toluene primarily causes central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness, poor coordination with staggering gait, skin paresthesia, collapse and coma. Locally, toluene may cause irritation of the eyes, respiratory tract, and skin.

Xylene is listed by EPA as a hazardous waste (U239) when discarded. It is mildly toxic by ingestion and inhalation, and moderately toxic by intraperitoneal and subcutaneous routes. It is an experimental teratogen.

Zinc has the following harmful effects and symptoms by ingestion: cough, dyspnea and sweating. It is a human skin irritant.

14. Respondent's Biological Treatment Facility (BTF) is located in the northern portion of the City of Birmingham where there is a mixture of residential and industrial usage. The BTF is approximately a quarter mile to the west and northwest of Tarrant City, and approximately a half a mile to the southeast of a residential neighborhood. Target populations therefore include people living in nearby housing and working in the adjacent industries.



#### V. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set out above, and after consideration of the administrative record, the Director of the Waste Management Division, EPA Region IV, has made the following conclusions of law and determinations:

1. Respondent is a "person" within the meaning of Section 1004(15) of RCRA, 42 U.S.C. Section 6903(15):
2. Respondent is the owner or operator of a facility that has operated subject to Section 3005(e) of RCRA, 42 U.S.C. Section 6925(e).
3. Certain wastes and constituents found at Respondent's facility are hazardous wastes or hazardous constituents thereof as defined by Section 1004(5) of RCRA, 42 U.S.C. Section 6903(5). These are also hazardous wastes or hazardous constituents within the meaning of Section 3001 of RCRA, 42 U.S.C. Section 6921 and 40 CFR Part 261.
4. There is or has been a release of hazardous wastes and/or hazardous constituents into the environment from Respondent's facility.
5. The actions required by this Order are necessary to protect human health and/or the environment.

#### VI. WORK TO BE PERFORMED

Pursuant to Section 3008(h) of RCRA, 42 U.S.C. Section 6928(h), Respondent is hereby ordered to perform the following tasks in the manner and by the dates specified herein. All work undertaken pursuant to this Order shall be performed in a manner consistent with, at a minimum: the attached Scope(s) of Work; the EPA-approved Interim Measures Workplan, RCRA Facility Investigation (RFI) Workplan, Corrective Measures Implementation Program Plan, and other Workplans; RCRA and its implementing regulations; and applicable EPA guidance documents. Relevant guidance may include, but is not limited to, the "RCRA Facility Investigation (RFI) Guidance" (EPA 530/SW-87-001), "RCRA Groundwater Monitoring Technical Enforcement Guidance Document" (OSWER Directive 9950.1, September 1986), "Test Methods for Evaluating Solid Waste" (SW-846, November 1986), and "Construction Quality Assurance for Hazardous Waste Land Disposal Facilities" (EPA 530/SW-85-031, July 1986.)



RCRA Facility Investigation (RFI)

1. Within 45 days of the effective date of this Order, Respondent shall submit to EPA and ADEM a work plan for an RFI. The RFI Work Plan and activities conducted pursuant to this Order are subject to approval by EPA and shall be performed in a manner consistent with the RFI Scope of Work contained in Attachment A. Attachment A to this Order is incorporated by reference as if fully set forth herein. The RFI Work Plan shall be developed in accordance with, at a minimum, RCRA, its implementing regulations, and EPA guidance documents determined by EPA to be relevant, including but not limited to, the "RCRA Facility Investigation (RFI) Guidance Manual--Draft", (OSWER 9502.00-6c, EPA 530/SW-87-001, July 1987).

2. The RFI Work Plan shall be designed to define the presence magnitude, extent, direction and rate of movement of any hazardous wastes or hazardous constituents, within and beyond the Facility boundary. The RFI Work Plan shall document the procedures Respondent shall use to conduct those investigations necessary to: (1) characterize the source(s) of contamination; (2) determine the nature, extent, and rate of movement of hazardous waste constituents on and off Respondent's property; (3) determine the possible routes of migration of hazardous wastes and hazardous constituents on and off the Facility, including characterization of the geology and hydrology of the Facility which delineates possible routes of migration; (4) determine the extent and potential for migration of hazardous wastes and hazardous constituents through each of the environmental media; (5) identify actual or potential receptors, and (6) develop alternative options from which EPA will select a corrective measure to remediate the observed and potential contamination. The Work Plan shall include a specific schedule for implementation of all activities described in the Work Plan.

3. In accordance with Attachment A herein, the RFI Work Plan shall include: (a) a Project Management Plan, which includes a schedule for implementation of the Work Plan; including preparation and submission of preliminary and final reports to EPA; (b) a Data Collection Quality Assurance Plan; (c) a specific Data Management Plan; (d) a Health and Safety Plan; and (e) a Community Relations Plan.

CORRECTIVE MEASURES STUDY (CMS)

4. Upon completion of the RFI, the Respondent shall conduct a CMS in accordance with CMS Scope of Work in Attachment B. Attachment B to this Order is incorporated by reference as if fully set forth herein.

CORRECTIVE MEASURES IMPLEMENTATION (CMI)

5. If Respondent has complied with the terms of this Order, after public comment and EPA's selection of the corrective measure to be



implemented, EPA shall provide a 90-day period for negotiation of an administrative order on consent [or a judicial consent decree] for implementation of the corrective measure. If agreement is not reached during this period, EPA reserves all rights to implement the corrective measure or other remedial response and to take any other appropriate actions under RCRA, the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), or any other available legal authority, including issuance of a unilateral administrative order directing Respondent to implement the corrective measure.

SUBMISSIONS/AGENCY APPROVAL/ADDITIONAL WORK

6. Within 10 days of approval or modification by EPA of the Work Plans, Respondent shall commence work and implement the tasks required by the Work Plans submitted pursuant to the Scope(s) of Work contained in Attachments A and B in accordance with the standards, specifications and schedule stated in the Work Plans as approved or modified by EPA.

7. Beginning with the month following the effective date of this Order, Respondent shall provide EPA and ADEM with progress reports for each month on the tenth day of the following month. The progress reports shall be developed as specified in the Scopes of Work contained in Attachment A and B hereto. At a minimum, these progress reports shall: (1) describe all activities undertaken in achieving compliance with this Order; (2) describe all plans and activities completed during the past month, as well as the actions which are scheduled for the next month; (3) identify any requirements under this Order that were not completed as provided and any problem areas and anticipated problem areas in complying with this Order; and (4) include the results of sampling and tests and other data generated pursuant to the Work Plan(s).

8. Respondent shall provide draft and final RFI and CMS reports to EPA and ADEM in accordance with the schedules contained in this Order and its attachments.

9. EPA will review all draft and final reports or work plans, and notify Respondent in writing of EPA's approval, disapproval or modification of the reports, work plans, or any part thereof. In the event of any disapproval, EPA shall specify in writing the deficiencies and reasons for such disapproval. With the receipt of EPA's disapproval of any reports or work plans, Respondent shall amend and submit revised reports or work plans which EPA will approve or modify. Reports, as approved or modified, shall be deemed incorporated into and part of this Order.

10. Two (2) copies of all documents, including work plans, preliminary and final reports, progress reports, and other correspondence to be submitted pursuant to this Order shall be hand delivered or sent by



certified mail, return receipt requested, to the Project Coordinator designated pursuant to Section XII of this Order.

11. Consistent with the objectives of this Order, EPA may determine that certain tasks, including investigatory work or engineering evaluations, are necessary in addition to the tasks and deliverables included in the Plans. If EPA determines that such additional work is necessary, EPA will request in writing that Respondent perform the additional work in this situation and shall specify the basis and reasons for EPA's determination that the additional work is necessary. Within fifteen (15) days after the receipt of such request, Respondent shall have the opportunity to meet with EPA to discuss the additional work EPA has requested and to propose alternatives. Within fifteen (15) days of this meeting, or the receipt of EPA's request for additional work, whichever is later, Respondent shall commence with the additional work EPA has requested according to an EPA approved work plan. All additional work performed by Respondent under this paragraph shall be performed in a manner consistent with this Order.

12. All work performed pursuant to this Order shall be under the direction and supervision of a professional engineer licensed in the State of Alabama with expertise in hazardous waste site investigations and remediation. Within ten (10) days of the effective date of this Order, Respondent shall notify EPA and ADEM in writing of the name, title, and qualifications of the engineer, and of any contractors, or subcontractors and their personnel to be used in carrying out the terms of the Order.

#### VII. QUALITY ASSURANCE

Throughout all sample collections and analysis activities, Respondent shall use EPA-approved quality assurance, quality control, and chain-of-custody procedures, as specified in the approved Plans. In addition, Respondent shall:

1. Consult with EPA in planning for, and prior to, field sampling and laboratory analysis.

2. Inform the EPA Project Coordinator, ten (10) days in advance of which laboratories will be used by Respondent and ensure that EPA personnel and EPA authorized representatives have reasonable access to the laboratories and personnel used for analyses.

3. Ensure that laboratories used by Respondent for analyses perform such analyses according to EPA methods included in "Test Methods for Evaluating Solid Waste" (SW-846, November 1986 - 3rd. Edition) or other methods deemed satisfactory to EPA. If methods other than EPA methods are to be used, Respondent shall submit all protocols to be used for analyses to EPA for approval within ten days prior to the commencement of analyses.



4. Ensure that laboratories used by Respondent for analyses participate in a quality assurance/quality control program equivalent to that which is followed by EPA. As part of such a program, and upon request by EPA, such laboratories shall perform analysis of samples provided by EPA to demonstrate the quality of the analytical data.

5. Use the EPA guidance to evaluate all data to be used in the proposed plans including data collected prior to EPA approval of these plans required by Section VI of this Order. This evaluation shall be provided to EPA as part of the plans required by Section VI of this Order, and shall be updated as necessary or as required by EPA.

#### VIII. PUBLIC COMMENT AND PARTICIPATION

1. Following proposed modification or proposed approval by EPA of a CMS Final Report, EPA shall make the RFI Final Report (or summary of report), the CMS Final Report (or summary of report), and EPA's justification for selecting the proposed remedy available to the public for review and comment for at least twenty-one (21) days.

2. Following the public review and comment period, EPA will notify Respondent which alternative corrective measure is selected, if any. If the Corrective Measure recommended in the CMS Final Report is not the corrective measure selected by EPA after consideration of public comments, EPA will inform Respondent in writing of the reasons for such decision and the Respondent shall modify the CMS Final Report as directed by EPA.

#### IX. ON-SITE AND OFF-SITE ACCESS

1. Respondent shall provide access to EPA or its designated representatives to enter and freely move about all property at the Facility during the effective dates of the Order for the purposes of, inter alia: interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts related to the Facility; reviewing the progress of the Respondent in carrying out the terms of this Order; conducting such sampling, tests, or monitoring as EPA or its representatives deem necessary; using a camera, sound recording, or other documentary type equipment; and verifying the reports and data submitted to EPA by the Respondent. The Respondent shall permit such persons to inspect and copy all records, files, photographs, documents, and other writings, including all sampling and monitoring data, that pertain to work undertaken pursuant to this Order. The Respondent shall comply with all approved health and safety plans.

2. To the extent that work required by this Order, or by any approved Work Plans prepared pursuant hereto must be done on property not owned or controlled by the Respondent, Respondent shall use their best efforts to



obtain site access agreements from the present owner(s) of such property within 10 days of approval of any Work Plan for which site access is required. Best efforts as used in this Section shall include, at a minimum, a certified letter from Respondent to the present owners of such property requesting access agreements to permit Respondent, EPA and its authorized representatives to access such property. Any such access agreement shall be incorporated by reference into this Order. In the event that agreements for site access are not obtained within 10 days upon approval of the work plans which identify the need for access, Respondent shall notify EPA in writing regarding both the efforts undertaken to obtain access and its failure to obtain such agreements within 5 days thereafter. In the event that EPA obtains access, Respondent shall undertake EPA approved work on such property.

3. Nothing in this section limits or otherwise affects EPA's right of access and entry pursuant to applicable law, including but not limited to RCRA and CERCLA.

#### X. SAMPLING AND DATA/DOCUMENT AVAILABILITY

1. Respondent shall submit to EPA and ADEM all results of sampling, and/or tests, or other data generated by or on behalf of the Respondent in accordance with the requirements of this Order and its attachments.

2. Respondent shall notify EPA and ADEM at least ten (10) days before engaging in any field activities such as any well drilling, installation of equipment, or sampling. At the request of EPA, Respondent shall provide or allow EPA or its authorized representative to take split or duplicates of all samples collected by Respondent pursuant to this Order. Similarly, at the request of Respondent, EPA will allow Respondent or their authorized representatives to take split or duplicates of all samples collected by EPA under this Order. EPA will notify Respondent at least ten (10) days before conducting any sampling under this Order.

3. All information and data shall be available to the public except to the extent that it is confidential business information. Disputes over confidentiality shall be covered by 40 CFR Part 2. Physical or analytical data shall not be deemed confidential.

#### XI. RECORD PRESERVATION

Respondent shall preserve, during the pendency of this Order and for a minimum of six (6) years after approval or modification of the final CMS report, all records and documents in their possession or in the possession of their divisions, employees, agents or consultants or contractors which relate in any way to this Order or to hazardous waste management and disposal at the Facility. At the conclusion of six (6)



years, Respondent shall then make such records available to EPA for inspection or shall provide copies of any such records to EPA. Respondent shall notify EPA 30 days prior to the destruction of any such records, and shall provide EPA with the opportunity to take possession of any such records.

#### XII. PROJECT COORDINATOR

1. Within (ten) 10 days of the effective date of this Order, EPA and Respondent shall each designate a Project Coordinator. Respondent shall notify EPA in writing of the Project Coordinator it has selected. Each Project Coordinator shall be responsible for overseeing the implementation of this Order. The EPA Project Coordinator will be EPA's designated representative. All communications between Respondent and EPA, and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed through the Project Coordinators.

2. Respondent and EPA shall provide at least ten (10) days written notice prior to changing Project Coordinators.

3. The absence of the EPA Project Coordinator from the Facility shall not be cause for the stoppage of work.

4. If EPA determines that activities in compliance or noncompliance with this Order, have caused or may cause a release of hazardous waste or hazardous constituents, hazardous substances, pollutants, or contaminants, or a threat or potential threat to the public health or to the environment, EPA may order Respondent to stop further implementation of the Order for such a period of time as may be needed to abate any such release or threat and/or undertake any action which EPA determines is necessary to abate such a release or threat.

#### XIII. NOTIFICATION

1. Unless otherwise specified, reports, notices or other submissions required under this Order shall be in writing and shall be hand delivered or sent by certified mail, return receipt requested to:

Allan E. Antley, Chief  
Compliance Section  
RCRA Branch  
U.S. EPA, Region IV  
345 Courtland Street, N.E.  
Atlanta, Georgia 30365

Mrs. Sue Robertson, Chief  
Land Division  
Alabama Department of  
Environmental Management  
1751 Congressman Dickinson Dr.  
Montgomery, Alabama 36130



2. Documents to be submitted to Respondent will be sent to:

Charles Jones  
Manager of Environmental Affairs  
Sloss Industries Corporation  
P.O. Box 5327  
3500 35th Avenue North  
Birmingham, AL 35207

#### XIV. PENALTIES FOR NONCOMPLIANCE

The failure or refusal to carry out the terms of this Order in a manner deemed satisfactory subjects Respondent to a civil penalty in an amount not to exceed \$25,000 for each day of noncompliance with this Order in accordance with Section 3008(h) of RCRA, 42 U.S.C. Section 6928(h).

#### XV. DISPUTE RESOLUTION

1. If Respondent disagrees, in whole or in part, with any EPA disapproval or other decision or directive made by EPA pursuant to this Order, Respondent shall notify EPA in writing of its objections and the basis therefore within fifteen (15) calendar days of receipt of EPA's disapproval, decision or directive. Said notice shall specify the following: the points in dispute; the position Respondent maintains should be adopted as consistent with the requirements of the Order; the basis for Respondent's position; and any matters which Respondent considers necessary for EPA's determination. Within fifteen (15) business days of EPA's receipt of such written notice, EPA shall provide to Respondent its final decision on the pending dispute which shall be binding upon parties to this Order.

2. The existence of a dispute as defined herein, and EPA's consideration of such matters as placed into dispute shall not excuse, toll or suspend any compliance obligation or deadline required pursuant to this Order during the pendency of the dispute resolution process.

3. Notwithstanding any other provisions of this Order, no action or decision by EPA, including without limitation, decisions of the Regional Administrator, Region IV, pursuant to this Order shall constitute final agency action giving rise to any rights to judicial review prior to EPA's initiation of judicial action to compel Respondent's compliance with the mandate(s) of this Order.



XVI. RESERVATION OF RIGHTS

1. This Order shall not be construed as a waiver or limitation of any rights, remedies, powers and/or authorities which EPA has under RCRA, CERCLA, or any other statutory or common law enforcement authority of the United States of America.

2. EPA hereby reserves all of its statutory and regulatory powers, authorities, rights, remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any applicable laws and regulations and with any of the requirements of this Order, including but not limited to: the right both to disapprove of work performed by the Respondent and to request that Respondent perform tasks in addition to those stated in the Work Plans; the right to perform any portion of the work herein or any additional site characterization, studies, and response/corrective actions as it deems necessary; the authority to undertake removal actions or remedial actions; the right to seek reimbursement from Respondent for such additional costs incurred by the United States; and the right to take additional enforcement action pursuant to Section 3008(h) of RCRA should the Agency determine that such actions are warranted.

3. Compliance by Respondent with the terms of this Order shall not relieve Respondent of its obligations to comply with RCRA or any other applicable State or Federal law or regulation including without limitation, any conditions of a permit issued under RCRA or any other applicable State or Federal law or regulation.

XVII. OTHER CLAIMS

Nothing in this Order shall constitute or be construed as a release from any claim, cause of action or demand 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 from the facility.

XVIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to this 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.



XIX. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT

Respondent shall 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 from or on account of acts or omissions of Respondent or its agents, independent contractors, receivers, trustees, and assigns in carrying out activities required by this Order. The United States government shall not be held out or construed to be a party to any contract entered into by Respondent in carrying out activities pursuant to this Order.

XX. FINANCIAL ASSURANCE

1. Within sixty (60) calendar days of the effective date of this Order, Respondent shall present to EPA for review a summary and analysis of Respondent's existing instruments for financial assurance provisions as established by EPA regulations 40 CFR Part 265.143 [ADEM Administrative Code 14-6-.08(4)] and 40 CFR 265.145 [ADEM Administrative code 14-6-.08(5)] and/or any other instruments that have been provided previously by Respondent for any purpose related to liability coverage, closure, and post-closure care of their facility. Respondent shall also provide a copy of each instrument for which a summary and analysis is being provided in accordance with this Section. The analysis shall describe clearly, but shall not be limited to, the following items:

a. The nature of these instruments and the extent to which they are available for access by EPA for the purpose of ensuring the completion of all requirements established pursuant to this Order, including all Tasks described in the Attachments hereto; and

b. Precise dollar amounts that are available to EPA, and schedules for their availability, for the above-stated purposes. The amount of funds available through these instruments must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for the financial assurance of closure, post-closure, liability coverage, and the actions required under this Order.

2. EPA will review the submittal and will provide notice to the Respondent as to the adequacy of its existing financial assurance measures for the above-stated purposes, and shall indicate therein what additional financial assurances, if any, must be provided by Respondent to ensure compliance with the terms of this Order.

3. Within thirty (30) days of Respondent's receipt of a notice from EPA that Respondent's financial assurance measures are inadequate,



Respondent shall establish an irrevocable standby letter of credit or shall otherwise provide [per 40 CFR Part 265.143/ADEM Administrative Code 14-6-.08(4)] additional financial assurances according to the terms provided in said notice. Such additional financial assurance measures shall be available to EPA to perform such terms or conditions established pursuant to the Order, provided that prior to drawing upon any such assurance measure, EPA shall notify Respondent in writing of its alleged failure to perform the requirements of this Order and provide Respondent with a reasonable time period of not less than fifteen (15) calendar days within which to remedy the alleged nonperformance.

4. This Order in no way negates Respondent's obligation to establish and/or maintain financial assurance for closure and post-closure care under 40 CFR Parts 265.143 [ADEM Administrative Code 14-6-.08(4)] and 40 CFR 265.145 [ADEM Administrative code 14-6-.08(5)].

#### XXI. SUBSEQUENT MODIFICATION

1. This Order may be amended by EPA. Such amendments shall be in writing, shall have as their effective date the date on which they are signed by EPA, and shall be incorporated into this Order.

2. Any reports, plans, specifications, schedules, and attachments required by this Order are, upon approval or modification by EPA, incorporated into this Order. Any noncompliance with such EPA-approved reports, plans, specifications, schedules, and attachments shall be considered a violation of the requirements of this Order and shall subject the Respondent to the statutory penalty provisions referenced in Section XIV of this Order and other sanctions.

3. No informal advice, guidance, suggestions, or comments by EPA regarding reports, plans, specifications, schedule and any other writing submitted to Respondent will be construed as relieving Respondent of its obligation to obtain written approval, if and when required by this Order.

#### XXII. SEVERABILITY

If any provision or authority of this Order or the application of this 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 Order shall remain in force and shall not be affected thereby.

#### XXIII. TERMINATION AND SATISFACTION

The provisions of this Order shall be deemed satisfied upon Respondent's receipt of written notice from EPA that Respondent has demonstrated, to the satisfaction of EPA, that the terms of this Order, including any additional tasks which, subject to the limitations set forth



herein, Respondent is ordered to undertake, have been satisfactorily completed. EPA shall issue such notices after receipt of notice by Respondent that they have completed the requirements of the Order.

XXIV. NOTICE OF OPPORTUNITY TO REQUEST A HEARING

In accordance with Section 3008(b) of RCRA, 42 U.S.C. 6928(b), the Initial Administrative Order shall become final unless Respondent files a response and requests a public hearing in writing no later than thirty (30) days after service of the Initial Administrative Order in accordance with 40 CFR Part 24.

- (a) The response and request for hearing must be filed with

Regional Hearing Clerk  
345 Courtland Street, N.E.  
Atlanta, Georgia 30365

A copy of the response and request for a hearing and copies of any subsequent documents filed in this action should be sent to Office of Regional Counsel, at the same address. The response must specify each factual or legal determination or relief provision that is contested and for which the hearing is requested, raising all issues regarding appropriateness of the terms of the Order including any proposals for modifications of the Order. Respondent must also submit affidavits and exhibits that support any of its allegations, claims or defenses at the time that it files a response. Any hearings on the Order will be conducted in accordance with the attached provisions.

The Order directs the respondent to undertake only an RFI and a CMS, which includes monitoring, surveys, testing, information gathering, analyses, and studies (including studies designed to develop recommendations for appropriate corrective measures); therefore, according to 40 CFR 24.08, the appropriate hearing procedure is that set forth in Subpart B. Respondent may include with its response to the Order and request for a hearing a statement indicating whether it believes the Subpart C hearing procedure should be employed for the requested hearing and the reason(s) therefore.

- (b) Respondent's failure to file a written response and request a hearing within thirty (30) days of service of this Order will constitute a binding admission of all allegations contained in the Order and a waiver of Respondent's right to a hearing.

XXV. SETTLEMENT CONFERENCE

Whether or not Respondent requests a hearing, an informal conference may be requested in order to discuss the facts of this case and to arrive at settlement. To request an informal conference contact:



Zylpha Pryor  
Office of Regional Counsel  
EPA, Region IV  
345 Courtland Street, N.E.  
Atlanta, Georgia 30365

A request for an informal conference does not extend the thirty (30) day period during which a written response and request for a hearing must be submitted. The informal conference procedure may be pursued simultaneously with the adjudicatory hearing procedure.

XXVI. SURVIVABILITY/PERMIT INTEGRATION

Subsequent to the issuance of this Order, A RCRA permit may be issued to the facility incorporating the requirements of this Order by reference into the permit.

Any requirements of this Order shall not terminate upon the issuance of a RCRA permit unless the requirements are expressly replaced by more stringent requirements in the permit.

XXVII. EFFECTIVE DATE

This Order shall become effective thirty (30) days after it is served unless Respondent requests a public hearing pursuant to RCRA Section 3008(b), 42 U.S.C. Section 6928(b).

IT IS SO ORDERED:

BY: \_\_\_\_\_

*Don Guinyard*

*9/29/89*

Patrick M. Tobin, Director  
Waste Management Division  
U.S. Environmental Protection Agency  
Region IV

Date

Effective Date:



CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing Administrative Order to be served upon the person designated below on the date below, by causing said copy to be deposited in the U.S. Mail First Class (certified mail: return receipt requested, postage prepaid) in Atlanta, Georgia, in an envelope addressed to:

D. R. Wedell, President  
Sloss Industries Corp.  
P.O. Box 5327  
3500 35th Avenue, North  
Birmingham, Alabama 35207

I have further caused the original and one copy of the Administrative Order and this certification of service to be filed with the Regional Hearing Clerk, United States Environmental Protection Agency, Region IV, 345 Courtland Street, N.E., Atlanta, Georgia 30365 on the date specified below.

These are said persons' last known address to the subscriber.

Date this 29<sup>th</sup> day of September 1989.

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Angela Teagle  
Compliance Clerk  
Waste Compliance Section



ATTACHMENT A  
SCOPE OF WORK FOR A RCRA FACILITY INVESTIGATION (RFI)  
AT  
SLOSS INDUSTRIES INCORPORATED,  
BIRMINGHAM, ALABAMA



An RFI is to determine the nature and extent of releases of hazardous wastes or constituents from regulated units, solid waste management units, and other source areas at the Facility and to gather all necessary data to support the Corrective Measures Study (CMS). The Respondent shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RCRA remedial investigation at SLOSS INDUSTRIES, INCORPORATED, Birmingham, Alabama.

#### SCOPE

The RFI consists of seven tasks:

- Task I: Description of Current Conditions
  - A. Facility Background
  - B. Nature and Extent of Contamination
  - C. Implementation of Interim Measures
- Task II: Preinvestigation Evaluation of Corrective Measures Technologies
- Task III: RFI Work Plan Requirements
  - A. Project Management Plan
  - B. Data Collection Quality Assurance Plan
  - C. Data Management Plan
  - D. Health and Safety Plan
  - E. Community Relations Plan
- Task IV: Facility Investigation
  - A. Environmental Setting
  - B. Source Characterization
  - C. Contamination Characterization
  - D. Potential Receptor Identification
- Task V: Investigation Analysis
  - A. Data Analysis
  - B. Protection Standards
  - C. Draft and Final Reports
- Task VI: Laboratory and Bench-Scale Studies
- Task VII: Reports
  - A. Preliminary and Work Plan
  - B. Progress
  - C. Draft and Final



TASK I: DESCRIPTION OF CURRENT CONDITIONS

The Respondent shall submit to EPA and ADEM for EPA review and approval, a report providing the background information pertinent to the Facility, plus contamination and interim measures as set forth below. The data gathered during any previous investigations, including but not limited to, the RFA, or inspections and other relevant data shall be included.

A. Facility Background

The Respondent's report shall summarize the regional location, pertinent boundary features, general Facility physiography, hydrogeology, and historical use of the Facility for the treatment, storage or disposal of solid and hazardous waste. The Respondent's report shall include:

1. Map(s) depicting the following:
  - a. General geographic location;
  - b. Property lines, with the owners of all adjacent property clearly indicated;
  - c. Topography and surface drainage depicting all waterways, wetlands, floodplains, water features, drainage patterns, and surface water containment areas. The map shall show contours at 10 foot intervals with 5 foot supplementals and will clearly show the pattern of surface water flow in the vicinity of and from each operational unit and solid waste management units. The scale of the map should be a maximum scale of 1 inch equals 200 feet;
  - d. All tanks, buildings, utilities, paved areas, easements, right-of-ways, and other features;
  - e. All solid or hazardous waste treatment, storage or disposal areas active after November 19, 1980;
  - f. All known past solid or hazardous waste treatment, storage or disposal areas regardless of whether they were active on November 19, 1980.
  - g. All known past and present product and waste underground tanks or piping;
  - h. Surrounding land uses (residential, commercial, agricultural, recreational); and



- i. The location of all production and groundwater monitoring wells within a 3 mile radius of the site. These wells shall be clearly labeled and ground and top of casing elevations and construction details included (these elevations and details may be included as an attachment).
- j. Cross-sections of the Facility including but not limited to solid and hazardous waste management units.
- k. Aerial photographs of the entire facility.

All maps shall be consistent with the requirements set forth in 40 CFR Part 270.14(b)(19)/ADEM Administrative Code 14-8-.02(5)(B)18, and be of sufficient detail and accuracy to locate and report all current and future work performed at the site;

- 2. A history and description of ownership and operation, solid and hazardous waste generation, treatment, storage and disposal activities at the Facility;
- 3. Approximate dates or periods of past product and waste spills, identification of the materials spilled, the amount spilled, the location where spilled, and a description of the response actions conducted (local, state, or federal response units or private parties), including any inspection reports or technical reports generated as a result of the response; and
- 4. A summary of past permits requested and/or received, any enforcement actions and their subsequent responses and a list of documents and studies prepared for the Facility.

**B. Nature and Extent of Contamination**

The Respondent shall prepare and submit to EPA and ADEM, for EPA review and approval, a preliminary report describing the existing information on the nature and extent of contamination.

- 1. The Respondent's report shall summarize all possible source areas of contamination. This, at a minimum, should include all regulated units, solid waste management units, spill areas, and other suspected source areas of contamination. For each area, the Respondent shall identify the following:
  - a. Location of unit/area (which shall be depicted on a Facility map);



- b. Quantities of solid and hazardous wastes;
  - c. Hazardous waste or constituents, to the extent known for each area; and
  - d. Identification of areas where additional information is necessary.
2. The Respondent shall prepare an assessment and description of the existing degree and extent of contamination. This should include:
- a. Available monitoring data, sampling results and qualitative information on locations and levels of contamination at the Facility, including both an areal and cross-sectional view of plume extent (define a zero line);
  - b. All potential migration pathways including information on geology, pedology, hydrogeology, physiography, hydrology, water quality, meteorology, and air quality; and
  - c. The potential impact(s) on human health and the environment, including demography, groundwater and surface water use, and land use.

#### TASK II: PRE-INVESTIGATION EVALUATION OF CORRECTIVE MEASURE TECHNOLOGIES

Prior to starting the Facility investigation, the Respondent shall submit to EPA and ADEM a report that identifies the potential corrective measures technologies that may be used on-site or off-site for the containment, treatment, remediation, and/or disposal of contamination. This report shall also identify any field data that needs to be collected in the Facility investigation to facilitate the evaluation and selection of the final corrective measure or measures (e.g., compatibility of waste and construction materials, information to evaluate effectiveness, treatability of wastes, etc.). This report shall be submitted with the Description of Current Situation (Task I) report.

#### TASK III: RFI WORK PLAN REQUIREMENTS

The Respondent shall prepare an RFI Work Plan. This RFI work plan shall include the development of several plans, which shall be prepared concurrently. During the RFI, it may be necessary to revise the RFI Work Plan to increase or decrease the detail of information collected to accommodate the Facility specific situation. The RFI Work Plan includes the following:



A. Project Management Plan

The Respondent shall prepare a Project Management Plan which will include a discussion of the technical approach, schedules, budget, and personnel. The Project Management Plan will also include a description of qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the RFI.

B. Data Collection Quality Assurance Plan

The Respondent shall prepare a plan to document all monitoring procedures: sampling, field measurements and sample analysis performed during the investigation to characterize the environmental setting, source, and contamination, so as to ensure that all information, data and resulting decisions are technically sound, statistically valid, and properly documented.

1. Data Collection Strategy

The strategy section of the Data Collection Quality Assurance Plan shall include but not be limited to the following:

- a. Description of the intended uses for the data, and the necessary level of precision and accuracy for these intended uses;
- b. Description of methods and procedures to be used to assess the precision, accuracy and completeness of the measurements data;
- c. Description of the rationale used to assure that the data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition or an environmental condition. Examples of factors which shall be considered and discussed include:
  - i) Environmental conditions at the time of sampling;
  - ii) Number of sampling points;
  - iii) Representativeness of selected media; and
  - iv) Representativeness of selected analytical parameters.
- d. Description of the measures to be taken to assure that the following data sets can be compared to each other:



- i) RFI data generated by the Respondent over some time period;
  - ii) RFI data generated by an outside laboratory or consultant versus data generated by the Respondent;
  - iii) Data generated by separate consultants or laboratories, and
  - iv) Data generated by an outside consultant or laboratory over some time period.
- e. Details relating to the schedule and information to be provided in quality assurance reports. The reports should include but not be limited to:
- i) Periodic assessment of measurement data accuracy, precision, and completeness;
  - ii) Results of performance audits;
  - iii) Results of system audits;
  - iv) Significant quality assurance problems and recommended solutions; and
  - v) Resolutions of previously stated problems.

## 2. Sampling

The Sampling section of the Data Collection Quality Assurance Plan shall discuss:

- a. Selecting appropriate sampling locations, depths, etc.;
- b. Providing a statistically sufficient number of sampling sites;
- c. Measuring all necessary ancillary data;
- d. Determining conditions under which sampling should be conducted;
- e. Determining which media are to be sampled (e.g., ground-water, air, soil, sediment, etc.);
- f. Determining which parameters are to be measured and where;



- g. Selecting the frequency of sampling and length of sampling period;
- h. Selecting the types of sample (e.g., composites vs. grabs) and number of samples to be collected;
- i. Measures to be taken to prevent contamination of the sampling equipment and cross contamination between sampling points;
- j. Documenting field sampling operations and procedures, including:
  - i) Documentation of procedures for preparation of reagents or supplies which become an integral part of the sample (e.g., filters, and adsorbing reagents);
  - ii) Procedures and form for recording the exact location and specific considerations associated with sample acquisition;
  - iii) Documentation of specific sample preservation method;
  - iv) Calibration of field devices;
  - v) Collection of replicate samples;
  - vi) Submission of field-biased blanks, where appropriate;
  - vii) Potential interferences present at the Facility;
  - viii) Construction materials and techniques, associated with monitoring wells and piezometers;
  - ix) Field equipment and sample containers listing;
  - x) Sampling order; and
  - xi) Decontamination procedures.
- k. Selecting appropriate sample containers;
- l. Sample preservations; and
- m. Chain-of-custody, including;



- i) Standardized field tracking reporting forms to establish sample custody in the field prior to and during shipment; and
- ii) Pre-prepared sample labels containing all information necessary for effective sample tracking.

### 3. Field Measurements

The Field Measurements section of the Data Collection Quality Assurance Plan shall discuss:

- a. Selecting appropriate field measurement locations, depths, etc.;
- b. Providing a statistically sufficient number of field measurements;
- c. Measuring all necessary ancillary data;
- d. Determining conditions under which field measurements should be conducted;
- e. Determining which media are to be addressed by appropriate field measurements (e.g., groundwater, air, soil, etc.);
- f. Determining which parameters are to be measured and where;
- g. Selecting the frequency of field measurement and length of field measurements period; and
- h. Documenting field measurement operations and procedures, including:
  - i) Procedures and forms for recording raw data and the exact location, time, and Facility-specific considerations associated with the data acquisition;
  - ii) Calibration of field devices;
  - iii) Collection of replicate measurements;
  - iv) Submission of field-biased blanks, where appropriate;



- v) Potential interferences present at the Facility;
- vi) Construction materials and techniques associated with monitoring wells and piezometers used to collect field data;
- vii) Field equipment listing;
- viii) Order in which field measurements were made; and
- ix) Decontamination procedures.

#### 4. Sample Analysis

The Sample Analysis section of the Data Collection Quality Assurance Plan shall specify the following:

##### a. Chain-of-Custody procedures, including:

- i) Identification of a responsible party to act as sample custodian at the laboratory facility authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
- ii) Provision for a laboratory sample custody log consisting of serially numbered standard lab-tracking report sheets; and
- iii) Specification of laboratory sample custody procedures for sample handling, storage, and dispersment for analysis.

##### b. Sample storage procedures and storage times;

##### c. Sample preparation methods;

##### d. Analytical procedures, including:

- i) Scope and application of the procedure;
- ii) Sample matrix;
- iii) Potential interferences;
- iv) Precision and accuracy of the methodology; and
- v) Method detection limits.



- e. Calibration procedures and frequency;
- f. Data reduction, validation and reporting;
- g. Internal quality control checks, laboratory performance and systems audits and frequency, including:
  - i) Method blank(s);
  - ii) Laboratory control sample(s);
  - iii) Calibration check sample(s);
  - iv) Replicate sample(s);
  - v) Matrix-spiked sample(s);
  - vi) "Blind" quality control sample(s);
  - vii) Control samples;
  - viii) Surrogate samples;
  - ix) Zero and span gases; and
  - x) Reagent quality control checks.

A performance audit will be conducted by EPA on the laboratories selected by the Respondents. This audit must be completed and approved prior to the facility investigation.

- h. Preventive maintenance procedures and schedules;
- i. Corrective action (for laboratory problems); and
- j. Turn-around time.

C. Data Management Plan

The Respondent shall develop and initiate a Data Management Plan to document and track investigation data and results. This plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The plan shall also provide the format to be used to present the raw data and conclusions of the investigation. The Data Management Plan shall include:



1. Data Record

The data record shall include the following:

- a. Unique sample or field measurement code;
- b. Sampling or field measurement location and sample or measurement type;
- c. Sampling or field measurement raw data;
- d. Laboratory analysis identification number;
- e. Property or component measured; and
- f. Results of analysis (e.g., concentration).

2. Tabular Displays

The following data shall be presented in tabular displays:

- a. Unsorted (raw) data;
- b. Results for each medium, or for each constituent monitored;
- c. Data reduction for statistical analysis;
- d. Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and
- e. Summary data.

3. Graphical Displays

The following data shall be presented in graphical format (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three-dimensional graphs, etc.):

- a. Display sampling location and sampling grid;
- b. Indicate boundaries of sampling area, and areas where more data are required;
- c. Display levels of contamination at each sampling location;
- d. Display geographical extent of contamination;
- e. Display contamination levels, averages, and maxima;



- f. Illustrate changes in concentration in relation to distance from the source, time, depth or other parameters; and
- g. Indicate features affecting intramedia transport and show potential receptors.

D. Health and Safety Plan

The Respondent shall prepare a Facility Health and Safety Plan.

- 1. Major elements of the Health and Safety Plan shall include:
  - a. Facility description including availability of resources such as roads, water supply, electricity and telephone service;
  - b. Describe the known hazards and evaluate the risks associated with each activity conducted;
  - c. List key personnel and alternates responsible for site safety, responses operations, and for protection of public health;
  - d. Delineate work area;
  - e. Describe levels of protection to be worn by personnel in work area;
  - f. Establish procedures to control site access;
  - g. Describe decontamination procedures for personnel and equipment;
  - h. Establish site emergency procedures;
  - i. Address emergency medical care for injuries and toxicological problems;
  - j. Describe requirements for an environmental surveillance program;
  - k. Specify any routine and special training required for field personnel; and
  - l. Establish procedures for protecting workers from weather-related problems.



2. The Facility Health and Safety Plan shall be consistent with:
  - a. NIOSH Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1985);
  - b. EPA Order 1440.1 - Respiratory Protection;
  - c. EPA Order 1440.3 - Health and Safety Requirements for Employees Engaged in Field Activities;
  - d. Facility Contingency Plan;
  - e. EPA Standard Operating Safety Guide (1984);
  - f. OSHA regulations particularly in 29 CFR 1910 and 1926;
  - g. State and local regulations; and
  - h. Other EPA guidance as provided.

E. Community Relations Plan

The Respondent shall prepare a plan for the dissemination of information to the public regarding investigation activities and results.

TASK IV: FACILITY INVESTIGATION

The Respondent shall conduct those investigations necessary to: characterize the Facility (Environmental Setting); define the source (Source Characterization); define the degree and extent of contamination (Contamination Characterization); and identify actual or potential receptors.

The investigations should result in data of adequate technical quality to support the development and evaluation of the corrective measure alternative or alternatives during the CMS.

The site investigation activities shall follow the plans set forth in Task III. All sampling and analyses shall be conducted in accordance with the Data Collection Quality Assurance Plan. All sampling locations shall be documented in a log and identified on a detailed site map.

A. Environmental Setting

The Respondent shall collect information to supplement and verify existing information on the environmental setting at the Facility. The Respondent shall characterize the following:



1. Hydrogeology

The Respondent shall conduct a program to evaluate hydrogeologic conditions at the Facility. This program shall provide the following information:

- a. A description of the regional and Facility-specific geologic and hydrogeologic characteristics affecting groundwater flow beneath the Facility, including:
  - i) Regional and Facility-specific stratigraphy: description of strata including strike and dip, identification of stratigraphic contacts;
  - ii) Structural geology: description of local and regional structural features (e.g., folding, faulting, tilting, jointing, etc.).
  - iii) Depositional and post-depositional history;
  - iv) Identification and characterization of areas and amounts of recharge and discharge.
  - v) Regional and facility-specific groundwater flow patterns; and
  - vi) Characterize seasonal variations in the groundwater flow regime.
- b. An analysis of any topographic features that might influence the groundwater flow system. (Note: Stereographic analysis of aerial photographs may aid in this analysis).
- c. Based on field data, test, and cores, a representative and accurate classification and description of the hydrogeologic units which may be part of the migration pathways at the Facility (i.e., the aquifers and any intervening saturated and unsaturated units), including:
  - i) Hydraulic conductivity and porosity (total and effective);
  - ii) Lithology, grain size, sorting, degree of cementation;
  - iii) An interpretation of hydraulic interconnections between saturated zones including but not limited to the depths, thickness, and degree of lateral



continuity and hydraulic characteristics of any discernible confining units between water-bearing zones underneath the Facility; and

- iv) The attenuation capacity and mechanisms of the natural earth materials (e.g., ion exchange capacity, organic carbon content, mineral content etc.).
- d. Based on field studies and cores, structural geology and hydrogeologic cross sections showing the extent (depth, thickness, lateral extent) of hydrogeologic units which may be part of the migration pathways identifying:
  - i) Sand and gravel deposits in unconsolidated deposits;
  - ii) Zones of fracturing or channeling in consolidated or unconsolidated deposits;
  - iii) Zones of relatively higher or lower permeability that might direct or restrict the flow of contaminants;
  - iv) The uppermost aquifer: geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells and springs; and
  - v) Water-bearing zones above the first confining layer that may serve as a pathway for contaminant migration including perched zones of saturation.
- e. Based on data obtained from groundwater monitoring wells and piezometers installed upgradient and downgradient of the BTF Sewer (SWMU #4), the Spill Area Around Diesel Tank (SWMU #6), Coal Tar Decanters 1, 2, 3, 4, and 5 (SWMUs #10, #11, and #12), the Equalization Basin (SWMU #13), the BTF Emergency Basin (#21), the Polishing Pond (SWMU #22), the Biological Sludge Disposal Area (SWMU #23) and other sources of contamination, a representative description of water levels or fluid pressure monitoring including:
  - i) Water-level contour and/or potentiometric maps;
  - ii) Hydrologic cross sections showing vertical gradients;



- iii) The flow system, including the vertical and horizontal components of flow; and
  - iv) Any temporal changes in hydraulic gradients, for example, due to tidal or seasonal influences.
- f. A description of man-made influences that may affect the hydrogeology of the site, identifying:
- i) Active and inactive local water-supply and production wells with an approximate schedule of pumping; and
  - ii) Man-made hydraulic structures (pipelines, french drains, ditches, unlined ponds, septic tanks, NPDES outfalls, retention areas, etc.).

## 2. Soils

The Respondent shall conduct a program to characterize the soil and rock units above the water table in the vicinity of all contaminant release(s). Such characterization shall include but not be limited to, the following information:

- a. USGS soil classification;
- b. Surface soil distribution;
- c. Soil profile, including ASTM classification of soils;
- d. Transects of soil stratigraphy;
- e. Hydraulic conductivity (saturated and unsaturated);
- f. Relative permeability;
- g. Bulk density;
- h. Porosity;
- i. Soil sorptive capacity;
- j. Cation exchange capacity (CEC);
- k. Soil organic content;
- l. Soil pH;
- m. Particle size distribution;
- n. Elevation and depth of water table;
- o. Moisture content;
- p. Effect of stratification on unsaturated flow;
- q. Infiltration
- r. Evapotranspiration;
- s. Storage capacity;
- t. Vertical flow rate; and
- u. Mineral content.



### 3. Surface Water and Sediment

The Respondent shall conduct a program to characterize the surface water bodies in the vicinity of the Facility. Such characterization shall include, but not be limited to, the following activities and information:

- a. Description of the temporal and permanent surface-water bodies including:
  - i) For lakes and estuaries: location, elevation, surface area, inflow, outflow, depth, temperature stratification, and volume;
  - ii) For impoundments: location, elevation, surface area, depth, volume, freeboard, and purpose of impoundment;
  - iii) For rivers, streams, ditches, drains, swamps and channels: location, elevation, flow, velocity, depth, width, seasonal fluctuations, and flooding tendencies (i.e., 100 year event);
  - iv) Drainage patterns; and
  - v) Evapotranspiration.
- b. Description of the chemistry of the natural surface water and sediments. This includes determining the pH, total dissolved solids, total suspended solids, biological oxygen demand, alkalinity, conductivity, dissolved oxygen profiles, nutrients ( $\text{NH}_3$ ,  $\text{NO}_3^-/\text{NO}_2^-$ ,  $\text{PO}_4^{-3}$ ), chemical oxygen demand, total organic carbon, specific contaminant concentrations, etc.
- c. Description of sediment characteristics including:
  - i) Deposition area;
  - ii) Thickness profile; and
  - iii) Physical and chemical parameters (e.g., grain size, density, organic carbon content, ion exchange capacity, pH, etc.).

### 4. Air

The Respondent shall provide information characterizing the climate in the vicinity of the Facility. Such information shall include, but not be limited to:



a. A description of the following parameters:

- i) Annual and monthly rainfall averages;
- ii) Monthly temperature averages and extremes;
- iii) Wind speed and direction;
- iv) Relative humidity/dew point;
- v) Atmospheric pressure;
- vi) Evaporation data;
- vii) Development of inversions; and
- viii) Climate extremes that have been known to occur in the vicinity of the Facility, including frequency of occurrence.

b. A description of topographic and man-made features which affect air flow and emission patterns, including:

- i) Ridges, hills or mountain areas;
- ii) Canyons or valleys;
- iii) Surface water bodies (e.g., rivers, lakes, bays, etc.);
- iv) Wind breaks and forest; and
- v) Buildings.

B. Source Characterization

The Respondent shall collect analytical data to completely characterize the wastes and the areas where wastes have been placed, collected or removed including: type; quantity; physical form; disposition (containment or nature of deposits); and Facility characteristics affecting release (e.g., Facility security, and engineered barriers).

The source characterization shall include quantification of the following specific characteristics, at each source area:



1. Unit/Disposal Area Characteristics:

- a. Location of unit/disposal area;
- b. Type of unit/disposal area;
- c. Design features and dimensions;
- d. Operating practices (past and present);
- e. Period of operation;
- f. Age of unit/disposal area;
- g. General physical conditions; and
- h. Method used to close the unit/disposal area.

2. Waste Characteristics:

a. Type of waste placed in the unit:

- i) Hazardous classification (e.g., flammable, reactive, corrosive, oxidizing or reducing agent);
- ii) Quantity; and
- iii) Chemical composition.

b. Physical and chemical characteristics;

- i) Physical form (solid, liquid, gas);
- ii) Physical description (e.g., powder, oily sludge);
- iii) Temperature;
- iv) pH;
- v) General chemical class (e.g., acid, base, solvent);
- vi) Molecular weight;
- vii) Density;
- viii) Boiling point;
- ix) Viscosity;
- x) Solubility in water;
- xi) Cohesiveness of the waste;
- xii) Vapor pressure;
- xiii) Flash point.

c. Migration and dispersal characteristics of the waste;

- i) Sorption;
- ii) Biodegradability, bioconcentration, biotransformation;
- iii) Photodegradation rates;
- iv) Hydrolysis rates; and
- v) Chemical transformations.



The Respondent shall document the procedures used in making the above determinations.

C. Contamination Characterization

The Respondent shall collect analytical data on groundwater, soils, surface water, sediment, and subsurface gas contamination in the vicinity of the Facility. This data shall be sufficient to define the extent, origin, direction, and rate of movement of contaminant plumes. Data shall include time and location of sampling, media sampled, concentrations found, conditions during sampling, and the identity of the individuals performing the sampling and analysis. The Respondent shall address the following types of contamination at the Facility:

1. Groundwater Contamination

The Respondent shall conduct a Groundwater Investigation to characterize any plumes of contamination at the Facility. This investigation shall at a minimum provide the following information:

- a. A description of the horizontal and vertical extent of any immiscible or dissolved plume(s) originating from the Facility;
- b. The horizontal and vertical direction of contaminant movement;
- c. The velocity of contaminant movement;
- d. The horizontal and vertical concentration profiles of Appendix IX constituents in the plume(s);
- e. An evaluation of factors influencing the plume movement; and
- f. An extrapolation of future contaminant movement.

The Respondent shall document the procedures used in making the above determinations (e.g., well design, well construction, geophysics, modeling, etc.).

2. Soil Contamination

The Respondent shall conduct an investigation to characterize the contamination of the soil and rock units above the water table in the vicinity of any contaminant releases. The



investigation shall include, but not be limited to, the BTF Sewer (SWMU #4), the Spill Area Around Diesel Tank (SWMU #6), Coal Tar Decanters 1, 2, 3, 4, and 5 (SWMUs #10, #11, and #12), the Equalization Basin (SWMU #13), the BTF Emergency Basin (#21), the Polishing Pond (SWMU #22), the Biological Sludge Disposal Area (SWMU #23) and the Blast Furnace Emission Control Sludge Waste Pile (SWMU #24). For each area, the Respondent shall identify the following:

- a. A description of the vertical and horizontal extent of contamination.
- b. A description of contaminant and soil chemical properties within the contaminant source area and plume. This includes contaminant solubility, speciation, adsorption, leachability, exchange capacity, biodegradability, photolysis, oxidation and other factors that might affect contaminant migration and transformation.
- c. Specific contaminant concentrations.
- d. The velocity and direction of contaminant movement.
- e. An extrapolation of future contaminant movement.

The Respondent shall document the procedures used in making the above determinations.

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3. Surface-Water and Sediment Contamination

The Respondent shall conduct a surface-water investigation to characterize contamination in surface-water bodies resulting from contaminant releases at the Facility. The investigation shall include, but not be limited to, the following information:

- a. A description of the horizontal and vertical extent of any immiscible or dissolved plume(s) originating from the Facility, and the extent of contamination in underlying sediments;
- b. The horizontal and vertical direction of contaminant movement;
- c. The contaminant velocity;
- d. An evaluation of the physical, biological and chemical factors influencing contaminant movement;



- e. An extrapolation of future contaminant movement; and
- f. A description of the chemistry of the contaminated surface waters and sediments. This includes determining the pH, total dissolved solids, specific contaminant concentrations, etc.;

The Respondent shall document the procedures used in making the above determinations.

4. Air Contamination

The Respondent shall conduct an investigation to characterize the particulate and gaseous contaminants released into the atmosphere. This investigation shall provide the following information:

- a. A description of the horizontal and vertical direction and velocity of contaminant movement;
- b. The rate and amount of the release; and
- c. The chemical and physical composition of the contaminant(s) released, including horizontal and vertical concentration profiles.

The Respondent shall document the procedures used in making the above determinations.

5. Subsurface Gas Contamination

The Respondent shall conduct an investigation to characterize subsurface gases emitted from buried hazardous waste constituents in the groundwater. This investigation shall include the following information:

- a. A description of the horizontal and vertical extent of subsurface gases mitigation;
- b. The chemical composition of the gases being emitted;
- c. The rate, amount, and density of the gases being emitted; and
- d. Horizontal and vertical concentration profiles of the subsurface gases emitted.



The Respondent shall document the procedures used in making the above determinations.

D. Potential Receptors

The Respondent shall collect data describing the human populations and environmental systems that are susceptible to contaminant exposure from the Facility. Chemical analysis of biological samples may be needed. Data on observable effects in ecosystems may also be obtained. The following characteristics shall be identified:

1. Local uses and possible future uses of groundwater:
  - a. Type of use (e.g., drinking water source: municipal or residential, agricultural, domestic/non-potable, and industrial); and
  - b. Location of groundwater users including wells and discharge areas.
2. Local uses and possible future uses of surface waters and drainage from the Facility:
  - a. Domestic and municipal (e.g., potable and lawn/gardening watering);
  - b. Recreational (e.g., swimming, fishing);
  - c. Agricultural;
  - d. Industrial; and
  - e. Environmental (e.g., fish and wildlife propagation).
3. Human use of or access to the Facility and adjacent lands, including but not limited to:
  - a. Recreation;
  - b. Hunting;
  - c. Residential;
  - d. Commercial;
  - e. Zoning; and
  - f. Relationships between population locations and prevailing wind direction.



4. A description of the biota in surface water bodies on, adjacent to, or affected by the Facility.
5. A description of the ecology on and adjacent to the Facility.
6. A demographic profile of the people who use or have access to the Facility and adjacent land, including but not limited to: age; sex; and sensitive subgroups.
7. A description of any endangered or threatened species near the facility.

#### TASK V: INVESTIGATION ANALYSIS

The Respondent shall prepare an analysis and summary of all the Facility investigations and their results. The objective of this task shall be to ensure that the investigation data are sufficient in quality (e.g., quality assurance procedures have been followed) and quantity to describe the nature and extent of contamination, potential threat to human health and/or the environment, and to support the CMS.

##### A. Data Analysis Draft and Final Report

The Respondent shall prepare and submit to EPA and ADEM, for EPA approval, a draft RFI Report which shall contain an analysis and summary of all Facility investigations implemented pursuant to Task IV and their results. EPA will review the Draft RFI Report and will provide comments thereon to the Respondent. Within thirty (30) days of receipt of EPA comments, Respondent shall submit the revised RFI Report to EPA and ADEM. EPA will approve the revised RFI Report or modify it. The revised RFI Report as approved or modified by EPA shall become the Final RFI Report.

The RFI Report shall describe the nature and extent of contamination at the Facility including sources and migration pathways, potential threat to human health and/or the environment, and to support the CMS. The report shall describe the extent of contamination (qualitative/quantitative) in relation to background levels indicative for the area. The report shall include the identification of applicable protection standards including these under item B below.

##### B. Protection Standards

###### 1. Groundwater Protection Standards

For regulated units, Respondent shall provide information to support the Agency's selection/development of Groundwater Protection Standards for all of the Appendix VIII constituents found in the groundwater during the Facility Investigation (Task IV).



- a The Groundwater Protection Standards shall consist of:
- i) For any constituents listed in Table 1 of 40 CFR 264.94, the respective value given in that table (MCL) if the background level of the constituent is below the one given in Table 1; or
  - ii) The background level of that constituent in the groundwater; or
  - iii) An EPA approved Alternate Concentration Limit (ACL).
- b. Information to support EPA's subsequent selection of ACLs shall be developed by the Respondent in accordance with EPA's guidance. For any proposed ACLs, the Respondent shall include a justification based upon the criteria set forth in 40 CFR 264.94(b).
- c. Within 90 calendar days of receipt of any proposed ACLs, the EPA shall notify the Respondent in writing of approval, disapproval or modifications. The EPA shall specify in writing the reason(s) for any disapproval or modification.
- d. Within 60 calendar days of receipt of the EPA's notification or disapproval of any proposed ACL, the Respondent shall amend and submit revisions to the EPA.

2. Other Relevant Protection Standards

The Respondent shall identify all relevant and applicable standards for the protection of human health and the environment (e.g., National Ambient Air Quality Standards, Federally-approved State Water Quality Standards, etc.).

TASK VI: LABORATORY AND BENCH-SCALE STUDIES

The Respondent shall conduct laboratory and/or bench-scale studies to determine the applicability of a corrective measure technology or technologies to the Facility conditions. The Respondent shall analyze the technologies, based on literature review, vendor contracts, and past experience to determine the testing requirements.

The Respondent shall develop a testing plan identifying the type(s) and goal(s) of the study(ies), the level of effort needed, and the procedures to be used for data management and interpretation.



Upon completion of the testing, the Respondent shall evaluate the testing results to assess the technology or technologies with respect to the site-specific questions identified in the test plan.

The Respondent shall prepare a report summarizing the testing program and its results, both positive and negative.

TASK VII: REPORTS

A. Preliminary and Work Plan

The Respondent shall submit to EPA and ADEM, for EPA review and approval, reports on tasks I and II when it submits the RFI Work Plan (Task III).

B. Progress

The Respondent shall at minimum provide EPA with signed, monthly, progress reports containing:

1. A description and estimate of the percentage of the RFI completed;
2. Summaries of all findings;
3. Summaries of all changes made in the RFI during the reporting period;
4. Summaries of all contacts with representatives of the local community, public interest groups or State government during the reporting period;
5. Summaries of all problems or potential problems encountered during the reporting period;
6. Actions being taken to rectify problems;
7. Changes in personnel involved with the RFI during the reporting period;
8. Projected work for the next reporting period; and
9. Copies of daily reports, inspection reports, laboratory/monitoring data, etc.

C. Draft and Final

As outlined in Task V, the Respondent shall prepare a Draft RFI Report to present and document the findings of Tasks IV-V. The RFI Report



shall be developed in draft form for EPA review. The RFI Report shall be developed in final format incorporating comments received on the Draft RFI Report. Task VI shall be submitted as a separate report when the Final RFI Report is submitted. All reports become final upon EPA approval.

Three copies of all reports, including the Task I report, Task II report, Task III work plan, Task VI report and both the Draft and Final RFI Reports (Task IV-V) shall be provided by Respondent to EPA.

Facility Submission Summary

A Summary of the information reporting requirements contained in the RFI Scope of Work is presented below.

<u>Facility Submission</u>	<u>Due Date</u>
Description of Current Situation (Task I)	Within 30 days after the effective date of this Order
Pre-Investigation Evaluation of Corrective Measure Technologies (Task II)	Within 30 days after the effective date of this Order
RFI Work Plan (Task III)	Within 45 days after the effective date of this Order
Implementation of approved RFI Work Plan (Task IV)	Within 10 days of notice of approval of revised RFI Work Plan
Draft RFI Report (Task IV and V)	365 days after RFI Work Plan approval
Final RFI Report (Tasks IV and V)	30 days after Comments on Draft RFI Report
Laboratory and Bench-Scale Studies (Task VI)	Concurrent with Final RFI Report
Progress Reports on Tasks I through VI	Monthly, pursuant to the Order



**ATTACHMENT B**  
**SCOPE OF WORK FOR A CORRECTIVE MEASURES STUDY (CMS)**  
**AT**  
**SLOSS INDUSTRIES INCORPORATED**  
**BIRMINGHAM, ALABAMA**



### PURPOSE

The purpose of this Corrective Measures Study (CMS) is to develop and evaluate the corrective action alternative or alternatives, and to recommend the corrective measure or measures to be taken at Sloss Industries Incorporated, Birmingham, Alabama. Respondent will furnish the personnel, materials, and services necessary to prepare the CMS, except as otherwise specified. Respondent shall submit to EPA and ADEM, ninety (90) calendar days after submittal of the Final RFI Report, a Draft CMS Report. This report shall contain all information requested in the task outlined below. EPA will review the Draft CMS report and EPA will provide comments to Respondent. Within thirty (30) calendar days of receipt of EPA comments, Respondent shall modify the Draft CMS Report to incorporate such comments and shall submit the revised CMS Report to EPA and ADEM. EPA will approve the revised CMS Report or modify it. The revised CMS Report as approved or modified by EPA shall become the Final CMS Report. Upon receipt of the Final CMS Report, EPA shall announce its availability to the public for review and comments, and then inform Respondent of its final decision as to the approved corrective measures to be implemented.

### SCOPE

The CMS consists of four tasks:

- Task VIII: Identification and Development of the Corrective Measure Alternative or Alternatives
- A. Description of Current Situation
  - B. Establishment of Corrective Action Objectives
  - C. Screening of Corrective Measures Technologies
  - D. Identification of the Corrective Measure Alternative or Alternatives
- Task IX: Evaluation of the Corrective Measure Alternative or Alternatives
- A. Technical/Environmental/Human Health/Institutional
  - B. Cost Estimate
- Task X: Justification and Recommendation of the Corrective Measure or Measures
- A. Technical
  - B. Environmental
  - C. Human Health



Task XI: Reports

- A. Progress
- B. Draft
- C. Final

TASK VIII: IDENTIFICATION AND DEVELOPMENT OF THE CORRECTIVE ACTION  
ALTERNATIVE OR ALTERNATIVES

Based on the results of the RFI and consideration of the identified Preliminary Corrective Measure Technologies (Task II), Respondent shall identify, screen and develop the alternative or alternatives for removal, containment, treatment and/or other remediation of the contamination based on the objectives established for the corrective action.

A. Description of Current Situation

Respondent shall submit an update to the information describing the current situation at the Facility and the known nature and extent of the contamination as documented by the RFI Report. Respondent shall provide an update to information presented in Task I of the RFI to the Agency regarding previous response activities, and any interim measures which have or are being implemented at the Facility. Respondent shall also make a Facility-specific statement of the purpose for the response, based on the results of the RFI. The statement of purpose should identify the actual or potential exposure pathways that should be addressed by corrective measures.

B. Establishment of Corrective Action Objectives

Respondent, in conjunction with the EPA, shall establish site-specific objectives for the corrective action. These objectives shall be based on public health and environmental criteria, information gathered during the RFI, EPA guidance, and the requirements of any applicable Federal statutes. At a minimum, all corrective actions concerning groundwater releases from regulated units must be consistent with, and as stringent as, those required under 40 CFR 264.100

C. Screening of Corrective Measure Technologies

Respondent shall review the results of the RFI and reassess the technologies specified in Task II and to identify additional technologies which are applicable at the Facility. Respondent shall screen the preliminary corrective measure technologies identified in Task II of the RFI, and any supplemental technologies to eliminate



those that may prove infeasible to implement, that rely on technologies unlikely to perform satisfactorily or reliably, or that do not achieve the corrective measure objective within a reasonable time period. This screening process focuses on eliminating those technologies which have severe limitations for a given set of waste and site-specific conditions. The screening step may also eliminate technologies based on inherent technology limitations.

Site, waste, and technology characteristics which are used to screen inapplicable technologies are described in more detail below:

1. Site Characteristics

Site data should be reviewed to identify conditions that may limit or promote the use of certain technologies. Technologies whose use is clearly precluded by site characteristics should be eliminated from further consideration;

2. Waste Characteristics

Identification of waste characteristics that limit the effectiveness or feasibility of technologies is an important part of the screening process. Technologies clearly limited by these waste characteristics should be eliminated from consideration. Waste characteristics particularly affect the feasibility of in-situ methods, direct treatment methods, and land disposal (on/off-site); and

3. Technology Limitations

During the screening process, the level of technology development, performance record, and inherent construction, operation, and maintenance problems should be identified for each technology considered. Technologies that are unreliable, perform poorly, or are not fully demonstrated may be eliminated in the screening process. For example, certain treatment methods have been developed to a point where they can be implemented in the field without extensive technology transfer or development.

D. Identification of the Corrective Measure Alternative or Alternatives

Respondent shall develop the Corrective Measure Alternative or Alternatives based on the corrective action objectives and analysis of Preliminary Corrective Measure Technologies, as presented in Task II of the RFI and as supplemented following the preparation of the RFI Report. Respondent shall rely on engineering practice to determine which of the previously identified technologies appear most suitable



for the site. Technologies can be combined to form the overall corrective action alternative or alternatives. The alternative or alternatives developed should represent a workable number of option(s) that each appear to adequately address all site problems and corrective action objectives. Each alternative may consist of an individual technology or a combination of technologies. Respondent shall document the reasons for excluding technologies, identified in Task II, as supplemented in the development of the alternative or alternatives.

TASK IX: EVALUATION OF THE CORRECTIVE MEASURE ALTERNATIVE  
OR ALTERNATIVES

Respondent shall describe each corrective measure alternative that passes through the Initial Screening in Task VIII and evaluate each corrective measure alternative and its components. The evaluation shall be based on technical, environmental, human health and institutional concerns. Respondent shall also develop cost estimates of each corrective measure.

A. Technical/Environmental/Human Health/Institutional

Respondent shall provide a description of each corrective measure alternative which includes, but is not limited to, the following: preliminary process flow sheets; preliminary sizing and type of construction for buildings and structures; and rough quantities of utilities required. Respondent shall evaluate each alternative in the four following areas:

Technical,

1. Respondent shall evaluate each corrective measure alternative based on performance, reliability, implementability and safety.
  - a. Respondent shall evaluate performance based on the effectiveness and useful life of the corrective measure:
    - i) Effectiveness shall be evaluated in terms of the ability to perform intended functions, such as containment, diversion, removal, destruction, or treatment. The effectiveness of each corrective measure shall be determined either through design specifications or by performance evaluation. Any specific waste or site characteristics which could potentially impede effectiveness shall be considered. The evaluation should also consider the effectiveness of combinations of technologies; and



- ii) Useful life is defined as the length of time to level of effectiveness can be maintained. Most corrective measure technologies, with the exception of destruction, deteriorate with time. Often, deterioration can be slowed through proper system operation and maintenance, but the technology eventually may require replacement. Each corrective measure shall be evaluated in terms of the projected service lives of its component technologies. Resource availability in the future life of the technology, as well as appropriateness of the technologies, must be considered in estimating the useful life of the project.
- b. Respondent shall provide information on the reliability of each corrective measure including their operation and maintenance requirements and their demonstrated reliability:
  - i) Operation and maintenance requirements include the frequency and complexity of necessary operation and maintenance. Technologies requiring frequent or complex operation and maintenance activities should be regarded as less reliable than technologies requiring little or straightforward operation and maintenance. The availability of labor and materials to meet these requirements shall also be considered; and
  - ii) Demonstrated and expected reliability is a way of measuring the risk and effect of failure. Respondent should evaluate whether the technologies have been used effectively under analogous conditions; whether the combination of technologies have been used together effectively; whether failure of any one technology has an immediate impact on receptors; and whether the corrective measure has the flexibility to deal with uncontrollable changes at the site.
- c. Respondent shall describe the implementability of each corrective measure including the relative ease of installation (constructability) and the time required to achieve a given level of response:
  - i) Constructability is determined by conditions both internal and external to the Facility conditions and include such items as location of underground



utilities, depth to water table, heterogeneity of subsurface materials, and location of the Facility (i.e., remote location vs. a congested urban area). Respondent shall evaluate what measures can be taken to facilitate construction under these conditions. External factors which affect implementation include the need for special permits or agreements, equipment availability, and the location of suitable off-site treatment or disposal facilities; and

- ii) Time has two components that shall be addressed: the time it takes to implement a corrective measure and the time it takes to actually see beneficial results. Beneficial results are defined as the reduction of contaminants to some acceptable, pre-established level.

- d. Respondent shall evaluate each corrective measure alternative with regard to safety. This evaluation shall include threats to the safety of nearby communities and environments as well as those to workers during implementation. Factors to consider are fire, explosion, and exposure to hazardous substances.

2. Environmental;

Respondent shall perform an Environmental Assessment for each alternative. The Environmental Assessment shall focus on the Facility condition and pathways of contamination actually addressed by each alternative. The Environmental Assessment for each alternative will include, at a minimum, an evaluation of: the short- and long-term beneficial and adverse effects of the response alternative; any adverse effects on environmentally sensitive areas; and an analysis of measures to mitigate adverse effects.

3. Human Health; and

Respondent shall assess each alternative in terms of the extent to which it mitigates short- and long-term potential exposure to any residual contamination and protects human health both during and after implementation of the corrective measure. The assessment will describe the levels and characterizations of contaminants on-site, potential exposure routes, and potentially affected population. Each alternative will be evaluated to determine the level of exposure to contaminants and the reduction



over time. For management of mitigation measures, the relative reduction of impact will be determined by comparing residual levels of each alternative with existing criteria, standards, or guidelines acceptable to EPA.

4. Institutional.

Respondent shall assess relevant institutional needs for each alternative. Especially, the effects of Federal, state and local environmental and public health standards, regulations, guidance, advisories, ordinances, or community relations on the design, operation, and timing of each alternative.

B. Cost Estimate

Respondent shall develop an estimate of the cost of each corrective measure alternative (and for each phase or segment of the alternative). The cost estimate shall include both capital and operation and maintenance costs.

1. Capital costs consist of direct (construction) and indirect (non construction and overhead) costs.

a. Direct capital costs include:

- i) Construction costs: Costs of materials, labor (including fringe benefits and worker's compensation), and equipment required to install the corrective measure.
- ii) Equipment costs: Costs of treatment, containment, disposal and/or service equipment necessary to implement the action; these materials remain until the corrective action is complete;
- iii) Land and site-development costs: Expenses associated with purchase of land and development of existing property; and
- iv) Building and services costs: Costs of process and non-process buildings, utility connections, purchased services, and disposal costs.

b. Indirect capital costs include:

- i) Engineering expenses: Costs of administration, design, construction supervision, drafting, and testing of corrective measure alternatives;



- ii) Legal fees and license or permit costs:  
Administrative and technical costs necessary to obtain licenses and permit for installation and operation;
  - iii) Start-up and shake-down costs: Costs incurred during corrective measure start-up; and
  - iv) Contingency allowances: Funds to cover costs resulting from unforeseen circumstances, such as adverse weather conditions, strikes, and inadequate Facility characterization.
2. Operation and maintenance costs are post-construction costs necessary to ensure continued effectiveness of a corrective measure. Respondent shall consider the following operation and maintenance cost components:
- a. Operating labor costs: Wages, salaries, training, overhead, and fringe benefits associated with the labor needed for post-construction operations;
  - b. Maintenance materials and labor costs: Costs for labor, parts, and other resources required for routine maintenance of facilities and equipment;
  - c. Auxiliary materials and energy: Costs of such items as chemicals and electricity for treatment plant operations, water and sewer service, and fuel;
  - d. Purchased services: Sampling costs, laboratory fees, and professional fees for which the need can be predicted;
  - e. Disposal and treatment costs: Costs of transporting, treating, and disposing of waste materials, such as treatment plant residues, generated during operations;
  - f. Administrative costs: Costs associated with administration of corrective measure operation and maintenance not included under other categories;
  - g. Insurance, taxes, and licensing costs: Costs of such items as liability and sudden accidental insurance; real estate taxes on purchased land or rights-of-way; licensing fees for certain technologies; and permit renewal and reporting costs;



- h. Maintenance reserve and contingency funds: Annual payments into escrow funds to cover (1) costs of anticipated replacement or rebuilding of equipment and (2) any large unanticipated operation and maintenance costs; and
- i. Other costs: Items that do not fit any of the above categories.

TASK X. JUSTIFICATION AND RECOMMENDATION OF THE CORRECTIVE MEASURE OR MEASURES

Respondent shall justify and recommend a corrective measure alternative using technical, human health, and environmental criteria. This recommendation shall include summary tables which allow the alternative or alternatives to be understood easily. Trade-offs among health risks, environmental effects, and other pertinent factors shall be highlighted. EPA will select the corrective measure alternative or alternatives to be implemented based on the results of Tasks IX and X. At a minimum, the following criteria will be used to justify the final corrective measure or measures.

A. Technical

- 1. Performance - corrective measure or measures which are most effective at performing their intended functions and maintaining the performance over extended periods of time will be given preference;
- 2. Reliability - corrective measure or measures which do not require frequent or complex operation and maintenance activities and that have proven effective under waste and Facility conditions similar to those anticipated will be given preference;
- 3. Implementability - corrective measure or measures which can be constructed and operated to reduce levels of contamination to attain or exceed applicable standards in the shortest period of time will be preferred; and
- 4. Safety - corrective measure or measures which pose the least threat to the safety of nearby residents and environments as well as workers during implementation will be preferred.

B. Human Health

The corrective measure or measures must comply with existing EPA criteria, standards, or guidelines for the protection of human health. Corrective measures which provide the minimum level of exposure to contaminants and the maximum reduction in exposure with time are preferred.



C. Environmental

The corrective measure or measures posing the least adverse impact (or greatest improvement) over the shortest period of time on the environment will be favored.

TASK XI: REPORTS

Respondent shall prepare a CMS Report presenting the results of Task VIII through X and recommending a corrective measure alternative. Two copies of the preliminary report shall be provided by Respondent to EPA and ADEM for EPA review and approval.

A. Progress

Respondent shall at a minimum provide the EPA and ADEM with signed, monthly progress reports containing:

1. A description and estimate of the percentage of the CMS completed;
2. Summaries of all findings;
3. Summaries of all changes made in the CMS during the reporting period;
4. Summaries of all contacts with representative of the local community, public interest groups or State government during the reporting period;
5. Summaries of all problems or potential problems encountered during the reporting period;
6. Actions being taken to rectify problems;
7. Changes in personnel involved with the CMS during reporting period;
8. Projected work for the next reporting period; and
9. Copies of daily reports, inspection reports, laboratory/monitoring data, etc.

B. Draft

The Report shall at a minimum include:

1. A description of the Facility;
  - a. Site topographic map and preliminary layouts.



2. A summary of the corrective measure or measures;
  - a. Description of the corrective measure or measures and rationale for selection;
  - b. Performance expectations;
  - c. Preliminary design criteria and rationale;
  - d. General operation and maintenance requirements; and
  - e. Long-term monitoring requirements.
3. A summary of the RFI and impact on the selected corrective measure or measures:
  - a. Field studies (groundwater, surface water, soil, air); and
  - b. Laboratory studies (bench scale, pick scale).
4. Design and Implementation Precautions:
  - a. Special technical problems;
  - b. Additional engineering data required;
  - c. Permits and regulatory requirements;
  - d. Access, easements, right-of-way;
  - e. Health and safety requirements; and
  - f. Community relations activities.
5. Cost Estimates and Schedules:
  - a. Capital cost estimate;
  - b. Operation and maintenance cost estimate; and
  - c. Project schedule (design, construction, operations).

Two copies of the draft shall be provided by Respondent to EPA and ADEM.

C. Final

Respondent shall finalize the CMS Report incorporating comments received from EPA on the Draft CMS Report. The report shall become final upon EPA approval.



D. Public Review and Final Selection of Corrective Measures

Upon receipt of the Final CMS Report, EPA shall announce its availability to the public for review and comment. At the end of the comment period, EPA shall review the comments and then inform the Respondent of its final decision as to the approved corrective measures to be implemented.

Facility Submission Summary

A summary of the information reporting requirements contained in the CMS Scope of Work is presented below:

<u>Facility Submission</u>	<u>Due Date</u>
Draft CMS Report (Tasks VIII, IX, and X)	90 calendar days after submittal of the Final RFI
Final CMS Report (Tasks VIII, IX, and X)	30 calendar days after comments on the Draft CMS
Progress Reports (Tasks VIII, IX, and X)	Monthly



# Exhibit CX09



User Selection Criteria
<div><div>Handler ID: ALD000828848</div><div>Unit Detail: All (Historic)</div><div>Display Code Descriptions: No</div><div>Include Waste Codes: No</div></div>

Report Results
<div><div>Number of Sites: 1</div><div>Number of Pages: 6</div></div>

Report Description
<p>This report lists all permitting data for facilities that meet the user selection criteria. Unlinked Events are shown for each facility, as are Units that are not linked to either an Event or Unit Detail. The report is presented by Handler, Series, Responsible Agency, Event, and Unit Detail, and is sorted by Handler Name, Handler ID, Series, Event Best Date (descending), Responsible Agency, Event Code, and Unit/Unit Detail Sequence Number.</p>



# Comprehensive Permitting Report

\*\*\* WARNING \*\*\* Sensitive information may be displayed on this report. \*\*\* WARNING \*\*\*

BLUESTONE COKE, L.L.C.

County Name/Code: JEFFERSON / AL073

ALD000828848

Location 3500 35TH AVENUE NORTH, BIRMINGHAM, AL 35207--2919

Latitude: 33.340519 Longitude -86.475277

Region: 04

Mailing: 3500 35TH AVENUE NORTH, BIRMINGHAM, AL 35207--2919

Activity Location: AL		State District:		Non-Notifier:		Extract Flag: Y		Active Site: Y	
Generator:	LQG	Transporter:	N	Operating TSDF:	-----	IC/EC In Place:	Y / Y	EI Indicator (HE / GW):	+ / -
Permit Progress:	L-----	Post-Closure	-----	Subject to CA:	Y	Subj CA Non-TSD:	N	Progress Track:	Y
Permit Workload:	-----	Renewals Workload:	-----	Subj CA TSD 3004:	N	CA Workload:	Y	GPRA Permit:	N
Closure Workload:	-----			Subj CA TSD Discr:	Y			GPRA Renewals:	N

Series Name: CC1

Seq: 2

Resp. Person: AL- JWG

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - CL413 - CLOSURE PERIOD COMPLETED	STATE	03/30/1988	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
EQBASIN	2-2	S04	ISCC	1	4,000,000	Gal	Operating	N	04/30/1987
Commercial Status: Does not accept waste from off-site generators									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - CL414 - FACILITY RELEASED FROM CLOSURE FINANCIAL ASSURANCE REQUIREMENT	STATE	03/30/1988	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
EQBASIN	2-2	S04	ISCC	1	4,000,000	Gal	Operating	N	04/30/1987
Commercial Status: Does not accept waste from off-site generators									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	2	HQ - CL372CA - REVIEW CLOSURE CERTIFICATION ACCEPTABLE	STATE	10/20/1987	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
EQBASIN	2-2	S04	ISCC	1	4,000,000	Gal	Operating	N	04/30/1987
Commercial Status: Does not accept waste from off-site generators									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - CL320 - CLOSURE PLAN NOD	STATE	10/05/1987	



Comprehensive Permitting Report

\*\*\* WARNING \*\*\* Sensitive information may be displayed on this report. \*\*\* WARNING \*\*\*

BLUESTONE COKE, L.L.C. - (continued)

ALD000828848

Series Name: CC1 - (continued)

Seq: 2

Resp. Person: AL- JWG

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
EQBASIN	2-2	S04	ISCC	1	4,000,000	Gal	Operating	N	04/30/1987
Commercial Status: Does not accept waste from off-site generators									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	2	HQ - CL360ME - CLOSURE PLAN APPROVED - FINAL CLOSURE	STATE	10/05/1987	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
EQBASIN	2-2	S04	ISCC	1	4,000,000	Gal	Operating	N	04/30/1987
Commercial Status: Does not accept waste from off-site generators									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - CL411 - CLOSURE PROCESS BEGUN - ACCORDING TO PLAN	STATE	07/06/1987	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
EQBASIN	2-2	S04	ISCC	1	4,000,000	Gal	Operating	N	04/30/1987
Commercial Status: Does not accept waste from off-site generators									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	2	HQ - CL310 - PLAN RECEIVED - CLOSURE	STATE	04/30/1987	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
EQBASIN	2-2	S04	ISCC	1	4,000,000	Gal	Operating	N	04/30/1987
Commercial Status: Does not accept waste from off-site generators									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - CL401 - CLOSURE NOTICE RECEIVED	STATE	04/30/1987	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
EQBASIN	2-2	S04	ISCC	1	4,000,000	Gal	Operating	N	04/30/1987
Commercial Status: Does not accept waste from off-site generators									



Comprehensive Permitting Report

\*\*\* WARNING \*\*\* Sensitive information may be displayed on this report. \*\*\* WARNING \*\*\*

BLUESTONE COKE, L.L.C. - (continued)

ALD000828848

Series Name: EP1

Seq: 3

Resp. Person: AL- JWG

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - EP380CA - CLOSURE VERIFICATION - CLEAN CLOSURE ACCEPTABLE Notes: ANALYSIS OF TREATMENT AREA CONFIRMED ACCEPTABLE CLOSURE	STATE	07/09/1991	07/19/1991

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
DETONATE	1-1	T04	EMCC	1	0	LB/Hr		N	06/04/1991
Commercial Status: Does not accept waste from off-site generators									
Notes: EMERGENCY PERMIT FOR DETONATION OF 0.33 POUNDS OF PICRIC ACID									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - EP160DP - PUBLIC NOTICE-DRAFT PERMIT	STATE	06/18/1991	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
DETONATE	1-1	T04	EMCC	1	0	LB/Hr		N	06/04/1991
Commercial Status: Does not accept waste from off-site generators									
Notes: EMERGENCY PERMIT FOR DETONATION OF 0.33 POUNDS OF PICRIC ACID									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - EP200PI - EMERGENCY PERMIT FINAL DETERMINATION-RCRA PERMIT ISSUED Notes: EMERGENCY PERMIT TO DETONATE PICRIC ACID	STATE	06/14/1991	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
DETONATE	1-1	T04	EMCC	1	0	LB/Hr		N	06/04/1991
Commercial Status: Does not accept waste from off-site generators									
Notes: EMERGENCY PERMIT FOR DETONATION OF 0.33 POUNDS OF PICRIC ACID									

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - EP205 - EMERGENCY PERMIT EFFECTIVE	STATE	06/13/1991	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
DETONATE	1-1	T04	EMCC	1	0	LB/Hr		N	06/04/1991
Commercial Status: Does not accept waste from off-site generators									
Notes: EMERGENCY PERMIT FOR DETONATION OF 0.33 POUNDS OF PICRIC ACID									



Comprehensive Permitting Report

\*\*\* WARNING \*\*\* Sensitive information may be displayed on this report. \*\*\* WARNING \*\*\*

BLUESTONE COKE, L.L.C. - (continued)										ALD000828848	
Series Name: EP1 - (continued)					Seq: 3				Resp. Person: AL- JWG		
Events		Seq.	Description					Resp. Agency	Actual Date	Schedule Date	
		1	HQ - EP270 - PERMIT EXPIRES					STATE	06/13/1991		
Unit Name		Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date	
DETONATE		1-1	T04	EMCC	1	0	LB/Hr		N	06/04/1991	
Commercial Status: Does not accept waste from off-site generators											
Notes: EMERGENCY PERMIT FOR DETONATION OF 0.33 POUNDS OF PICRIC ACID											
Events		Seq.	Description					Resp. Agency	Actual Date	Schedule Date	
		1	HQ - EP110 - REVISIONS RECEIVED					STATE	06/11/1991		
Unit Name		Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date	
DETONATE		1-1	T04	EMCC	1	0	LB/Hr		N	06/04/1991	
Commercial Status: Does not accept waste from off-site generators											
Notes: EMERGENCY PERMIT FOR DETONATION OF 0.33 POUNDS OF PICRIC ACID											
Events		Seq.	Description					Resp. Agency	Actual Date	Schedule Date	
		1	HQ - EP150 - DETERMINED TO BE COMPLETE AND TECHNICALLY ADEQUATE					STATE	06/11/1991		
Unit Name		Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date	
DETONATE		1-1	T04	EMCC	1	0	LB/Hr		N	06/04/1991	
Commercial Status: Does not accept waste from off-site generators											
Notes: EMERGENCY PERMIT FOR DETONATION OF 0.33 POUNDS OF PICRIC ACID											
Events		Seq.	Description					Resp. Agency	Actual Date	Schedule Date	
		2	HQ - EP020 - EMERGENCY PERMIT REQUEST RECEIVED					STATE	06/07/1991		
Notes: HARDCOPY OF REQUEST RECEIVED											
Unit Name		Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date	
DETONATE		1-1	T04	EMCC	1	0	LB/Hr		N	06/04/1991	
Commercial Status: Does not accept waste from off-site generators											
Notes: EMERGENCY PERMIT FOR DETONATION OF 0.33 POUNDS OF PICRIC ACID											



# Comprehensive Permitting Report

Report run on: August 16, 2024 2:13:29 PM EDT

\*\*\* WARNING \*\*\* Sensitive information may be displayed on this report. \*\*\* WARNING \*\*\*

BLUESTONE COKE, L.L.C. - (continued)

ALD000828848

Series Name: EP1 - (continued)

Seq: 3

Resp. Person: AL- JWG

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - EP020 - EMERGENCY PERMIT REQUEST RECEIVED Notes: TELEPHONED REQUEST FOR EMER. PERMIT	STATE	06/04/1991	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
DETONATE	1-1	T04	EMCC	1	0	LB/Hr		N	06/04/1991
Commercial Status: Does not accept waste from off-site generators									
Notes: EMERGENCY PERMIT FOR DETONATION OF 0.33 POUNDS OF PICRIC ACID									

Series Name: OP1

Seq: 1

Resp. Person: AL- JWG

Events	Seq.	Description	Resp. Agency	Actual Date	Schedule Date
	1	HQ - OP010 - PART B CALL-IN	EPA	05/08/1985	

Unit Name	Seq.	Process Code	Legal/Op. Status	# Units	Capacity	UOM	Capacity Type	Standard Permit	Effective Date
01	3-1	D80	NRIN	1	5	Ac-F	Operating	N	05/08/1985
Commercial Status: Does not accept waste from off-site generators									

Unlinked Units - Seq. and Name		Unit Detail Sequence Numbers
2	EQBASIN	1

Unlinked Events		Event Seq. and Description		Resp. Agency	Actual Date	Schedule Date
Series: CC1	Seq: 2	1	HQ-CL370 - RECEIVE CLOSURE CERTIFICATION	EPA		10/30/1987
Series: CC1	Seq: 2	1	HQ-CL360ME - CLOSURE PLAN APPROVED - FINAL CLOSURE	EPA	09/15/1987	
Series: CC1	Seq: 2	1	HQ-CL340 - PUBLIC NOTICE - CLOSURE	EPA	07/16/1987	
Series: CC1	Seq: 2	1	HQ-CL330 - REVISIONS RECEIVED - CLOSURE	EPA	06/18/1987	
Series: CC1	Seq: 2	1	HQ-CL310 - PLAN RECEIVED - CLOSURE	EPA	04/30/1987	
Series: OP1	Seq: 1	1	HQ-OP12002 - WAIVER REQUESTED-SURFACE IMPOUNDMENT RETROFIT WAIVERS	EPA	11/07/1986	
UNDER REVIEW						
Series: OP1	Seq: 1	1	HQ-OP440 - FACILITY MANAGEMENT PLAN REVIEWED	EPA	03/31/1986	
Series: OP1	Seq: 1	1	HQ-OP020 - PART B RECEIVED	EPA	11/20/1985	11/08/1985
Series: OP1	Seq: 1	1	HQ-OP439ES - FACILITY MANAGEMENT PLAN SCREEN	EPA	09/24/1985	
Series: OP1	Seq: 1	1	04-OP481 - NOTICE OF DEFICIENCY	EPA	06/17/1985	

\*\*\* End of Report \*\*\*



# Exhibit CX10



Department of State: Division of Corporations

[Allowable Characters](#)

HOME

## Entity Details

**THIS IS NOT A STATEMENT OF GOOD STANDING**

[File Number:](#) **5953385** [Incorporation Date / Formation Date:](#) **2/2/2016**  
(mm/dd/yyyy)

[Entity Name:](#) **BLUESTONE COKE, LLC**

[Entity Kind:](#) **Limited Liability Company** [Entity Type:](#) **General**

[Residency:](#) **Domestic** State: **DELAWARE**

**[REGISTERED AGENT INFORMATION](#)**

Name: **UNASSIGNED AGENT**

Address:

City: County:

State: **NullValue** Postal Code: **95050**

Phone:

Additional Information is available for a fee. You can retrieve Status for a fee of \$10.00 or more detailed information including current franchise tax assessment, current filing history and more for a fee of \$20.00.

Would you like ☐ Status ☐ Status, Tax & History Information

For help on a particular field click on the Field Tag to take you to the help area.

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# Exhibit CX11





# STATE OF ALABAMA

## FOREIGN LIMITED LIABILITY COMPANY (LLC) APPLICATION FOR REGISTRATION

Alabama	Sec. of State	351-486	FLL
Date	02/04/2016	Time	13:18
File	\$150.00	Exp	\$100.00
Total			\$250.00

1. NAME OF THE FOREIGN ENTITY AS RECORDED IN THE JURISDICTION IN WHICH IT WAS FORMED/ORGANIZED

ERP Compliant COKE, LLC

2. NAME OF THE FOREIGN ENTITY FOR USE IN ALABAMA ONLY IF DIFFERENT FROM LEGAL NAME\*

ERP Compliant COKE, LLC

\*A FICTITIOUS NAME MAY BE USED ONLY IF THE LEGAL NAME IS NOT AVAILABLE FOR USE IN ALABAMA OR THE NAME DOES NOT CONTAIN THE WORDS "LIMITED LIABILITY COMPANY" OR THE ABBREVIATION "L.L.C" OR "LLC" (10A-1-5.06)

3. IF A FICTITIOUS NAME IS USED THE UNDERSIGNED CERTIFIES THE RESOLUTION OF THE LLC'S GOVERNING AUTHORITY TO ADOPT THE FICTITIOUS NAME FOR USE IN ALABAMA AND AFFIRMS THE AUTHORITY TO MAKE SUCH A CERTIFICATION UNDER 10A-1-7.07

4. A COPY OF THE NAME RESERVATION ALREADY SUBMITTED TO THE SECRETARY OF STATE IS ATTACHED AT THE END OF THIS DOCUMENT

5. ENTITY'S JURISDICTION OF FORMATION

Delaware

6. DATE OF ENTITY'S FORMATION IN THE STATE/COUNTRY OF JURISDICTION

02/02/2016

7. THE UNDERSIGNED CERTIFIES THAT THE FOREIGN ENTITY EXISTS AS A VALID LIMITED LIABILITY COMPANY UNDER THE LAWS OF THE ENTITY'S JURISDICTION OF FORMATION.

8. THE FOREIGN ENTITY WILL BEGIN OR BEGAN TRANSACTING BUSINESS IN ALABAMA

02/05/2016

9. ADDRESS OF PRINCIPAL OFFICE

15 Appledore Lane  
Natural Bridge, VA 24578

MAILING ADDRESS

15 Appledore Lane  
Natural Bridge, VA 24578

10. NAME AND ADDRESS OF REGISTERED AGENT FOR SERVICE OF PROCESS

Corporation Service Company/CSC-Lawyers Incorporating Service Incorporated  
150 South Perry Street  
Montgomery, AL 36104

02/04/2016

Mildred M Hartzog Authorized Representative

DATE

ELECTRONIC SIGNATURE & TITLE

CX11 page 1 of 1



# Exhibit CX12



**From:** [Hunter Naff](#)  
**To:** [Annicella, Alan](#)  
**Cc:** [Hendrix, Corey](#); [Steve Ball](#)  
**Subject:** RE: Request for Information- EPA ID ALD000828848 (Bluestone Coke, LLC)  
**Date:** Thursday, June 18, 2020 7:26:59 PM  
**Attachments:** [Cover Letter signed.pdf](#)  
[Enclosure C Responses.pdf](#)  
[Enclosure D Responses.pdf](#)

---

Mr. Annicella:

Please find attached Bluestone Coke, LLC's (1) Cover Letter, (2) Enclosure C Responses, and (3) Enclosure D Responses, which are due today.

As you know, Bluestone acquired ERP Compliant Coke in July 2019. As that is the case, many requests for documents more than a year old are not currently in our possession. Moreover, while we are spread thin in our ability to respond fully to EPA's request within the two-week time frame, we are submitting what we have at this point, in good faith, for the EPA to begin its review. Bluestone will supplement its responses as it continues to locate documents and information responsive to the requests. The documents produced are found in the dropbox link below.

As stated above, Bluestone's responses are continuing in nature. If the EPA can agree to a two-week extension in order for Bluestone to provide fully developed response to requests, we feel that will give us adequate time to meet the requests. Please note the confidentiality claims set forth in the cover letter. Do not hesitate to contact me with any questions.

<https://www.dropbox.com/sh/f0gaiendvqpduq0/AAAu1qAZxTPHhdK42nDyYUj0a?dl=0>

Best regards,

Hunter

Hunter Naff  
(540) 613-5795

\*\*\*\*\*CONFIDENTIALITY NOTICE AND WARNINGS\*\*\*\*\*

This e-mail message and any attachments are confidential and are only for the review and use of the intended recipient(s) and may contain proprietary material and/or other material protected by attorney-client, work product or other legal privileges making it exempt from use or disclosure. WARNING: Any unauthorized review, use, retention, disclosure, copying, distribution

or other dissemination of either this e-mail or any attachment(s) is STRICTLY PROHIBITED.

If you are not an intended recipient please do not read, review, retain, copy or distribute this e-mail or any attachments (or any part of them) and immediately (1) permanently delete and destroy the e-mail message and any and all associated attachments/files (without forwarding or retaining a copy of any kind) and (2) notify the sender so we can correct our address records. Neither the transmission of this e-mail or any attachment(s), nor any error in transmission or mis-delivery, shall constitute a waiver of any applicable legal privilege. Thank you for your cooperation.





June 18<sup>th</sup>, 2020

**VIA ELECTRONIC MAIL**

**annicella.alan@epa.gov**

Alan A. Annicella, Acting Chief  
Chemical Safety and Land Enforcement Branch Enforcement and  
Compliance Assurance Division  
U.S. Environmental Protection Agency, Region 4

SUBJ: Request for Information  
Bluestone Coke, LLC, Birmingham, EPA ID ALD000828848

Dear. Mr. Annicella:

Please find under this cover letter Bluestone Coke, LLC's ("Bluestone") response to EPA's request for information in the above-referenced matter. The response is continuing in nature and pursuant to Section 3007(b) of RCRA, 42 U.S.C. Section 6927(b), Sections 104(e)(7)(E) and (F) of CERCLA, 42 U.S.C. Sections 9604(e)(7)(E) and (F), and 40 C.F.R. Section 2.203(b), Bluestone hereby asserts a confidentiality claim to cover each and every response submitted herein, including attachments or files (whether electronic or hard copies). Aside from existing publicly available information produced, Bluestone considers each response to contain either proprietary, business confidential, or employee's personally identifiable information which collectively shall remain confidential and limited to the purpose of EPA's request to evaluate Bluestone's ability to secure financial assurance as required by the Administrative Order on Consent.

Bluestone's responses to the request for information are continuing in nature and as such, hereby reserves its right to supplement its responses as necessary to adequately comply with the requests.

Should you have any questions, please do not hesitate to contact me.

Best regards,

Hunter Naff

cc: Corey Hendrix  
Steve Ball



# Exhibit CX13



Send Tax Notice To:

ERP Compliant COKE, LLC  
Attn: Thomas M. Clarke  
15 Appledore Lane  
Natural Bridge, Virginia 24578

25.00

STATE OF ALABAMA

)

:

JEFFERSON COUNTY

)

County Division Code: AL039  
Inst. # 2016022671 Pages: 1 of 4  
I certify this instrument filed on  
3/10/2016 2:55 PM Doc: D  
Alan L. King, Judge of Probate  
Jefferson County, AL. Rec: \$26.00

### QUITCLAIM DEED

Clerk: LFBESS

**KNOW ALL MEN BY THESE PRESENTS**, that in consideration of the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, paid in hand to **WALTER COKE, INC.**, a Delaware corporation (the "Grantor"), by **ERP COMPLIANT COKE, LLC**, a Delaware limited liability company (the "Grantee"), the receipt and sufficiency of which are hereby acknowledged, the Grantor does hereby remise, release, quitclaim and convey unto the Grantee all the Grantor's right, title and interest in and to the land described on Exhibit A attached hereto and made a part hereof, situated in Jefferson County, Alabama. The transfer of the Property is subject to the terms of the Asset Purchase Agreement and has been approved by that certain pleading styled Order (I) Approving the Sale of Certain Non-Core Assets Free and Clear of Claims, Liens, Interests and Encumbrances; (II) Approving the Assumption and Assignment of Certain Executory Contracts and Unexpired Leases; and (III) Granting Related Relief, in the Chapter 11 proceeding styled *In Re: Walter Energy, Inc., et al.* (including Grantor), such proceeding being administered in the United States Bankruptcy Court for the Northern District of Alabama, Southern Division, under Case No. 15-02741.

**TO HAVE AND TO HOLD** unto the Grantee and its successors and assigns forever.

The US Bankruptcy Order described above in Re: **Walter Energy, Inc. et al**, Case No. 15-02741, US Bankruptcy Court for the Northern District of Alabama, Southern Division, is recorded in Book 2016022670, Page \_\_\_\_\_, of the Jefferson County, Alabama Probate Court Records.



IN WITNESS WHEREOF, the Grantor has caused this instrument to be duly executed on this 12 day of February, 2016.

WALTER COKE, INC., a Delaware corporation

By: [Signature]

Name: Michael Griffin

Title: Treasurer

STATE OF ALABAMA            )  
  :  
JEFFERSON COUNTY         )

I, the undersigned authority, a Notary Public in and for said county in said state, hereby certify that Michael Griffin, whose name as Treasurer of **WALTER COKE, INC.**, a Delaware corporation, is signed to the foregoing conveyance and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he/she, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation.

Given under my hand and official seal of office, this 12 day of February 2016.

[ NOTARIAL SEAL ]



[Signature]  
Notary Public

My Commission Expires: December 2, 2019

This instrument was prepared without benefit of title examination by:

Meade Whitaker, Jr.  
Bradley Arant Boult Cummings LLP  
1819 Fifth Avenue North  
Birmingham, Alabama 35203



**Exhibit A – Legal Description**

**For Walter Coke, Inc. Owned Property Being Quitclaim Conveyed To  
ERP Compliant Coke, LLC**

**Jefferson County, Alabama Property:**

Remise, remit and Quitclaim any and all rights, title and interest in and to the following described parcel of property situated in the Southeast Quarter of the Northwest Quarter of Section 13, Township 17 South, Range 3 West:

Begin at the Southeast intersection of the SL&SF RR ROW and the L&N RR ROW, thence proceed South for 150 feet along the L&N RR ROW, thence proceed Northeast for 220 feet along the L&N RR ROW to the SL&SF RR ROW, thence proceed Southwest for 136 feet along the SL&SF RR ROW to the Point of Beginning. All of said parcel lying in the Southeast Quarter of the Northwest Quarter.

Source of Title:  
Deed Book 3996, Page 614

Tax Parcel:  
22-00-13-2-017-001.000



Send Tax Notice To:

ERP Compliant COKE, LLC  
Attn: Thomas M. Clarke  
15 Appledore Lane  
Natural Bridge, Virginia 24578

32.00

STATE OF ALABAMA )

JEFFERSON COUNTY )

County Division Code: AL039  
Inst. # 2016022672 Pages: 1 of 6  
I certify this instrument filed on  
3/10/2016 2:55 PM Doc: D  
Alan L. King, Judge of Probate  
Jefferson County, AL. Rec: \$32.00

Clerk: LFBESS

### STATUTORY WARRANTY DEED

**KNOW ALL MEN BY THESE PRESENTS**, that in consideration of the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, paid in hand to **JEFFERSON WARRIOR RAILROAD COMPANY, INC.**, an Alabama corporation (the "Grantor"), by **ERP COMPLIANT COKE, LLC**, a Delaware limited liability company (the "Grantee"), the receipt and sufficiency of which are hereby acknowledged, and in consideration of that certain Asset Purchase Agreement dated January 31, 2016, by and among Grantor, and certain of its affiliates defined therein as "Sellers", Grantee, and certain of its affiliates defined therein as "Buyers", and J.W. Walter, Inc. (the "Asset Purchase Agreement"), the Grantor does hereby grant, bargain, sell and convey unto the Grantee the land described on Exhibit A attached hereto and made a part hereof, together with all improvements thereon and appurtenances thereto, situated in Jefferson County, Alabama (herein called the "Property"), subject, however, to the exceptions listed on Exhibit B attached hereto and incorporated herein. The transfer of the Property is subject to the terms of the Asset Purchase Agreement and has been approved by that certain pleading styled Order (I) Approving the Sale of Certain Non-Core Assets Free and Clear of Claims, Liens, Interests and Encumbrances; (II) Approving the Assumption and Assignment of Certain Executory Contracts and Unexpired Leases; and (III) Granting Related Relief, in the Chapter 11 proceeding styled *In Re: Walter Energy, Inc., et al.* (including Grantor), such proceeding being administered in the United States Bankruptcy Court for the Northern District of Alabama, Southern Division, under Case No. 15-02741.

The US Bankruptcy Order described above in Re: Walter Energy, Inc. et al, Case No. 15-02741, US Bankruptcy Court for the Northern District of Alabama, Southern Division, is recorded in Book 2016022670, Page \_\_\_\_\_, of the Jefferson County, Alabama Probate Court Records.



It is hereby covenanted and agreed between the Grantor and the Grantee that all covenants, conditions, agreements and undertakings contained herein shall extend and inure to the benefit of and be binding upon the respective heirs, executors, administrators, successors and assigns of the respective parties hereto, the same as if they were in every case named and expressed and the same shall be construed as covenants running with the land.

**TO HAVE AND TO HOLD** unto the Grantee and its successors and assigns in fee simple forever.

[Signature page follows]



IN WITNESS WHEREOF, the Grantor has caused this instrument to be duly executed on this 12 day of February, 2016.

JEFFERSON WARRIOR RAILROAD  
COMPANY, INC., an Alabama corporation

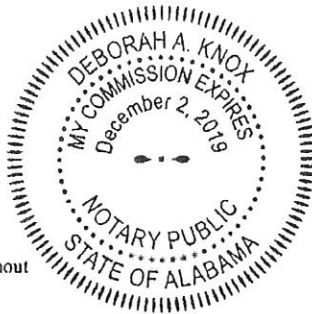
By: [Signature]  
Name: Michael Griffin  
Title: Treasurer

STATE OF ALABAMA )  
:  
JEFFERSON COUNTY )

I, the undersigned authority, a Notary Public in and for said county in said state, hereby certify that Michael Griffin, whose name as Treasurer of **JEFFERSON WARRIOR RAILROAD COMPANY, INC.**, an Alabama corporation, is signed to the foregoing conveyance and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he/she, as such officer and with full authority, executed the same for and as the act of said corporation.

Given under my hand and official seal of office, this 12 day of February, 2016.

[ NOTARIAL SEAL ]



[Signature]  
Notary Public

My Commission Expires: December 2, 2019

This instrument was prepared without  
benefit of title examination by:

Meade Whitaker, Jr.  
Bradley Arant Boult Cummings LLP  
1819 Fifth Avenue North  
Birmingham, Alabama 35203



**Exhibit A – Legal Description**

**Jefferson Warrior Railroad Company, Inc. Owned Property Being Conveyed to  
ERP Compliant Coke, LLC**

**Jefferson County, Alabama Properties:**

Grantor releases, remises and conveys all right, title and interest in and to the following described land:

The right-of-way for the Mary Lee Railroad, including spur tracks and side tracks from the Northwest Quarter of Section 13, Township 17 South, Range 3 West (at the By-Product Plant in Sections 12 and 13, Township 17 South, Range 3 West), to the north and west boundary of the Walter Coke, Inc. property (formerly the Sloss Industries Corporation property) in the Northwest Quarter of Section 6, Township 17 South, Range 2 West.

Whenever possible, said right-of-way shall be 100 feet wide, or 50 feet on either side of the center line of said Mary Lee Railroad as same is now constructed.

All of said right-of-way being located in the following Sections, Townships and Ranges, all in Jefferson County, Alabama:

Sections 6, 7 and 18, Township 17 South, Range 2 West;

Sections 12 and 13, Township 17 South, Range 3 West;

Subject to any conveyances, abandonments or vacations of record.

Source of Title:  
Deed Book 2634, Page 616

**Tax Parcels:**

- 22-00-13-2-017-001.000
- 22-00-13-2-018-002.000
- 23-00-06-2-000-005.000
- 23-00-07-3-001-003.000
- 23-00-18-2-001-002.000



**EXHIBIT B**  
**EXCEPTIONS**

1. The lien for ad valorem property taxes and any other property-related taxes, dues or assessments for any tax year beginning in 2015, and all subsequent tax years, and any current use roll-back taxes, if assessed.

2. All restrictions, reservations, easements, servitudes, rights-of-way, leases, mineral leases and encumbrances, whether or not of record, that run with the land, and riparian rights incident to the land; provided that nothing herein or in the Asset Purchase Agreement shall be deemed to constitute the Grantee's consent to or acceptance of any unrecorded instrument of which Grantee does not have actual knowledge.

3. Any encroachment, overlap, violation, variation or adverse circumstances that would be disclosed by an accurate and complete survey and inspection of the land.

4. Any reservation or conveyance of minerals and other subsurface materials of every kind and character filed in the appropriate real property records on or before July 15, 2015, including, but not limited to, coal, oil, gas, sand, ore, kaolin, clay, stone and gravel in, on and under the land, together with mining rights and all other rights, privileges and immunities relating thereto, including any release of damages.

5. All applicable laws, rules, regulations, ordinances and orders of any government or governmental body, agency or entity, including, without limitation, zoning and other land use rules, regulations and ordinances and environmental laws, rules and regulations.



Send Tax Notice To:

ERP Compliant COKE, LLC  
Attn: Thomas M. Clarke  
15 Appledore Lane  
Natural Bridge, Virginia 24578

59.00

STATE OF ALABAMA )

JEFFERSON COUNTY )

County Division Code: AL039  
Inst. # 2016022673 Pages: 1 of 15  
I certify this instrument filed on  
3/10/2016 2:55 PM Doc: D  
Alan L. King, Judge of Probate  
Jefferson County, AL. Rec: \$59.00

Clerk: LFBESS

### STATUTORY WARRANTY DEED

**KNOW ALL MEN BY THESE PRESENTS**, that in consideration of the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, paid in hand to **WALTER COKE, INC.**, a Delaware corporation (the "Grantor"), by **ERP COMPLIANT COKE, LLC**, a Delaware limited liability company (the "Grantee"), the receipt and sufficiency of which are hereby acknowledged, and in consideration of that certain Asset Purchase Agreement dated January 31, 2016, by and among Grantor, and certain of its affiliates defined therein as "Sellers", Grantee, and certain of its affiliates defined therein as "Buyers", and J.W. Walter, Inc. (the "Asset Purchase Agreement"), the Grantor does hereby grant, bargain, sell and convey unto the Grantee the land described on Exhibit A attached hereto and made a part hereof, together with all improvements thereon and appurtenances thereto, situated in Jefferson County, Alabama (herein called the "Property"), subject, however, to the exceptions listed on Exhibit B attached hereto and incorporated herein. The transfer of the Property is subject to the terms of the Asset Purchase Agreement and has been approved by that certain pleading styled Order (I) Approving the Sale of Certain Non-Core Assets Free and Clear of Claims, Liens, Interests and Encumbrances; (II) Approving the Assumption and Assignment of Certain Executory Contracts and Unexpired Leases; and (III) Granting Related Relief, in the Chapter 11 proceeding styled *In Re: Walter Energy, Inc., et al.* (including Grantor), such proceeding being administered in the United States Bankruptcy Court for the Northern District of Alabama, Southern Division, under Case No. 15-02741.

The US Bankruptcy Order described above in Re: Walter Energy, Inc. et al, Case No. 15-02741, US Bankruptcy Court for the Northern District of Alabama, Southern Division, is recorded in Book 2016022670, Page \_\_\_\_\_, of the Jefferson County, Alabama Probate Court Records.



It is hereby covenanted and agreed between the Grantor and the Grantee that all covenants, conditions, agreements and undertakings contained herein shall extend and inure to the benefit of and be binding upon the respective heirs, executors, administrators, successors and assigns of the respective parties hereto, the same as if they were in every case named and expressed and the same shall be construed as covenants running with the land.

**TO HAVE AND TO HOLD** unto the Grantee and its successors and assigns in fee simple forever.

[Signature page follows]



IN WITNESS WHEREOF, the Grantor has caused this instrument to be duly executed on this  
12 day of February, 2016.

WALTER COKE, INC., a Delaware corporation

By: [Signature]

Name: Michael Griffin

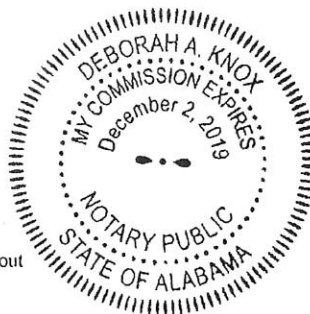
Title: Treasurer

STATE OF ALABAMA )  
:  
JEFFERSON COUNTY )

I, the undersigned authority, a Notary Public in and for said county in said state, hereby  
certify that Michael Griffin, whose name as Treasurer of  
WALTER COKE, INC., a Delaware corporation, is signed to the foregoing conveyance and  
who is known to me, acknowledged before me on this day that, being informed of the contents of  
the conveyance, he/she, as such officer and with full authority, executed the same for and as the  
act of said corporation.

Given under my hand and official seal of office, this 12 day of February, 2016.

[ NOTARIAL SEAL ]



[Signature]  
Notary Public

My Commission Expires: December 2, 2019

This instrument was prepared without  
benefit of title examination by:

Meade Whitaker, Jr.  
Bradley Arant Boult Cummings LLP  
1819 Fifth Avenue North  
Birmingham, Alabama 35203



**Exhibit A – Legal Description**

**For Walter Coke, Inc. Owned Property Being Conveyed To ERP Compliant Coke, LLC**

**Jefferson County, Alabama Property: Fee Simple**

Lying in Section 13, Township 17 South, Range 3 West:

Lots 1, 2, 3, in Block 2, according to the Survey of Rose Park, as recorded in Map Book 28, Page 45, in the Office of the Judge of Probate of Jefferson County, Alabama.

Source of Title:

Deed Book 3683, Page 485

Tax Parcels:

• 22-00-13-1-001-005.000

Lying in Section 7, Township 17 South, Range 2 West

Lots 3 and 4, in Block 1, according to the Survey of Washington Park, as recorded in Map Book 9, Page 66, in the Office of the Judge of Probate of Jefferson County, Alabama.

Source of Title:

Deed Book 200718, Page 6272

Tax Parcels:

• 23-00-07-3-002-006.000



And the following property in Township 17 South, Range 2 West and Township 17 South, Range 3 West:

(1) Section 6, Township 17 South, Range 2 West; that part of the East Half of the Southwest Quarter of said Section 6 lying west of the L & N Railroad right-of-way and that part of the West Half of the Southwest Quarter of said Section 6 conveyed to United States Pipe and Foundry Company in that certain Deed recorded in Deed Volume 5770 at page 561 in the office of the Judge of Probate of Jefferson County, Alabama; and

(2) Section 1, Township 17 South, Range 3 West; that part of the Southeast Quarter of the Southeast Quarter of said Section 1 conveyed to United States Pipe and Foundry Company in that certain Deed recorded in Deed Volume 5770 at page 561 in the office of the Judge of Probate of Jefferson County, Alabama; and

(3) Section 7, Township 17 South, Range 2 West; that part of the Northwest Quarter of said Section 7 lying southeast of the L & N Boyles Gap Railroad right-of-way and west of the Mary Lee Railroad right-of-way except that portion thereof conveyed to Citadel Cement Company described in those certain Deeds recorded in Deed Volume 1160 at page 309 and in Deed Volume 1161 at page 198 in the office of the Judge of Probate of Jefferson County, Alabama, and that part of the Southwest Quarter of said Section 7 lying northwest of Huntsville Road and west of the Mary Lee Railroad right-of-way, except that portion thereof conveyed to Citadel Cement Company described in those certain Deeds recorded in Deed Volume 1160 at page 309 and in Deed Volume 1161 at page 198 in the office of the Judge of Probate of Jefferson County, Alabama, and except that portion thereof east of the west right-of-way of Chestnut Street according to the Washington Park Survey recorded in Map Book 9 at page 66 in the office of the Judge of Probate of Jefferson County, Alabama, and except Lots 3 and 4 of Block 1 of the aforesaid Washington Park Survey; and



**(4) Section 12, Township 17 South, Range 3 West:  
that part of the East Half of said Section 12 lying south-  
east of the L & N Boyles Gap Railroad right-of-way and  
northwest of Huntsville Road; and**

**(5) Section 13, Township 17 South, Range 3 West:  
that part of the North Half of said Section 13 lying south-  
east of the L & N Boyles Gap Railroad right-of-way and  
north of 35th Avenue North and west of Huntsville Road.**

Less and except all out-conveyances, easements and right-of-ways that are recorded in the Office  
of the Judge of Probate of Jefferson County, Alabama.

Source of Title:

Deed Book 3273, Page 101

Deed Book 201108, Page 28149

Tax Parcels:

- 22-00-01-4-001-029.000
- 22-00-12-4-001-001.000
- 22-00-12-4-001-001.001
- 22-00-13-1-002-001.000
- 22-00-13-1-002-001.001
- 22-00-13-2-008-001.000
- 23-00-06-3-000-001.000
- 23-00-07-2-000-003.000
- 23-00-07-2-000-003.001
- 23-00-07-3-002-002.000
- 23-00-07-3-002-003.000
- 23-00-07-3-002-003.001
- 23-00-07-3-002-004.000
- 23-00-07-3-002-005.000
- 23-00-07-3-002-007.000



And the following property in Township 17 South, Range 2 West and Township 17 South, Range 3 West:

PARCEL 1

Section 12, Township 17 South, Range 3 West: That part of the South Half of the Northeast Quarter lying Northwest of the L&N Boyles Gap Railroad right of way; that part of the Northeast Quarter of the Southeast Quarter lying Northwest of the L&N Boyles Gap Railroad Right-of-way.

PARCEL 2

Section 7, Township 17 South, Range 2 West: That part of the Southwest Quarter of Northwest Quarter lying Northwest of the L&N Boyles Gap Railroad right of way.

PARCEL 3

That part of the Northeast Quarter of Southwest Quarter more particularly described as follows: Commence at a monument on the Southwest boundary of Chestnut Street at the intersection of Sloss Industries boundary with the Southeast boundary of Citadel Cement Company; thence on an astronomic bearing of South 36 degrees 35 minutes 30 seconds East, 490.00 feet along said right-of-way of Chestnut Street to a monument, at the intersection with the Northwesterly boundary of Huntsville Road; thence continue on the previously described course 52.75 feet; thence right 90 degrees 47 minutes 28 seconds, Southwesterly 299.11 feet to the Point of Beginning; thence left 113 degrees 38 minutes 22 seconds, Southeasterly 610.56 feet; thence right 43 degrees 12 minutes 33 seconds, Southeasterly 114.76 feet to the Westerly right-of-way of the Mary Lee Railroad, said right-of-way being 25.00 feet West of and parallel with the centerline of said railroad; thence left 160 degrees 41 minutes 48 seconds, North 2 degrees 34 minutes 22 seconds East, 88.57 feet along said right-of-way; thence continue 760.46 feet along the previously described course to the point of intersection of said right-of-way with the Southeasterly boundary of Huntsville Road; thence left 128 degrees 22 minutes 23 seconds, South 54 degrees 11 minutes 58 seconds West along said boundary 739.26 feet to the point of beginning.

PARCEL 4

Begin at the Northwest corner of Section 18, Township 17 South, Range 2 West; thence along the North boundary of said Section 18 on an astronomic bearing of 87 degrees 00 minutes 19 seconds East, 660.57 feet; thence right 87 degrees 09 minutes 34 seconds, Southerly 20.00 feet; thence left 87 degrees 09 minutes 34 seconds Easterly and parallel with the North boundary of said section 655.75 feet; thence right 00 degrees 01 minutes 32 seconds, Easterly 230.74 feet; thence right 89 degrees 31 minutes 05 seconds, South 725.99 feet; thence left 89 degrees 32 minutes 37 seconds, Easterly 420.00 feet; thence right 89 degrees 32 minutes 37 seconds, South 191.63 feet to a point on the Westerly right-



of-way of Southern Railway Company, thence right 14 degrees 31 minutes 52 seconds, Southwesterly 86.88 feet along said right-of-way; thence right 02 degrees 07 minutes 38 seconds, Southwesterly 540.74 feet along said right-of-way to the intersection with the Northeasterly right-of-way of Burlington Northern Railroad; thence right 136 degrees 19 minutes 31 seconds, Northwesterly 28.80 feet along the Burlington Northern right-of-way to the beginning of a curve to the left, concave to the Southwest, having a radius of 482.12 feet; thence through a central angle of 54 degrees 33 minutes 56 seconds, along an arc distance of 459.15 feet, left 29 degrees 30 minutes 39 seconds to the chord line of said curve, Northwesterly a chord distance of 441.99 feet to the point of tangency; thence from the chord line of foregoing curve left 29 degrees 56 minutes 54 seconds, Westerly 40.04 feet to the East boundary of the NW 1/4 of the NW 1/4 of said Section 18; thence left 03 degrees 24 minutes 07 seconds, continue Westerly along the Northerly right-of-way of Burlington Northern Railroad 1315.07 feet to the East boundary of Section 13, Township 17 South, Range 3 West; thence right 87 degrees 27 minutes 13 seconds, Northerly 482.70 feet along said East boundary; thence left 89 degrees 17 minutes 00 seconds, Westerly 651.52 feet to the Easterly line of Huntsville Road; thence right 104 degrees 44 minutes 51 seconds; Northeasterly 374.84 feet along the Easterly line of Huntsville Road; thence right 03 degrees 35 minutes 09 seconds, continue Northeasterly 201.10 feet along Huntsville Road; thence right 05 degrees 29 minutes 00 seconds Northeasterly 97.00 feet; thence right 8 degrees 16 minutes 00 seconds, Northeasterly 80.60 feet; thence from the previous course on the Easterly line of Huntsville Road, right 95 degrees 42 minutes 00 seconds, Southeasterly 513.60 feet to the East boundary of said Section 13; thence left 128 degrees 30 minutes 00 seconds, North 403.50 feet along said East boundary to the Point of Beginning, containing 57.30 acres.

Subject to right-of-way to the City of Birmingham for a pipeline, over the West 40.00 feet of the NE 1/4 of the NW 1/4 of Section 18, Township 17 South, Range 2 West. Containing in all 1.15 acres.

Subject to Rights-of-way or easements which may exist for public roads along Huntsville Road, 35th Street North and 41st Avenue North.

#### PARCEL 5

A strip of land lying within the bounds of the SE 1/4 of the NW 1/4 of Section 13, Township 17 South, Range 3 West, and situated in the City of Birmingham, Alabama, being the strip of land previously occupied by a portion of the Boyles Gap Spur of the Louisville and Nashville Railroad, said strip being more particularly described as follows:

Beginning at the Point of intersection of the East right-of-way of the Graves Mine Branch of the Louisville and Nashville Railroad, and the Northwest right-of-way of the old Boyles Gap Spur of the Louisville and Nashville Railroad, said Point of Beginning being



25.00 feet East from and at right angles to the centerline of said Graves Mine branch and 25.00 feet Northwest from and at right angles to the curved centerline of said Boyles Gap Spur; thence from a line with an astronomic bearing of North 21 degrees 53 minutes 33 seconds East, tangent to a curve concave to the Southeast, having a radius of 713.30 feet, right through a central angle of 08 degrees 18 minutes 11 seconds an arc distance of 103.37 feet along the Northwesterly right-of-way of the old Boyles Gap Spur; thence North 30 degrees 11 minutes 44 seconds East along said right-of-way, 786.74 feet to a point 2.49 feet Southeast of the Southeasterly edge of pavement of 35th Avenue North; thence left 00 degrees 00 minutes 54 seconds, North 30 degrees 10 minutes 56 seconds East, 95.38 feet to the Northwest right-of-way of 35th Avenue North, said right-of-way being also the Southeasterly boundary of Sloss Industries Corporation property; thence right 40 degrees 25 minutes 30 seconds, North 70 degrees 36 minutes 01 seconds East, 76.59 feet along the aforementioned boundary; thence right 139 degrees 34 minutes 00 seconds, South 30 degrees 10 minutes 20 seconds West, 148.85 feet along the Southeasterly right-of-way of the previously mentioned Boyles Gap Spur to the Southeasterly right-of-way of the St. Louis & San Francisco Railroad which lies Southeast of and parallel with the Southeast right-of-way of 35th Avenue; thence continue along the previously described course 791.56 feet to the beginning of a curve concave to the Southeast having a radius of 663.30 feet; thence left through a central angle of 29 degrees 53 minutes 00 seconds an arc distance of 345.95 feet to a point on the East right-of-way of the Graves Mine Branch of the Louisville and Nashville Railroad, said point being 25.00 feet East of, and at right angles to the centerline of said railroad; thence from a line tangent to the foregoing curve, right 180 degrees 00 minutes 00 seconds, North 00 degrees 17 minutes 21 seconds East, 262.36 feet along said East right-of-way to the Point of Beginning, containing 1.24 acres.

PARCEL 6

A parcel of land lying within the bounds of the SE 1/4 of the NW 1/4 of Section 13, Township 17 South, Range 3 West, described as follows:

Commence at the Southeast corner of the SE 1/4 of the NW 1/4 of Section 13, Township 17 South, Range 3 West; thence West along the South boundary of said SE 1/4 of the NW 1/4 a deed distance of 1204.6 feet to the Point of Beginning; thence right 88 degrees 42 minutes 00 seconds, on an astronomic bearing of North 00 degrees 17 minutes 21 seconds East, 398.71 feet to the Southeasterly right-of-way of the old Boyles Gap Spur of the Louisville and Nashville Railroad; thence left 157 degrees 36 minutes 51 seconds to a line bearing South 22 degrees 40 minutes 30 seconds West, tangent to a curve concave to the Southeast, having a radius of 663.30 feet; thence left through a central angle of 22 degrees 23 minutes 09 seconds an arc distance of 259.16 feet along said right-of-way 25.00 feet Southeasterly from and parallel with the centerline of said railroad to a point on the East right-of-way of the Graves



Mine Branch of the Louisville and Nashville Railroad, said point being 25.00 feet East from and at right angles to the centerline of said railroad; thence South 00 degrees 17 minutes 21 seconds West, 144.96 feet along said East right-of-way, 25.00 feet East from and parallel with said centerline to the intersection with the South boundary of the SE 1/4 of the NW 1/4 of said Section 13; thence left 88 degrees 42 minutes 00 seconds, South 88 degrees 24 minutes 40 seconds East, 50.00 feet to the Point of Beginning, containing 0.36 acres.

Less and except the following conveyance out of Parcel 4 above, conveyed by Walter Coke, Inc. on May 26, 2010 to The City of Birmingham, Care of The Environmental Litigation Group, P.C., in an unrecorded deed in Jefferson County, Alabama, as follows:

A parcel of land situated in the Northwest quarter of the Northwest quarter of Section 18, Township 17 South, Range 2 West and being more particularly described as follows:

Commence at the Southwest corner of Lot 30, Rose Park Subdivision as recorded in Map Book 28, Page 45 in the Office of the Judge of Probate, Jefferson County, Alabama, said point also being on the North right of way line of 41<sup>st</sup> Avenue North (40' R.O.W.); thence run in an Easterly direction along the South boundary of said Lot 30 and Lot 29 of Rose Park Subdivision and along said North right of way line of 41<sup>st</sup> Avenue North for a distance of 104.03 feet; thence turn an interior angle to the left of 93 degrees 15 minutes 49 seconds and run in a Southerly direction for a distance of 40.06 feet to a point on the South right of way line of said 41<sup>st</sup> Avenue North, said point also being the POINT OF BEGINNING; thence turn an interior angle to the right of 93 degrees 15 minutes 49 seconds and run in an Easterly direction along the said South right of way line of 41<sup>st</sup> Avenue North for a distance of 655.32 feet; thence leaving said right of way line turn an interior angle to the left of 38 degrees 52 minutes 02 seconds and run in a Southwesterly direction for a distance of 804.68 feet; thence turn an interior angle to the left of 54 degrees 23 minutes 47 seconds and run in a Northerly direction for a distance of 505.77 feet to the POINT OF BEGINNING. Said parcel contains 165,453 square feet or 3.80 acres more or less.

Less and except all out-conveyances, easements and right-of-ways that are recorded in the Office of the Judge of Probate of Jefferson County, Alabama.

Source of Title:  
Deed Book 3996, Page 614



Tax Parcels:

22-00-12-1-001-084.000  
22-00-12-1-001-085.000  
22-00-12-1-006-001.000  
22-00-12-1-006-002.000  
22-00-12-1-006-003.000  
22-00-12-1-007-001.000  
22-00-12-1-007-002.000  
22-00-12-1-008-001.000  
22-00-12-1-008-002.000  
22-00-12-1-009-001.000  
22-00-12-1-009-002.000  
22-00-12-1-009-003.000  
22-00-12-1-010-001.000  
22-00-12-4-002-023.000  
22-00-12-4-002-024.000  
22-00-13-1-001-006.000  
22-00-13-2-018-002.000  
23-00-07-2-000-003.002  
23-00-07-3-004-001.000  
23-00-18-2-001-004.000

And conveying all right, title and interest that the Grantor may hold in and to the following property in Jefferson County, Alabama:

The right-of-way for the Mary Lee Railroad, including spur tracks and side tracks from the Northwest Quarter of Section 13, Township 17 South, Range 3 West (at the By-Product Plant in Sections 12 and 13, Township 17 South, Range 3 West), to the north and west boundary of the Walter Coke, Inc. property (formerly the Sloss Industries Corporation property) in the Northwest Quarter of Section 6, Township 17 South, Range 2 West.

Whenever possible, said right-of-way shall be 100 feet wide, or 50 feet on either side of the center line of said Mary Lee Railroad as same is now constructed.

All of said right-of-way being located in the following Sections, Townships and Ranges, all in Jefferson County, Alabama:

Sections 6, 7 and 18, Township 17 South, Range 2 West;  
Sections 12 and 13, Township 17 South, Range 3 West.

Subject to all out-conveyances, abandonments or vacations that are recorded in the Office of the Judge of Probate of Jefferson County, Alabama.



Source of Title:  
Deed Book 2634, Page 616

Tax Parcels:  
22-00-13-2-017-001.000  
22-00-13-2-018-002.000  
23-00-06-2-000-005.000  
23-00-07-3-001-003.000  
23-00-18-2-001-002.000

And conveying all right, title and interest in and to a Pipeline Property, Right-of-way and Easement in Section 7, Township 17 South, Range 2 West, and in Sections 1 and 12, Township 17 South, Range 3 West, all in Jefferson County, Alabama, as follows:

Being the pipeline Easement granted by Sloss Industries Corporation on June 15, 1998 to DTE Biomass Energy, Inc. and recorded in the Office of the Judge of Probate of Jefferson County, Alabama in Deed Book 9812, Page 2379, and further shown on the map attached on the next page. Being the same Easement terminated and returned to Walter Coke, Inc. (the successor to Sloss Industries Corporation) on November 29, 2012 by DTE Biomass Energy, Inc. and recorded in the Office of the Judge of Probate of Jefferson County, Alabama in Deed Book 201312, Page 1560.

And further being a part of the property conveyed unto Sloss-Sheffield Steel & Iron Company, the predecessor to Sloss Industries Corporation, on April 30, 1919 by E. I. du Pont de Nemours and Company and recorded in the Office of the Judge of Probate of Jefferson County, Alabama in Deed Book 983, Page 448.

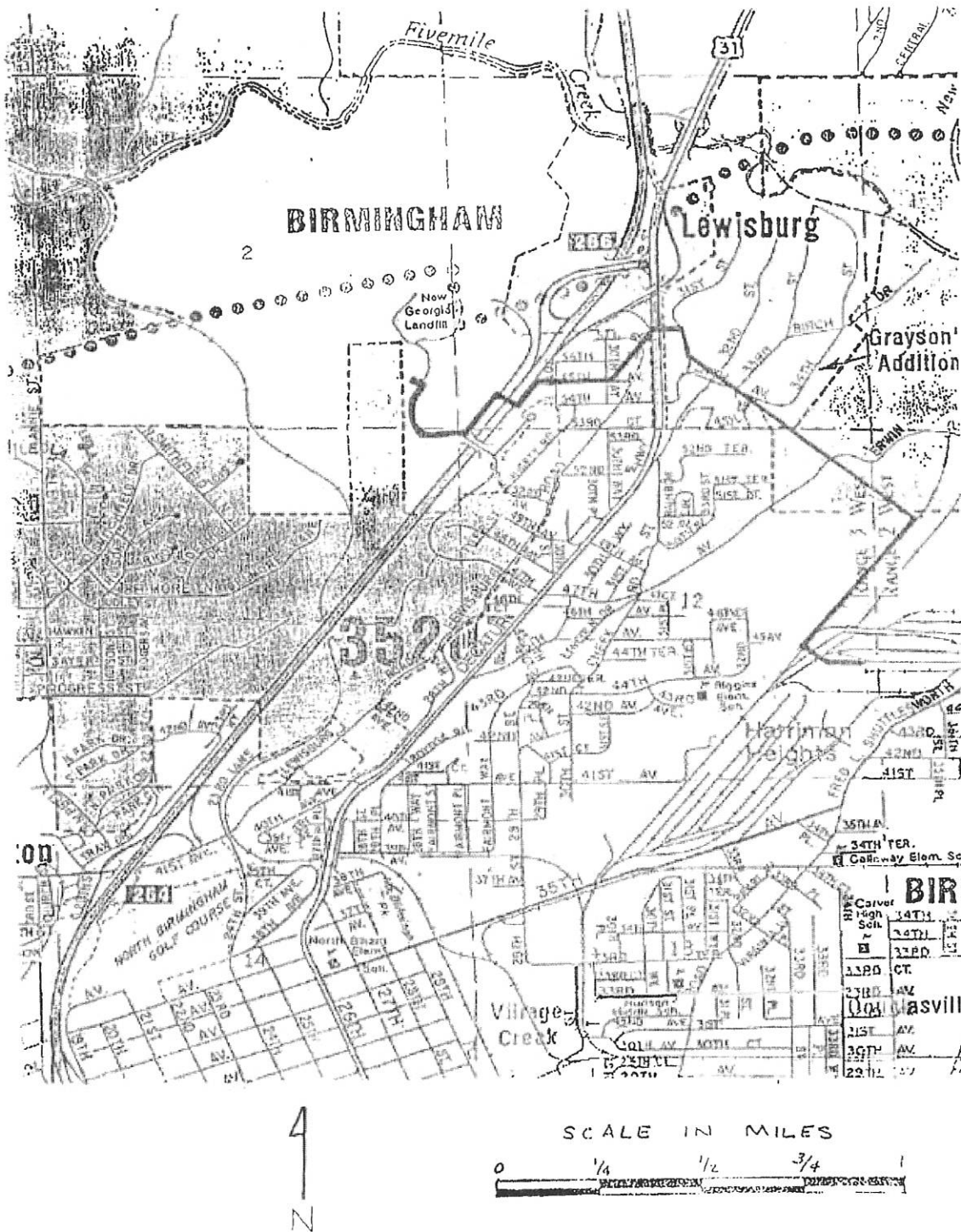
Subject to all out-conveyances, abandonments or vacations that are recorded in the Office of the Judge of Probate of Jefferson County, Alabama.

Source of Title:  
Deed Book 201312, Page 1560  
Deed Book 9812, Page 2379  
Deed Book 1362, Page 330  
Deed Book 983, Page 448

Tax Parcels:  
22-00-01-4-001-026.000  
22-00-01-4-003-012.000  
22-00-01-4-004-013.000  
22-00-01-4-007-014.000  
22-00-12-1-001-001.001  
And part of 23-00-07-2-000-003.000



EXHIBIT "A"





**EXHIBIT B**  
**EXCEPTIONS**

1. The lien for ad valorem property taxes and any other property-related taxes, dues or assessments for any tax year beginning in 2015, and all subsequent tax years, and any current use roll-back taxes, if assessed.

2. All restrictions, reservations, easements, servitudes, rights-of-way, leases, mineral leases and encumbrances, whether or not of record, that run with the land, and riparian rights incident to the land; provided that nothing herein or in the Asset Purchase Agreement shall be deemed to constitute the Grantee's consent to or acceptance of any unrecorded instrument of which Grantee does not have actual knowledge.

3. Any encroachment, overlap, violation, variation or adverse circumstances that would be disclosed by an accurate and complete survey and inspection of the land.

4. Any reservation or conveyance of minerals and other subsurface materials of every kind and character filed in the appropriate real property records on or before July 15, 2015, including, but not limited to, coal, oil, gas, sand, ore, kaolin, clay, stone and gravel in, on and under the land, together with mining rights and all other rights, privileges and immunities relating thereto, including any release of damages.

5. All applicable laws, rules, regulations, ordinances and orders of any government or governmental body, agency or entity, including, without limitation, zoning and other land use rules, regulations and ordinances and environmental laws, rules and regulations.



Send Tax Notice To:

ERP Compliant COKE, LLC  
Attn: Thomas M. Clarke  
15 Appledore Lane  
Natural Bridge, Virginia 24578

35.00

STATE OF ALABAMA

)

:

JEFFERSON COUNTY

)

County Division Code: AL039  
Inst. # 2016022674 Pages: 1 of 7  
I certify this instrument filed on  
3/10/2016 2:55 PM Doc: D  
Alan L. King, Judge of Probate  
Jefferson County, AL. Rec: \$35.00

Clerk: LFBESS

### STATUTORY WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that in consideration of the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, paid in hand to **WALTER MINERALS, INC.**, a Delaware corporation, and **JIM WALTER RESOURCES, INC.**, an Alabama corporation (collectively, the "Grantor"), by **ERP COMPLIANT COKE, LLC**, a Delaware limited liability company (the "Grantee"), the receipt and sufficiency of which are hereby acknowledged, and in consideration of that certain Asset Purchase Agreement dated January 31, 2016, by and among Grantor, and certain of its affiliates defined therein as "Sellers", Grantee, and certain of its affiliates defined therein as "Buyers", and J.W. Walter, Inc. (the "Asset Purchase Agreement"), the Grantor does hereby grant, bargain, sell and convey unto the Grantee the land described on Exhibit A attached hereto and made a part hereof, together with all improvements thereon and appurtenances thereto, situated in Jefferson County, Alabama (herein called the "Property"), subject, however, to the exceptions listed on Exhibit B attached hereto and incorporated herein. The transfer of the Property is subject to the terms of the Asset Purchase Agreement and has been approved by that certain pleading styled Order (I) Approving the Sale of Certain Non-Core Assets Free and Clear of Claims, Liens, Interests and Encumbrances; (II) Approving the Assumption and Assignment of Certain Executory Contracts and Unexpired Leases; and (III) Granting Related Relief, in the Chapter 11 proceeding styled *In Re: Walter Energy, Inc., et al.* (including Grantor), such proceeding being administered in the United States Bankruptcy Court for the Northern District of Alabama, Southern Division, under Case No. 15-02741.

The US Bankruptcy Order described above in Re: *Walter Energy, Inc. et al*, Case No. 15-02741, US Bankruptcy Court for the Northern District of Alabama, Southern Division, is recorded in Book 2016022670, Page \_\_\_\_\_, of the Jefferson County, Alabama Probate Court Records.



It is hereby covenanted and agreed between the Grantor and the Grantee that all covenants, conditions, agreements and undertakings contained herein shall extend and inure to the benefit of and be binding upon the respective heirs, executors, administrators, successors and assigns of the respective parties hereto, the same as if they were in every case named and expressed and the same shall be construed as covenants running with the land.

**TO HAVE AND TO HOLD** unto the Grantee and its successors and assigns in fee simple forever.

[Signature page follows]



IN WITNESS WHEREOF, the Grantor has caused this instrument to be duly executed on this 12 day of February, 2016.

WALTER MINERALS, INC., a  
Delaware corporation

By: [Signature]  
Name: Michael Griffin  
Title: Treasurer

STATE OF ALABAMA                     )  
  :  
JEFFERSON COUNTY                    )

I, the undersigned authority, a Notary Public in and for said county in said state, hereby certify that Michael Griffin, whose name as Treasurer of **WALTER MINERALS, INC.**, a Delaware corporation, is signed to the foregoing conveyance and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he/she, as such officer and with full authority, executed the same for and as the act of said corporation.

Given under my hand and official seal of office, this 12 day of February, 2016.

[ NOTARIAL SEAL ]



[Signature]  
Notary Public

My Commission Expires: December 2, 2019



JIM WALTER RESOURCES, INC., an  
Alabama corporation

By: [Signature]  
Name: Michael Griffin  
Title: VP & Treasurer

STATE OF ALABAMA                     )  
   :  
JEFFERSON COUNTY                    )

I, the undersigned authority, a Notary Public in and for said county in said state, hereby certify that Michael Griffin, whose name as Vice President & Treasurer of **JIM WALTER RESOURCES, INC.**, an Alabama corporation, is signed to the foregoing conveyance and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he/she, as such officer and with full authority, executed the same for and as the act of said corporation.

Given under my hand and official seal of office, this 12 day of February, 2016.

[ NOTARIAL SEAL



[Signature]  
Notary Public

My Commission Expires: December 2, 2019

This instrument was prepared without  
benefit of title examination by:

Meade Whitaker, Jr.  
Bradley Arant Boult Cummings LLP  
1819 Fifth Avenue North  
Birmingham, Alabama 35203



**Exhibit A – Legal Description**

**Walter Minerals, Inc. (as successor to United Land Corporation, as successor to U. S. Pipe Realty, Inc., as successor to United States Pipe & Foundry Company), and Jim Walter Resources, Inc. – Conveyance of any interest owned to ERP Compliant Coke, LLC**

**Jefferson County, Alabama:**

Any and all right, title and interest in and to the following described land:

The right-of-way for the Mary Lee Railroad, including spur tracks and side tracks from the Northwest Quarter of Section 13, Township 17 South, Range 3 West (at the By-Product Plant in Sections 12 and 13, Township 17 South, Range 3 West), to the north and west boundary of the Walter Coke, Inc. property (formerly the Sloss Industries Corporation property) in the Northwest Quarter of Section 6, Township 17 South, Range 2 West.

Whenever possible, said right-of-way shall be 100 feet wide, or 50 feet on either side of the center line of said Mary Lee Railroad as same is now constructed.

All of said right-of-way being located in the following Sections, Townships and Ranges, all in Jefferson County, Alabama:

Sections 6, 7 and 18, Township 17 South, Range 2 West;  
Sections 12 and 13, Township 17 South, Range 3 West.

Subject to all out-any conveyances, abandonments or vacations that are recorded in the Office of the Judge of Probate of Jefferson County, Alabama.

Source of Title:  
Deed Book 2634, Page 616

Tax Parcels:  
22-00-13-2-017-001.000  
22-00-13-2-018-002.000  
23-00-06-2-000-005.000  
23-00-07-3-001-003.000  
23-00-18-2-001-002.000



**EXHIBIT B**  
**EXCEPTIONS**

1. The lien for ad valorem property taxes and any other property-related taxes, dues or assessments for any tax year beginning in 2015, and all subsequent tax years, and any current use roll-back taxes, if assessed.

2. All restrictions, reservations, easements, servitudes, rights-of-way, leases, mineral leases and encumbrances, whether or not of record, that run with the land, and riparian rights incident to the land; provided that nothing herein or in the Asset Purchase Agreement shall be deemed to constitute the Grantee's consent to or acceptance of any unrecorded instrument of which Grantee does not have actual knowledge.

3. Any encroachment, overlap, violation, variation or adverse circumstances that would be disclosed by an accurate and complete survey and inspection of the land.

4. Any reservation or conveyance of minerals and other subsurface materials of every kind and character filed in the appropriate real property records on or before July 15, 2015, including, but not limited to, coal, oil, gas, sand, ore, kaolin, clay, stone and gravel in, on and under the land, together with mining rights and all other rights, privileges and immunities relating thereto, including any release of damages.

5. All applicable laws, rules, regulations, ordinances and orders of any government or governmental body, agency or entity, including, without limitation, zoning and other land use rules, regulations and ordinances and environmental laws, rules and regulations.



# Exhibit CX14





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

February 23, 2018

**Certified Mail**  
**Return Receipt Requested**

Don Wiggins, Manager of Technical Services  
ERP Compliant Coke, LLC  
3500 35<sup>th</sup> Avenue North  
Birmingham, Alabama 35207

RE: Remedy for Former Chemical Plant and Former Pig Iron Foundry  
Response to Comments and Final Decision  
EPA ID Number: ALD 000 828 848  
RCRA Docket Number: RCRA-04-2016-4250

Dear Mr. Wiggins:

The United States Environmental Protection Agency has completed its review of public comments received during the public comment period held for the proposed remedies at ERP Compliant Coke's Birmingham facility. Enclosed with this letter are the Agency's Response to Comments (RTC) and its Final Decision for both the Former Chemical Plant and the Former Pig Iron Foundry. The RTC provides the Agency's response to comments received during the public comment period. The Final Decision describes the selected remedy, including any modifications based on the Agency's RTC, the rationale for selecting the remedy, and outlines general and specific performance standards to which the remedy will be held in future monitoring and effectiveness reports.

With selection of the remedy, attention now turns to remedy implementation. The following are some key timeframes from the 2016 RCRA Section 3008(h) Administrative Order on Consent to keep in mind going forward:

- Pursuant to Section XII Financial Assurance, "[w]ithin 120 calendar days of RTC issuance for each remedy, Respondent shall submit to EPA for review and approval an Estimated Cost of the Corrective Measures Work to Be Performed that includes the total third party cost of implementing the CMS remedy, including any necessary long-term CMS costs."
- Pursuant to Section XIII Corrective Measures Implementation, "[w]ithin one hundred twenty (120) days of Respondent's receipt of notification of EPA's selection of the corrective measure(s), Respondent shall submit to the EPA a Corrective Measures Implementation Work Plan (s) ("CMI Work Plan"). Each CMI Work Plan shall include a QA/QC plan as well as a schedule and date for remedy construction completion." Please note that a CMI Work Plan will need to include not only any design considerations, but future reporting submittals (e.g., a CMI Construction Complete Report, a Long-Term Remedy Monitoring and Effectiveness Plan and subsequent reporting).



Finally, I want to commend ERP Compliant Coke for voluntarily agreeing to meet with the community within ninety calendar (90) days of this Final Decision to further discuss the community's recommendations contained in the Harriman Park Proposal – Ideas for Managing and Maintaining the Mineral Wool Piles Adjacent to the Community (dated August 28, 2017). Recall that one of the people met at the November 2, 2017, Public Meeting was Kimberly Speorl, Senior Planner with the City of Birmingham. As you heard Kimberly say, the City has a new Buffer Ordinance.<sup>1</sup> This new ordinance may serve as a useful guide from which to approach the recommendations in the Harriman Park Proposal. Therefore, it is suggested that you please consider including Ms. Speorl or another City planner during your future meeting(s) with the community.

If you have any questions concerning this matter, please contact me at (404) 562-9629 or [hardegree.wes@epa.gov](mailto:hardegree.wes@epa.gov). Legal inquiries should be directed to Joan Redleaf-Durbin at (404) 562-9544 or [Redleaf-Durbin.Joan@epa.gov](mailto:Redleaf-Durbin.Joan@epa.gov).

Sincerely,



Wesley Hardegree, Project Manager  
RCRA Corrective Action and Permitting Section  
RCRA Cleanup and Brownfields Branch

**Enclosures**

1. Response to Comments, Final Decision – Former Chemical Plant
2. Response to Comments, Final Decision – Former Pig Iron Foundry

Cc: Chris Griffith, ADEM (via email)  
Terry Rippstein, Terracon (via email)  
Kimberly Speorl, City of Birmingham (via email)  
Rev. E.O. Jackson, Harriman Park Working Committee (email)

<sup>1</sup> City of Birmingham - Title 1: Zoning Ordinance, Chapter 6: Landscaping, Buffering and Screening, Article III. Buffer Requirements.



**U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**RESPONSE TO COMMENTS  
FOR  
THE FORMER CHEMICAL PLANT AND  
THE FORMER PIG IRON FOUNDRY**

**ERP COMPLIANT COKE, LLC  
EPA I.D. Number: ALD 000 828 848  
RCRA Docket Number: RCRA-04-2016-4250**

**February 2018**



## PUBLIC NOTICE ACTIVITIES

The public comment period, covering the proposed remedies for the Former Chemical Plant and the Former Pig Iron Foundry, occurred from October 1, 2017, to November 14, 2017. A joint public meeting/hearing on the proposed remedies was held on November 2, 2017, in Birmingham, Alabama at the Bethel Baptist Church. Approximately 60 people attended the event. Participants included local residents, as well as representatives of the EPA, local and state government, and the Alabama Department of Environmental Management. Although a number of questions were raised during the public meeting, no formal comments (written or verbal) were offered during the public hearing on November 2<sup>nd</sup>. However, two entities did submit written comments, both of which were received on November 14, 2017.

## RESPONSE TO COMMENTS

All comments were carefully reviewed during the final selection of the remedy and are addressed in this Response to Comments (RTC). Issues, comments or concerns have been combined and edited for length.

No.	Narrative		Impact on Remedy
1.	Comment	<b>Former Chemical Plant, Mineral Wool Piles (MWP):</b> Because of the concern that removal of the MWPs would cause heavy metals to become airborne, the commenter supports the preference of the Harriman Park Community Working Committee to keep the MWPs in-place. The commenter then goes on to express concern that the current decision to keep the MWPs in-place could be changed in the future. The commenter believes the residents in the Northern Birmingham communities would benefit from an agreement with ERP Compliant Coke specifically outlining how long the company plans to leave the MWPs in place and a process by which they will work with and inform the community in the event that ERP Compliant Coke decides to move and/or sell the MWPs.	Remedy Unchanged
	EPA Response	See EPA Response to Comment 2.	
2	Comment	<b>Former Chemical Plant, MWPs:</b> With this comment, the commenter makes reference to Recommendations 5 and 6 from Harriman Park Proposal. a) Recommendation 5: The commenter states that it would be more beneficial to plant native species to Alabama as opposed to invasive species like vinca and ivy. b) Recommendation 6: The commenter references the Shuttlesworth air monitor operated by the Jefferson County Health Department (JCHD) and states that it would be prudent to engage JCHD with the three enumerated partners (i.e., City, EPA, Alabama Department of Environmental Management (ADEM)).	Remedy Unchanged
	EPA Response	Both Comments 1 and 2 are made in reference to the August 2017 Harriman Park Proposal – Ideas for Managing and Maintaining the Mineral Wool Piles (MWPs) Adjacent to the Community. The Harriman Park Proposal is not an EPA document, and its recommendations are not EPA recommendations. Rather, the Harriman Park Proposal is the outcome of a dialogue process fostered by EPA to help the community reach some general consensus on their suggested recommendations for what could happen with the MWPs.	



No.	Narrative	Impact on Remedy
	<p>The hope is that the six recommendations will serve as a starting point for further discussion between the community, ERP Compliant Coke and any other stakeholders. If the commenter wishes to be part of future discussions coming out of the Harriman Park Proposal, then the EPA suggests that close contact be maintained with the community leaders associated with the Harriman Park Proposal. ERP Compliant Coke has indicated their willingness to sit down with the Harriman Park Community Leaders within 90 days from EPA's Final Decision for the Former Chemical Plant and Former Pig Iron Foundry remedies.</p>	
3	<p><b>Comment</b></p> <p><b>Air Monitoring:</b> In this comment, the commenter references the 2016 Alabama Ambient Air Monitoring Plan, which includes Appendix A – the Annual Air Monitoring Network Plan developed by the JCDH. The commenter is pleased that the 2016 Plan included Particulate Matter (PM<sub>2.5</sub>) monitoring at the Shuttlesworth Air Monitoring Station. However, the commenter is perplexed as to why, contrary to statements made in Appendix A of the Plan, the PM<sub>2.5</sub> results are not publically accessible through the AirNow website located within the JCDH webpage.</p>	Remedy Unchanged
	<p><b>EPA Response</b></p> <p>This comment is not directed toward the proposed remedy that EPA public noticed. However, it was discussed with Todd Rinck, Chief of the EPA Region 4 Air Data &amp; Analysis Section (<a href="mailto:rinck.todd@epa.gov">rinck.todd@epa.gov</a>), who suggested that representatives from GASP can register for access to EPA's AirNow-Tech site (<a href="https://www.airnowtech.org/">https://www.airnowtech.org/</a>). Once on the AirNow-Tech site, GASP can download data for all monitors that report real-time data to AirNow, including PM<sub>2.5</sub> data from the Shuttlesworth air monitoring site (AQS # 01-073-6004). When GASP registers, please choose "Other Agency" from the drop down menu in the Agency section.</p> <p>Please feel free to contact Mr. Rinck if you have any questions surrounding this response.</p>	
4	<p><b>Comment</b></p> <p><b>General Comment, Public Notice Process:</b> The commenter expressed a general concern on the length of time EPA used to seek and receive public comments – 45 days is not long enough.</p>	Remedy Unchanged
	<p><b>EPA Response</b></p> <p>Paragraph 32 in the Resource Conservation and Recovery Act (RCRA) Section 3008(h) Administrative Order on Consent (Docket Number: RCRA-04-2016-4250), calls for the EPA to "...provide the public with an opportunity to review and comment on its selection of the proposed final corrective measure(s), including the detailed written description and justification for its selection in the Statement of Basis." Forty-five days is a very common period of time used by many federal and state regulatory agencies for the receipt of public comments on draft permits and remedy selections.</p>	
5	<p><b>Comment</b></p> <p><b>General Comment, SWMU Waste Management Areas (SMA):</b> The commenter included a series of questions surrounding the other SMAs and urged EPA to explain the origin of these areas and identify deadlines for the remediation of these remaining areas of contamination.</p>	Remedy Unchanged
	<p><b>EPA Response</b></p> <p>Due to the size of the property (~400 acres), and almost from the beginning of EPA's involvement with this property in 1989, the facility has been divided into smaller areas to help organize and direct the investigation of the scope and extent of contamination. Dividing a problem into smaller chunks is a common corrective action practice (e.g., within the Superfund program, sites are broken up similarly into Operable Units), and this division</p>	



No.	Narrative	Impact on Remedy
	<p>ultimately resulted in five distinct areas at this coking facility: Biological Treatment Facility (SMA 1), the Land Disposal Area (SMA 2), and the Coke Manufacturing Plant (SMA 3), Former Chemical Plant (SMA 4) and the Former Pig Iron Foundry (SMA 5).</p> <p>The Coke Manufacturing Plant is currently the next SMA to see a Statement of Basis, probably in 2018, with the remaining two SMAs to follow.</p>	
6	<p><b>Comment</b></p> <p><b>Former Chemical Plant, MWPs:</b> With this comment, various concerns are expressed with the MWPs.</p> <ul style="list-style-type: none"> <li>• The commenter wants to better understand EPA's authority;</li> <li>• The commenter wants the piles removed to avoid leaching of contaminants to groundwater;</li> <li>• If removal is not forthcoming, then the commenter wants the MWPs to be capped to protect against fugitive dust.</li> </ul>	Remedy Unchanged
	<p><b>EPA Response</b></p> <p>The EPA's jurisdiction is through a 2016 Administrative Order on Consent ("Order") issued 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 ("HSWA") of 1984, 42 U.S.C. § 6928(h). Section 3008(h) of RCRA, 42 U.S.C. § 6928(h), authorizes the Administrator of EPA or her delegatee to issue an order requiring corrective action or such other response which she deems necessary to protect human health or the environment, if, on the basis of any information, she determines that there is or has been a release of hazardous waste or hazardous constituents into the environment from a Facility that is, was, or should have been authorized to operate under Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).</p> <p>Given the above authority, no remedy was proposed for the MWPs because the sampling to date has not found the MWPs to present a level of risk that is unacceptable and needed to protect human health or the environment. For example:</p> <ul style="list-style-type: none"> <li>• Sampling of the MWPs included testing by the Synthetic Precipitation Leaching Procedure (SPLP), a procedure designed to simulate material left in-situ and exposed to rainfall and then determine the mobility of both organic and inorganic constituents within the material. The results from this testing do not indicate that the MWPs are a threat to groundwater due to leaching.</li> <li>• A human health risk assessment of the constituents found in the MWPs concludes the MWPs do not contain constituent levels warranting cleanup. The risk assessment also concludes that the constituent levels do not pose an unacceptable inhalation risk to offsite residents, both adults and children.</li> <li>• Air monitoring by JCHD at the nearby Shuttlesworth Air Monitoring Station (010736004) has not indicated the daily average of particular matter (PM, "dust"), either PM<sub>10</sub> or PM<sub>2.5</sub>, to be a current concern (i.e., results are below the 24-hour PM standards).</li> </ul>	
7	<p><b>Comment</b></p> <p><b>Former Chemical Plant, In-Situ Treatment:</b> The commenter is concerned that the remedy component, in-situ treatment, was prematurely selected before knowing the full cost and long term implications of the yet to be</p>	Remedy Unchanged



No.	Narrative	Impact on Remedy
	<p>determined chemical or biologic in-situ agent, and that other considerations like excavation, removal/disposal of contaminated soils were not considered.</p> <p>In-situ treatment was included as a component of the proposed remedy to assist/enhance the ability of another remedy component (groundwater extraction) in restoring groundwater to drinkable conditions.</p> <p>With any in-situ treatment, the goal is either to destroy, remove, or degrade the existing soil contamination that may be serving as an ongoing source of groundwater contamination. Sampling to date does not indicate any distinct source of soil contamination at the Former Chemical Plant that is amenable to excavation or removal. Rather, the sampling suggests that dispersed, residual sources may exist, and if they are not removed or degraded, then aquifer restoration pursued through groundwater extraction alone will take a much longer time or maybe even fail. Therefore, the goal of the in-situ soil source area treatment option will be to generally lower, as needed, soil concentrations of relevant contaminants in select subsurface areas. In addition, groundwater in the area of the treated soil areas will also receive some treatment as an ancillary benefit, which will in turn help to further reduce contaminant mass within the groundwater plume.</p> <p>Treatability investigations are not required in every case for an accurate evaluation of a remedial alternative to occur. Generically, both chemical and biological agents have been found to be useful in-situ treatment materials for the constituents at the Former Chemical Plant. The bench-scale studies, to be performed during the upcoming Corrective Measures Implementation phase, are designed to select which specific agent should be used in this particular case. In other words, in this case, there is confidence that the technology will work reasonably well, and performance of the bench-scale studies is an acceptable approach and was deemed preferable to further delay in remedy selection.</p> <p>As with any remedy pursued to cleanup environmental contamination, monitoring of the effectiveness will occur. If the remedy ultimately fails to not meet the cleanup objectives, then a reassessment of the remedial approach will occur and a new remedial path will be forged.</p>	
8	<p><b>Comment</b></p> <p><b>Former Chemical Plant, Vapor Intrusion:</b> The commenter is concerned that only one home was studied for vapor intrusion and that a new, more rigorous indoor vapor study should be developed and implemented.</p> <p><b>EPA Response</b></p> <p>At the time the year-long vapor intrusion study was undertaken (2013-2014), the contaminated groundwater had migrated to be slightly offsite. The house studied for vapor intrusion was the closest home to this offsite groundwater plume (i.e., worst case scenario).</p> <p>With the groundwater extraction system operating since 2013, an action that is helping to minimize and control the migration of groundwater contamination offsite, this studied house is now even farther from the source of possible subsurface vapors. For example, a buffer zone of approximately 100 feet generally has been used in preliminary determinations of which buildings to include in vapor intrusion investigations. The previously studied house is now ~120 to 250 feet from the general boundary of the groundwater plume. The next closest house is ~250 to 400 feet away from the general boundary of the groundwater plume.</p>	Remedy Unchanged



No.	Narrative	Impact on Remedy
9	<p><b>Comment</b> <u><b>Former Chemical Plant, Groundwater Treatment:</b></u> The commenter is concerned that the extracted groundwater is being recycled back into the industrial process.</p>	Remedy Unchanged
	<p><b>EPA Response</b></p> <p>The cooling of coke oven gas containing volatiles and semi-volatiles and the processing of ammonia, tar, naphthalene, phenol, light oil (benzene/toluene/xylene) generates major wastewater streams. This wastewater is ultimately sent to the Biological Treatment Facility (BTF), which is permitted under the National Pollutant Discharge Elimination System (NPDES).</p> <p>The volatile and semi-volatile constituents in the combined effluent from the groundwater extraction wells are basically the same as those found in the plant's process water. Basically, the extracted groundwater is being used in the light oil process: a system designed to collect light oil accomplished by absorption using petroleum wash oil to scrub the coke oven gas stream, followed by steam distillation of the enriched absorbent to recover the light oil.</p> <p>At a point in the light oil process there is a Wash Oil Decanter, which has debenzolized wash oil at elevated temperatures coming in from the light oil still. Direct contact water sprays accomplish some cooling of the oil as the oil enters the decanter. This is where the extracted groundwater is added to this process as a part of the makeup of direct cooling water addition. Water and muck are separated from the oil in the decanter and the oil flows to the hot wash oil circulating tank. The contact water flows to the muck tank. The muck tank water is pumped to the muck decanter in order to further separate contact water, muck and oil. Contact water is pumped to T-62 liquor collecting tank. This T-62 liquor collecting tank collects all liquors of the coke making process and sends them to the Weak Liquor Tanks, which supply the Ammonia still operation. Water leaving the ammonia stills is then sent to the Equalization tanks prior to being released to the BTF.</p> <p>The EPA believes the recycling of this extracted groundwater back into the manufacturing system is both a protective and economical action.</p>	
10	<p><b>Comment</b> <u><b>Former Pig Iron Foundry, Risk Assessment Receptors:</b></u> The commenter wonders why trespassers were not included in the risk assessment for the Former Pig Iron Foundry when trespassers were included in the risk assessment for the Former Chemical Plant.</p>	Remedy Unchanged
	<p><b>EPA Response</b></p> <p>Although the act of knowingly entering another person's property without permission cannot be prevented, trespassers are generally not anticipated on an operating and secured industrial facility.</p> <p>The trespasser scenario was evaluated at the Former Chemical Plant, and this scenario, which was performed with conservative exposure and ingestion assumptions, did not show risk levels necessary to protect human health. With that information, the risk assessment for the Former Pig Iron Foundry, an even more central area of the facility and with less contamination, did not include a trespasser analysis.</p>	



**U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**FINAL (REMEDY) DECISION  
FOR  
THE FORMER CHEMICAL PLANT**

**ERP COMPLIANT COKE, LLC  
EPA I.D. Number: ALD 000 828 848  
RCRA Docket Number: RCRA-04-2016-4250**

**February 2018**



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## I. INTRODUCTION

Pursuant to the August 11, 2016, Resource Conservation and Recovery Act (RCRA) Section 3008(h) Administrative Order on Consent (Order), ERP Compliant Coke agreed to study remedial alternatives and implement the EPA-approved remedies at forty-five Solid Waste Management Units (SWMUs) and six Areas of Concern (AOCs), which are grouped into the following five Solid Waste Management Areas (SMAs):

1. SMA 1 - Biological Treatment Facility
2. SMA 2 - Land Disposal Area
3. SMA 3 - Coke Manufacturing Plant
4. SMA 4 - Former Chemical Plant
5. SMA 5 - Former Pig Iron Foundry

This Final Decision only concerns the Former Chemical Plant and its associated SWMUs and AOCs identified in the 2016 Order (see Table 1). The proposed remedy for the Former Pig Iron Foundry, which was public noticed at the same time as the proposed remedy for the Former Chemical Plant, will be addressed in a separate Final Decision document. The remaining three SMAs have yet to reach the proposed remedy phase.

Table 1. SWMUS and AOCs	
SMWU 26 – Main Process Building	SWMU 33 – Plant Drum Storage Area
SWMU 27 – Floor Drain System	SWMU 34 – Wastewater Neutralization System
SWMU 28 – Sulfonation Floor Drain	SWMU 35 – Mineral Wool Waste Piles
SWMU 29 – Product Tank Containment Area	SWMU 36 – Used Oil Tank
SWMU 30 – Centrifuge Waste Water Tank	SWMU 42 – Former Above Ground Storage Tanks (ASTs)
SWMU 31 – Monohydrate Floor Drain and Sump	AOC B – Drainage Ditch next to Shuttlesworth Drive and 35th Avenue
SWMU 32 – Drum Storage Area	AOC D – Former Chemical Plant (FCP) Groundwater Plume

## II. BACKGROUND

### A. Risk and Proposed Remedy

Remedial action (i.e., environmental cleanup) is required if environmental contamination fails any one of the four standard EPA remediation triggers.<sup>1</sup> As shown in Table 2, some of these remediation triggers have been exceeded at the Former Chemical Plant. Therefore, on October 1, 2017, the recommended remedy found in the facility's April 14, 2017, Corrective Measure Study Report and identified as **Alternative 5: Land Use Controls + In-Situ Soil Source Area Treatment + Groundwater Removal and Treatment + Groundwater Monitoring**, was proposed to the public as the remedy to address the identified risks.

<sup>1</sup> In general, remediation is needed if at least one of the following four standard EPA remediation triggers are exceeded:

- The cumulative excess carcinogenic site risk to an individual exceeds 1E-04;
- The non-carcinogenic hazard index is greater than 1;
- Site contaminants cause adverse environmental impacts; or
- Chemical-specific standards are exceeded (e.g., drinking water standards aka maximum contaminant levels (MCL)).



**Table 2. Evaluation of Remediation Triggers**

EPA Remediation Trlgger	Analysis		Is there an Identified Risk to Assess for Possible Cleanup?
	Receptor	Baseline Risk Assessment Finding	
The cumulative excess carcinogenic site risk to an individual exceeds 0.0001 (i.e., 1E-04).*	Industrial Worker	Cumulative excess carcinogenic site risk was calculated to be 2.7E-03 and 1.6E-02, current and future risk respectively. Groundwater is the predominant factor in exceeding the cumulative site risk.	Yes
	Construction Worker	Cumulative excess carcinogenic site risk was calculated to be 5.6E-04 and 5.6E-04, current and future risk respectively. Groundwater is the predominant factor in exceeding the cumulative site risk.	Yes
	Trespasser	Cumulative excess carcinogenic site risk was calculated to be 5.6E-06 for both current and future risk.	No
	Resident	For adult and child residents, the excess carcinogenic risk from the Mineral Wool Piles via an inhalation route of exposure was found to be 1.9E-07 and 2.3E-07, respectively.***	No
The non-carcinogenic hazard index is greater than 1 (i.e., 1E 00).**	Industrial Worker	Non-carcinogenic hazard index was calculated to be 2.9E+02 and 6.2E+02, current and future risk respectively. Groundwater is the predominant factor in exceeding the cumulative site risk.	Yes
	Construction Worker	Non-carcinogenic hazard index was calculated to be 3.7E+02 and 3.7E+02, current and future risk respectively. Groundwater is the predominant factor in exceeding the cumulative site risk. Subsurface soil is also a minor contributing factor in exceeding the cumulative site risk.	Yes
	Trespasser	Non-carcinogenic hazard index was calculated to be 1.4E-02 for both current and future risk.	No
	Resident	For adults and children, the noncancer hazard index for the Mineral Wool Piles via an inhalation route of exposure was calculated to be 8.6E-05 and 1.7E-04, respectively.***	No
Site contaminants cause adverse environmental impacts.	No areas of ecological significance exist at SMA 4.		No
Chemical-specific standards are exceeded.	Drinking water standards (aka maximum contaminant levels (MCL)) have been exceeded in wells within SMA 4 for the following constituents: Benzene, Chlorobenzene, Cis-1,2-Dichloroethene, and Vinyl Chloride.		Yes
Notes			
* A risk level of 1E-04 represents an increase of one additional person out of 10,000 developing cancer over the course of a lifetime of exposure. Risks calculated to exceed 1E-04 for a receptor are deemed to have exceeded a protective level and remedial action is needed. When a facility's calculated cumulative risk for a receptor exceeds 1E-04, EPA's goal is to reduce the threat from carcinogenic contaminants such that, for any medium, the excess lifetime risk of cancer to such a receptor generally falls within a range from one in ten thousand to one in one million (i.e., 1E-04 to 1E-06).			
** As the hazard index exceeds 1.0, the potential for adverse health effects increases. Risks calculated to exceed 1.0 are deemed to have exceeded a protective level and remedial action is needed.			



**Table 2. Evaluation of Remediation Triggers**

EPA Remediation Trigger	Analysis	Is there an Identified Risk to Assess for Possible Cleanup?
<p>*** Given the community's concern regarding the Mineral Wool Piles, the risk to nearby residents from the piles was evaluated as if it were soil. Although the risk assessment was based on the facility's current and reasonably expected future uses as an operating industrial facility with restricted access, in the case of the Mineral Wool Piles, it is possible that some material from the pile may become airborne, disperse in wind, and migrate off-site causing some exposure. Because of this potentially complete pathway, nearby residents (both adult and children) were evaluated for inhalation exposure to the constituents present in the Mineral Wool Piles.</p>		

## B. Facility-Specific Corrective Action Objectives

Seven Facility-Specific Corrective Action Objectives were identified to address the risks listed in Table 1. These facility-specific objectives are developed from the EPA's General Corrective Action Performance Standards (see Table 3).<sup>2</sup>

**Table 3. Facility-Specific Corrective Measure Objectives**

No.	Environmental Media	Corrective Measures Objective
1	Soil	Maintain, in perpetuity, land use as industrial, a setting that has been found to be protective for the detected soil concentrations.
2	Soil	Ensure that industrial/commercial workers, construction workers, and trespassers are not exposed to unacceptable levels of soil contaminants.
3	Soil	Minimize the potential for soil contaminants to leach and contaminant groundwater or adversely impact groundwater cleanup.
4	Groundwater	Restore groundwater to maximum beneficial use, which in this case is as a drinking water aquifer.*
5	Groundwater	While aquifer restoration is sought, hydraulically control the groundwater plume in order to keep contamination that is above identified cleanup standards from expanding and/or migrating offsite.
6	Groundwater	Remove significant sources of subsurface mass.**

<sup>2</sup> General Corrective Action Performance Objectives (aka RCRA Cleanup Threshold Criteria) include the following:

1. **Protect Human Health and the Environment (EPA's General Mandate for the RCRA Statute):** Remedies must be protective of human health and the environment. Remedies usually meet this criterion by meeting the second (meet cleanup goals) and third (source control) criteria. However, this first criterion also serves to ensure remedies include protective activities that would not necessarily be needed to achieve the other criteria. As such, remedies may include those measures that are needed to be protective, but are not directly related to media cleanup, source control or management of wastes. An example would be a requirement to provide alternative drinking water supplies in order to prevent exposures to releases from an aquifer used for drinking water purposes.
2. **Attain Media Cleanup Standards:** Remedies must achieve the chemical specific cleanup standards for each media, including restoration of groundwater to drinking water standards, or any other standards established by statute. The standards must be either background, promulgated federal and state standards or risk-derived standards. Selection of cleanup standards also requires the establishment of points of compliance which represent where the media cleanup levels are to be achieved; remediation time frame which is the site-specific schedule for a remedy (including both the time frame to construct the remedy and estimate of the time frame to achieve the cleanup levels at the points of compliance).
3. **Control of Sources of Releases:** Remedies must control the sources of release(s) so as to reduce or eliminate, to the extent practicable, further releases of hazardous waste or hazardous constituents that may pose a threat to human health and the environment. In this context, "source" includes both the location of the original release as well as locations where significant mass of contaminants may have migrated and remain in a distinct geographic area.



7	Groundwater	While aquifer restoration is sought, control current land use exposures (e.g., industrial/commercial workers, construction workers, and trespassers) and potential future exposures (residents) to groundwater above the identified cleanup standards.
<b>Notes</b> * It is EPA's policy to determine protective media cleanup objectives for groundwater remedies considering the use, value, and vulnerability of the groundwater resource, and all potential pathways that could result in human or ecological exposure to contaminants (Final Comprehensive State Ground Water Protection Program Guidance, December 1992). Typically, the groundwater use designation or classification system is the starting point for determining the appropriate reasonable expected uses and exposures to evaluate risks and identify groundwater cleanup levels.  ** Reaching restoration of groundwater will not occur unless the original source is remediated/eliminated. In this context, "sources" includes both the location of the original release as well as locations where significant mass of contaminants may have migrated and remain in a distinct geographic area.		

### III. SELECTED REMEDY – Alternative 5: Land Use Controls + In-Situ Soil Source Area Treatment + Groundwater Removal and Treatment + Groundwater Monitoring

The recommended remedy found in the facility's April 14, 2017, Corrective Measure Study Report and proposed to the public on October 1, 2017, is identified as Alternative 5: Land Use Controls + In-Situ Soil Source Area Treatment + Groundwater Removal and Treatment + Groundwater Monitoring. This alternative can reasonably be concluded to satisfy all of the Facility-Specific Corrective Action Objectives found in Table 3; therefore, it is EPA's Final Decision that Alternative 5, which consists of the following components, be the remedy for the Former Chemical Plant.

- Land Use Controls: Land use controls are administrative means to protect current and future human exposure to unacceptable environmental contamination. This protection will be accomplished through the following techniques/techniques:
  - Land Use Control Plan (LUCP) developed by the Facility (and overseen by EPA)
  - An Environmental Covenant secured under the Alabama Uniform Environmental Covenants Act, Ala. Code §§ 35-19-1 to 35-19-14 (2007 Cum. Supp.).
- In-Situ Soil Source Area Treatment/In-Situ Groundwater Treatment: Chemicals or bacteria (e.g., zero valent iron, yeast extract, micronutrients, potassium permanganate, etc.) will be used with the purpose of helping prevent any further release of contaminants from the soil to the groundwater and aiding in advancing the groundwater remediation. Bench scale studies will need to be conducted to determine the appropriate chemicals or bacteria to be used, the concentrations, locations, etc.
- Groundwater Removal and Treatment: The hydraulic control well network, which was installed under an Interim Measures in 2013 to control the VOC groundwater plume and currently consists of 6 extraction wells, will continue. The recovered groundwater will be used as process water for the coke plant and will eventually cycle to the Facility's Biological Treatment Facility (BTF) for subsequent discharge in compliance with the Facility's NPDES Permit.
- Groundwater Monitoring: Long-term groundwater monitoring will occur to assess the effectiveness of the overall remediation system.

With this remedy, all of the SWMUs and AOCs listed in Table 1, except AOC D – Former Chemical Plant Groundwater Plume, are no further action. The remedy components concerning soil are not easily associated with any particular unit listed in Table 1. The broad concerns with the soil addressed by this remedy are now subsumed by a new AOC G – Former Chemical Plant Dispersed Soil Contamination.



#### IV. FUTURE PERFORMANCE, MONITORING AND EFFECTIVENESS OF SELECTED REMEDY

The selected remedy will be assessed against the following facility-specific objectives and cleanup standards:

##### A. Facility-Specific Corrective Action (Remedy) Objectives

The selected remedy will conform with the Facility-Specific Corrective Action Objectives listed in Table 3 of this Final Decision.

##### B. Facility-Specific Cleanup Standards

The success of the selected remedy will be measured against the numeric and non-numeric cleanup standards listed in Tables 4 through 7.

Table 4. Numeric Cleanup Standards for Facility-Specific Groundwater Objective 4 (Groundwater Restoration) and Groundwater Objective 5 (Hydraulic Control)		
Contaminant	Groundwater	Point of Compliance
	Concentration (ug/L)	
1. Benzene	5 *	Throughout the Plume
2. Benzo(a)anthracene	0.03 **	
3. Benzo(a)pyrene	0.2 *	
4. Benzo(b)fluoranthene	0.25 **	
5. Chlorobenzene	100 *	
6. Cis-1,2-Dichloroethene	70 *	
7. Dibenz(a,h)anthracene	0.025 **	
8. Indo[1,2,3-cd]pyrene	0.25 **	
9. Methylene Chloride	5 *	
10. Napthalene	0.17 **	
11. Trichloroethene	5 *	
12. Toluene	1,000 *	
13. Pentachlorophenol	1 *	
14. Vinyl Chloride	2 *	
15. 1,2,4-Trichlorobenzene	70 *	
16. 1,2-Dichloroethane	5 *	
17. 1,4-Dichlorobenzene	75 *	
18. 1,4-Dioxane	0.46 **	
* Maximum Contaminant Level (MCL)		
** Carcinogenic Tap Water Regional Screening Level (June 2017)		

Table 5. Numeric Cleanup Standards* for Facility-Specific Groundwater Objective 6 (Source Removal) and Soil Objective 3 (Leaching)	
Contaminant	Groundwater Protection Soil Screening Levels (leachability)
	Concentration (mg/kg)
Arsenic	6
Benzene	0.11
Benzo(a)anthracene	1



Table 5. Numeric Cleanup Standards* for Facility-Specific Groundwater Objective 6 (Source Removal) and Soil Objective 3 (Leaching)	
Contaminant	Groundwater Protection Soil Screening Levels (leachability)
	Concentration (mg/kg)
Benzo(b)fluoranthene	2
Carbazole	0.1
Chlorobenzene	3.1
Dibenzofuran	0.015
Methylene chloride	0.033
Naphthalene	0.026
Toluene	31
Vinyl chloride	0.017
1-Methylnaphthalene	0.006
3 & 4 Methylphenol	0.17
4-Methylphenol (p-cresol)	0.15
<p>* These soil leaching standards are site specific soil screening levels from Appendix G of the Phase III RCRA Facility Investigation (RFI) Report (March 2009). They constitute the lowest target values that soil might need to reach in order for groundwater cleanup to be obtained/maintained. Soil levels higher than those listed here may turn out to be acceptable if Facility-Specific Groundwater Objective 4 (aquifer restoration) can be reached. In other words, the leachability cleanup standards are not to be strictly interpreted as levels to be met at every soil sample location. Instead, they are to be applied in coordination with the success in meeting the cleanup standards for groundwater restoration listed in Table 4.</p>	

Table 6. Numeric Cleanup Standards*** for Facility-Specific Soil Objectives 1 and 2 (Land Use Controls)				
Contaminant	Industrial/Commercial Worker		Construction Worker	
	Surface Soil (0-1 ft)	Groundwater	Subsurface Soil (2-15 ft)	Groundwater
	Concentration (mg/kg)	Concentration (ug/L)	Concentration (mg/kg)	Concentration (ug/L)
1. Arsenic	19 *	N/A	N/A	N/A
2. Benzene	N/A	15 *	409 **	110 **
3. Benzo(a)anthracene	29 *	0.08 *	N/A	N/A
4. Benzo(a)pyrene	2.9 *	0.005 *	28 *	N/A
5. Benzo(b)fluoranthene	29 *	0.09 *	N/A	N/A
6. Chlorobenzene	N/A	261 **	1,171 **	222 **
7. Chromium	65 *	N/A	N/A	N/A
8. Cis-1,2-Dichloroethene	N/A	202 *	N/A	N/A
9. Dibenz(a,h)anthracene	2.9 *	0.003 *	N/A	N/A
10. Indo[1,2,3-cd]pyrene	29 *	0.003 *	N/A	N/A
11. Methylene Chloride	N/A	547 *	N/A	N/A
12. Naphthalene	N/A	5.18 *	N/A	16 **
13. Trichloroethene	N/A	9.54 **	N/A	9.54 **
14. Toluene	N/A	5,278 **	21,785 **	16,382 **
15. Pentachlorophenol	N/A	0.51 *	N/A	N/A
16. Vinyl Chloride	N/A	3.7 *	N/A	317 **
17. 1,2,4-Trichlorobenzene	N/A	12 *	N/A	12 **
18. 1,2-Dichloroethane	N/A	5.4 *	N/A	31.2 **
19. 1,4-Dichlorobenzene	N/A	15 *	N/A	327 *
20. 1,4-Dioxane	N/A/	17 *	N/A	N/A
N/A Not Applicable				
* April 14, 2017 Risk Assessment, Estimated Lifetime Cancer Risk (ELCR) = 10E-05				



**Table 6. Numeric Cleanup Standards\*\*\* for  
Facility-Specific Soil Objectives 1 and 2 (Land Use Controls)**

Contaminant	Industrial/Commercial Worker		Construction Worker	
	Surface Soil (0-1 ft)	Groundwater	Subsurface Soil (2-15 ft)	Groundwater
	Concentration (mg/kg)	Concentration (ug/L)	Concentration (mg/kg)	Concentration (ug/L)

\*\* April 14, 2017 Risk Assessment, Hazardous Quotient = 1

\*\*\* These soil cleanup standards constitute the level that is protective of humans in an industrial setting. At this time, the soil concentrations and distribution do not warrant active remediation given the current industrial land use. These industrial cleanup levels serve as the basis for applying institutional controls (see Table 7), and can be used to evaluate any future soil results obtained within SMA-4 in order to help in determining what, if any, active remediation is needed.

**Table 7. Narrative (Non-Numeric) Cleanup Standards for  
Facility-Specific Soil Objectives 1 and 2 and Groundwater Objective 7 (Land Use Controls)**

Cleanup "Technology"	Comment on Cleanup "Technology"	Implementation Technique / Mechanism	Component of Cleanup Standard	Point of Compliance
Institutional Controls	<p>With use of a current and reasonable setting of industrial/commercial land use, the need to actively address soil contamination was deemed not to be needed. Groundwater contamination does exist at levels requiring active remediation.</p> <p>In order to satisfy Facility-Specific Soil Corrective Measure Objectives 1 and 2 and to satisfy Facility-Specific Corrective Measure Objective 4, institutional controls are needed to ensure that land use does not inadvertently and/or unknowingly become residential in the future, and to protect workers from unknowingly being exposed to contamination that might be at unacceptable levels.</p>	Environmental Covenant	<p>An Environmental Covenant shall be secured under the Alabama Uniform Environmental Covenants Act, Ala. Code §§ 35-19-1 to 35-19-14 (2007 Cum. Supp.).</p> <p>The Environmental Covenant shall be entered with the intent of providing clear and enforceable rules for the perpetual care of the Facility's real estate in light of the selected remedy. The Environmental Covenant shall list components of the LUCP that best reside long term with the land as opposed to specific operating procedures at the Facility (e.g., deed restriction to limit site to industrial land use only; deed restriction to limit use of groundwater, etc.).</p>	Throughout the SMA
Institutional Controls		Corporate Land Use Plan (LUCP)	<p>The LUCP, at a minimum, shall:</p> <ol style="list-style-type: none"> <li>1. Acquire a deed restriction on land and groundwater use through securing an Environmental Covenant.</li> <li>2. Explain the land use controls to be used to protect workers, contractors, public from exposure to contaminated environmental media (e.g., permits to perform any digging activities and the proper personal protective equipment (PPE), fences/signs as necessary to prevent unauthorized access, etc.).</li> <li>3. Include all necessary information or structure</li> </ol>	Throughout the SMA



Table 7. Narrative (Non-Numeric) Cleanup Standards for Facility-Specific Soil Objectives 1 and 2 and Groundwater Objective 7 (Land Use Controls)				
Cleanup "Technology"	Comment on Cleanup "Technology"	Implementation Technique / Mechanism	Component of Cleanup Standard	Point of Compliance
			necessary to implement the LUCP (e.g., points-of-contact; monitoring program; notification procedures for LUCP violations, pending sale/lease of property, etc.; and reporting).	

## V. DECISION

Based on the administrative record compiled for this corrective action remedy, I have determined that the selected remedy described in this document will be protective of human health and the environment.

2/22/18  
Date

  
Carol J. Monell  
Acting Director  
Resource Conservation and Restoration Division



**U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**FINAL (REMEDY) DECISION  
FOR  
THE FORMER PIG IRON FOUNDRY**

**ERP COMPLIANT COKE, LLC  
EPA I.D. Number: ALD 000 828 848  
RCRA Docket Number: RCRA-04-2016-4250**

**February 2018**



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## I. INTRODUCTION

Pursuant to the August 11, 2016, Resource Conservation and Recovery Act (RCRA) Section 3008(h) Administrative Order on Consent (Order), ERP Compliant Coke agreed to study remedial alternatives and implement the EPA-approved remedies at forty-five Solid Waste Management Units (SWMUs) and six Areas of Concern (AOCs), which are grouped into the following five Solid Waste Management Areas (SMAs):

1. SMA 1 - Biological Treatment Facility
2. SMA 2 - Land Disposal Area
3. SMA 3 - Coke Manufacturing Plant
4. SMA 4 - Former Chemical Plant
5. SMA 5 - Former Pig Iron Foundry

This Final Decision concerns only the Former Pig Iron Foundry and its associated SWMUs and AOCs (see Table 1). The proposed remedy for the Former Chemical Plant, which was public noticed at the same time as the proposed remedy for the Former Pig Iron Foundry, will be addressed in a separate Final Decision document. The remaining three SMAs have yet to reach the proposed remedy phase.

**Table 1. SWMUs and AOC at SMA 5 – Former Pig Iron Foundry**

SMWU 43 – Pig Machine Slurry Pits	SWMU 45 – Slag Drying Beds
SWMU 44 – Blast Furnace Ash Boiler Pit	AOC C – Former Pig Iron Foundry

## II. BACKGROUND

### A. Risk and Proposed Remedy

Remedial action (i.e., environmental cleanup) is required if the facility's contamination fails any one of the four standard EPA remediation triggers.<sup>1</sup> As shown in Table 2, none of these remediation triggers have been exceeded at the Former Pig Iron Foundry, which indicates that conditions at the Former Pig Iron Foundry do not warrant remedial action to protect industrial or construction workers.

**Table 2. Evaluation of Risk Remediation Triggers – Former Pig Iron Foundry**

EPA Remediation Trigger	Analysis		Is there an Identified Risk to Assess for Possible Cleanup?
	Receptor	Baseline Risk Assessment Finding	
The cumulative excess carcinogenic site risk to	Industrial Worker	Cumulative excess carcinogenic site risk was calculated to be 9.7E-06.	No

<sup>1</sup> In general, remediation is needed if at least one of the following three standard EPA remediation triggers are exceeded:

- The cumulative excess carcinogenic site risk to an individual exceeds 1E-04;
- The non-carcinogenic hazard index is greater than 1;
- Site contaminants cause adverse environmental impacts; or
- Chemical-specific standards are exceeded (e.g., drinking water standards aka maximum contaminant levels (MCL)).



**Table 2. Evaluation of Risk Remediation Triggers – Former Pig Iron Foundry**

EPA Remediation Trigger	Analysis		Is there an Identified Risk to Assess for Possible Cleanup?
an individual exceeds 0.0001 (i.e., 1E-04).*	Construction Worker	Cumulative excess carcinogenic site risk was calculated to be 7.7E-06.	No
The non-carcinogenic hazard index is greater than 1 (i.e., 1E 00).**	Industrial Worker	Non-carcinogenic hazard index was calculated to be 2.2E-02.	No
	Construction Worker	Non-carcinogenic hazard index was calculated to be 2.3E-01.	No
Site contaminants cause adverse environmental impacts.	No areas of ecological significance exist at SMA 5.		No
Chemical-specific standards are exceeded.	Based on groundwater sampling conducted around SMA 5 during previous investigations, there has been no indication that drinking water standards (aka maximum contaminant levels (MCL)) have been exceeded at SMA 5.		No

**Notes:**

\* A risk level of 1E-04 represents an increase of one additional person out of 10,000 developing cancer over the course of a lifetime of exposure. Risks calculated to exceed 1E-04 are deemed to have exceeded a protective level and remedial action is needed. When a facility's cumulative risk exceeds 1E-04, EPA's goal is to reduce the threat from carcinogenic contaminants such that, for any medium, the excess risk of cancer to an individual exposed over a lifetime generally falls within a range from one in ten thousand to one in one million (i.e., 1E-04 to 1E-06).

\*\* As the hazard index exceeds 1.0, the potential for adverse health effects increases. Risks calculated to exceed 1.0 are deemed by EPA to have exceeded a protective level and remedial action is needed.

## B. Facility-Specific Corrective Action Objectives

Although the risk levels identified in the Baseline Risk Assessment and summarized in Table 2 of this Final Decision do not exceed the levels the EPA has identified as triggering the need for remediation under current land use, the risk assessment limited its risk analyses to those exposures expected in an industrial setting (i.e., industrial/commercial workers and construction workers). Because constituents will remain at levels exceeding residential risk screening levels, action is needed to ensure that land use does not inadvertently and/or unknowingly become residential in the future. Therefore, application of the EPA's General Corrective Action Performance Standards<sup>2</sup> resulted in one Facility-Specific Corrective Action Objectives for the Former Pig Iron Foundry (see Table 3).

<sup>2</sup> General Corrective Action Performance Objectives (aka RCRA Cleanup Threshold Criteria) include the following:

1. Protect Human Health and the Environment (EPA's General Mandate for the RCRA Statute): Remedies must be protective of human health and the environment. Remedies usually meet this criterion by meeting the second (meet cleanup goals) and third (source control) criteria. However, this first criterion also serves to ensure remedies include protective activities that would not necessarily be needed to achieve the other criteria. As such, remedies may include those measures that are needed to be protective, but are not directly related to media cleanup, source control or management of wastes. An example would be a requirement to provide alternative drinking water supplies in order to prevent exposures to releases from an aquifer used for drinking water purposes.
2. Attain Media Cleanup Standards: Remedies must achieve the chemical specific cleanup standards for each media, including restoration of groundwater to drinking water standards, or any other standards established by statute. The standards must be either background, promulgated federal and state standards or risk-derived standards. Selection of cleanup standards also requires the establishment of points of compliance which represent where the media cleanup levels are to be achieved; remediation time frame which is the site-specific schedule for a remedy



Table 3. Facility-Specific Corrective Measure Objectives – Former Pig Iron Foundry		
No.	Environmental Media	Corrective Measures Objective
1	Soil	Maintain, in perpetuity, land use as industrial, a setting that has been found to be protective for the detected soil concentrations.
2	Soil	Ensure that industrial/commercial workers, construction workers, and trespassers are not exposed to unacceptable levels of soil contaminants.*
<b>Notes</b> * Although no unacceptable industrial risk was found to exist at the Former Pig Iron Foundry, the Facility has also chosen to have its Land Use Control Plan also apply to the Former Pig Iron Foundry for consistency in implementation and to be overly protective.		

### III. SELECTED REMEDY

The recommended remedy found in the facility's April 14, 2017, Corrective Measure Study Report and proposed to the public on October 1, 2017, is identified as **Alternative 2: Land Use Controls**. This alternative can reasonably be concluded to satisfy the Facility-Specific Corrective Action Objectives found in Table 3; therefore, it is EPA's Final Decision that Alternative 2, which consists of the following components, be the remedy for the Former Pig Iron Foundry.

- **Land Use Controls:** The Land Use Controls are administrative means to protect current and future human exposure to unacceptable environmental contamination. This protection will be accomplished through the following techniques/components:
  - Land Use Control Plan (LUCP) developed by the Facility (and overseen by EPA)
  - An Environmental Covenant secured under the Alabama Uniform Environmental Covenants Act, Ala. Code §§ 35-19-1 to 35-19-14 (2007 Cum. Supp.).

### IV. FUTURE PERFORMANCE, MONITORING AND EFFECTIVENESS OF SELECTED REMEDY

The selected remedy will be assessed against the following facility-specific objectives and cleanup standards:

#### A. Facility-Specific Corrective Action (Remedy) Objectives

The selected remedy will conform with the Facility-Specific Corrective Action Objectives listed in Table 3 of this Final Decision.

#### B. Facility-Specific Cleanup Standards

The success of the selected remedy will be measured against the numeric and non-numeric cleanup standards listed in Table 3.

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(including both the time frame to construct the remedy and estimate of the time frame to achieve the cleanup levels at the points of compliance).

3. **Control of Sources of Releases:** Remedies must control the sources of release(s) so as to reduce or eliminate, to the extent practicable, further releases of hazardous waste or hazardous constituents that may pose a threat to human health and the environment. In this context, "source" includes both the location of the original release as well as locations where significant mass of contaminants may have migrated and remain in a distinct geographic area.



**Table 4. Narrative (Non-Numeric) Cleanup Standards for  
Facility-Specific Soil Objectives 1 and 2 (Land Use Controls)**


Cleanup "Technology"	Comment on Cleanup "Technology"	Implementation Technique / Mechanism	Components of Cleanup Standard	Point of Compliance
Institutional Controls	<p>With use of a current and reasonable setting of industrial/commercial land use, the need to actively address soil contamination was deemed not to be needed. Groundwater contamination does exist at levels requiring active remediation.</p> <p>In order to satisfy Facility-Specific Soil Corrective Measure Objectives 1 and 2 and to satisfy Facility-Specific Corrective Measure Objective 4, institutional controls are needed to ensure that land use does not inadvertently and/or unknowingly become residential in the future, and to protect workers from unknowingly being exposed to contamination that might be at unacceptable levels.</p>	Environmental Covenant	<p>An Environmental Covenant shall be secured under the Alabama Uniform Environmental Covenants Act, Ala. Code §§ 35-19-1 to 35-19-14 (2007 Cum. Supp.).</p> <p>The Environmental Covenant shall be entered with the intent of providing clear and enforceable rules for the perpetual care of the Facility's real estate in light of the selected remedy. The Environmental Covenant shall list components of the LUCP that best reside long term with the land as opposed to specific operating procedures at the Facility (e.g., deed restriction to limit site to industrial land use only; deed restriction to limit use of groundwater, etc.).</p>	Throughout the SMA
Institutional Controls		Corporate Land Use Plan (LUCP)	<p>The LUCP, at a minimum, shall:</p> <ol style="list-style-type: none"> <li>1. Acquire a deed restriction on land and groundwater use through securing an Environmental Covenant.</li> <li>2. Explain the land use controls to be used to protect workers, contractors, public from exposure to contaminated environmental media (e.g., permits to perform any digging activities and the proper personal protective equipment (PPE), fences/signs as necessary to prevent unauthorized access, etc.).</li> <li>3. Include all necessary information or structure necessary to implement the LUCP (e.g., points-of-contact; monitoring program; notification procedures for LUCP violations, pending sale/lease of property, etc.; and reporting).</li> </ol>	Throughout the SMA



## V. DECISION

Based on the administrative record compiled for this corrective action remedy, I have determined that the selected remedy described in this document will be protective of human health and the environment.

2/22/18  
Date

  
Carol J. Monell  
Acting Director  
Resource Conservation and Restoration Division



# Exhibit CX15





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

July 11, 2019

**Certified Mail**  
**Return Receipt Requested**

Don Wiggins, Manager of Technical Services  
ERP Compliant Coke, LLC  
3500 35<sup>th</sup> Avenue North  
Birmingham, Alabama 35207

RE: Final Approval of Corrective Measures Implementation Work Plans (including cost estimates)  
SMA 5 - Former Pig Iron Foundry  
EPA ID Number: ALD 000 828 848  
RCRA Docket Number: RCRA-04-2016-4250

Dear Mr. Wiggins:

The United States Environmental Protection Agency has completed its review of the September 7, 2018, Addendum to the June 28, 2018, Corrective Measures Implementation (CMI) Work Plan for the Former Pig Iron Foundry. The EPA has also finished its review of the October 29, 2018, responses to the Agency's September 28, 2018, comments on the cost estimates for the Former Pig Iron Foundry (SMA 5).

**SMA 5 - CMI Work Plan, Cost Estimate**

The EPA's review found the September 7, 2018, Addendum to the June 28, 2018, CMI Work Plan acceptable. The Agency's review also found the October 29, 2018, cost estimate adequate for use in securing the initial corrective action Financial Assurance mechanism.

With both a satisfactory initial cost estimate and an acceptable CMI Work Plan, the July 27, 2018, Interim Approval of the CMI Work Plan now becomes a Final Approval.

Recall that on July 27, 2018, the EPA issued an Interim Approval of the CMI Work Plan for SMA 5. The approval was interim (or conditional) because the EPA did not want to delay implementation of certain work plan elements while other tasks were being completed. Table 1 lists the outstanding tasks that had to be completed and their current status.



Table 1. Tasks to Complete CMI Work Plan for SMA 5	
Task	Status
EPA review of Cost Estimates Provide a Cost Estimate	<p>EPA comments on the cost estimates issued on September 28, 2018. Revised cost estimates submitted October 29, 2018.</p> <p>The Agency's review found the October 29, 2018, cost estimate adequate for use in securing the initial corrective action Financial Assurance mechanism.</p>

With the satisfactory completion of the above task, the June 28, 2018, CMI Work Plan (along with the September 7, 2018, Addendum) now has Final (unconditional) Approval.

#### SMA 5 - Financial Assurance Mechanism

Please submit the Financial Assurance mechanism covering both SMA 5 **within sixty (60) calendar days** from receipt of this letter. Please see Attachment C of 2016 RCRA Section 3008(h) Administrative Order on Consent for more detailed information on the financial assurance mechanism.

If you have any questions concerning this matter, please contact me at (404) 562-9629 or [hardegree.wes@epa.gov](mailto:hardegree.wes@epa.gov).


Sincerely,



Wesley Hardegree, Project Manager  
RCRA Corrective Action Section  
RCRA Programs and Cleanup Branch

Cc: Terry Rippstein, Terracon (via email)  
Chip Crockett, ADEM (via email)



SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Signature X <i>Pam Travis</i> <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Number <b>Mr. Don Wiggins, Manager of Technical Services  ERP Compliant Coke, LLC  3500 35th Avenue North  Birmingham, AL 35207</b>		B. Received by (Printed Name) <i>Pam Travis</i>	
		C. Date of Delivery <i>7/18/19</i>	
		delivery address different from item 1? <input type="checkbox"/> Yes YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Transfer from service label) <b>7017 1450 0000 7973 4544</b>		3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> all Restricted Delivery	
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# Exhibit CX16



June 28, 2018



United States Environmental Protection Agency  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8960

Attention: Mr. Wesley Hardegree

Re: **Corrective Measures Implementation (CMI) Work Plan**  
**SMA 5 – Former Pig Iron Foundry**  
**Administrative Order on Consent - Docket # RCRA 04-2012-4255**  
**ERP Compliant Coke**  
**3500 35<sup>th</sup> Avenue North**  
**Birmingham, Jefferson County, Alabama**  
**USEPA ID No. ALD 000 828 848**  
Terracon Project No. E1187063



Dear Mr. Hardegree:

On behalf of ERP Compliant Coke, LLC (ERP Coke), Terracon Consultants, Inc. (Terracon) is pleased to submit the *Corrective Measures Implementation (CMI) Work Plan for SMA 5 - Former Pig Iron Foundry* for the above-referenced site. This CMI Work Plan has been prepared in response to the *Remedy for Former Chemical Plant and Former Pig Iron Foundry* letter from the USEPA dated February 23, 2018.

If you should have any questions, please do not hesitate to contact us at (205) 942-1289.

Sincerely,

**Terracon Consultants, Inc.**



Terrell W. Rippstein, AL-PG #8  
Principal Geologist



Eugene Whitmill, AL-PE #333070  
Senior Project Engineer

cc: Ms. Meredith Anderson; USEPA Region 4

CX16 page 1 of 71

Terracon Consultants, Inc. 2147 Riverchase Office Road Birmingham, Alabama 35244  
P [205] 942 1289 F [205] 443 5302 [terracon.com](http://terracon.com)

Environmental

Facilities

Geotechnical

Materials



# Corrective Measure Implementation Work Plan

## SMA 5 – Former Pig Iron Foundry

ERP Coke

3500 35<sup>th</sup> Avenue North

Birmingham, Alabama

US EPA ID No. ALD 000 828 848

June 28, 2018

Terracon Project No. E1187063



Prepared for:



Birmingham, Alabama

Prepared by:

Terracon Consultants, Inc.

Birmingham, Alabama

CX16 page 2 of 71

[terracon.com](http://terracon.com)

# Terracon

Environmental



Facilities



Geotechnical



Materials



June 28, 2018

ERP Compliant Coke  
3500 35<sup>th</sup> Avenue North  
Birmingham, Alabama 35207

Attention: Mr. Don Wiggins


Re: **Corrective Measures Implementation (CMI) Work Plan**  
**SMA 5 – Former Pig Iron Foundry**  
**Administrative Order on Consent - Docket # RCRA 04-2012-4255**  
**ERP Compliant Coke**  
**3500 35<sup>th</sup> Avenue North**  
**Birmingham, Jefferson County, Alabama**  
**USEPA ID No. ALD 000 828 848**  
**Terracon Project No. E1187063**

Dear Mr. Wiggins:

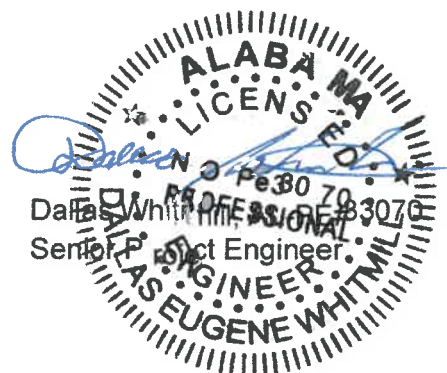
Terracon Consultants, Inc. (Terracon) is pleased to submit this *Corrective Measures Implementation (CMI) Work Plan for SMA 5 - Former Pig Iron Foundry* for the above-referenced site.

Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,  
Terracon Consultants, Inc.



Terrell W. Rippstein, AL-PG #8  
Principal Geologist





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## **LIST OF ABBREVIATIONS**

ADEM	Alabama Department of Environmental Management
AOC	Area of Concern
ANPR	Advanced Notice of Proposed Rulemaking
CAA	Corrective Action Alternative
CAO	Corrective Action Objective
CAP	Corrective Action Plan
CFR	Code of Federal Regulation
cm/sec	centimeter per second
CMI	Corrective Measures Implementation
CMS	Corrective Measure Study
COC	Contaminant of Concern
COPC	Constituent of Potential Concern
DOT	Department of Transportation
EI	Environmental Indicators
ERA	Ecological risk assessment
FCP	Former Chemical Plant
FMC	Five Mile Creek
FWI	Facility Wide Investigation
HHRA	Human Health Risk Assessment
HHRE	Human Health Risk Evaluation
HI	Hazard Index
IM	Interim Measures
IRIS	Integrated Risk Information System
LDA	Land Disposal Area
LDR	Land Disposal Restriction
LUCP	Land Use Control Plan
MCL	Maximum Contaminant Level
NRWQC	National Recommended Water Quality Criteria
Order	Administrative Order on Consent
OSHA	Occupational Safety and Health Administration
PCS	Preliminary Cleanup Standards
PIF	Pig Iron Foundry
PPE	Personal Protective Equipment
PRG	Preliminary Remediation Goal
PVC	Poly Vinyl Chloride
RAGS	Risk Assessment Guidance for Superfund
RCRA	Resource Conservation and Recovery Act
RCRIS	RCRA Information System
PCS	Preliminary Cleanup Standards
RFI	RCRA Facility Investigation



**CMI Work Plan – SMA 5 – Former Pig Iron Foundry**

ERP Coke ■ Birmingham, Alabama

June 28, 2018 ■ Terracon Project No. E1187063



RSL	Regional Screening Levels
SMA	SWMU Management Area
SSL	Soil screening level
SVOC	Semi-volatile Organic Compound
SWMU	Solid Waste Management Unit
TCL	Target Constituent List
TCLP	Toxicity Characteristic Leaching Procedure
TSD	Treatment, Storage, And Disposal
UCL	Upper Confidence Limit
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds



## **Corrective Measures Implementation Work Plan**

### **SMA 5 – Former Pig Iron Foundry**

#### **ERP Coke**

**3500 35<sup>th</sup> Avenue North**

**Birmingham, Alabama**

**US EPA ID No. ALD 000 828 848**

**Project No. E1187063**

**June 28, 2018**

## **1.0 INTRODUCTION/PURPOSE**

The ERP Compliant Coke, LLC (ERP Coke) facility is located at 3500 35<sup>th</sup> Avenue North in Birmingham, Jefferson County, Alabama ([Figure 1-1](#)). This Corrective Measures Implementation (CMI) Work Plan for SMA 5 has been prepared in response to the *Final (Remedy) Decision for the Former Pig Iron Foundry* from the United States Environmental Protection Agency (US EPA) dated February 2018. A map of the current facility including the 45 Solid Waste Management Units (SWMUs) and six Areas of Concern (AOCs) consolidated into five SWMU Management Areas (SMAs) is included as [Figure 1-2](#). This CMI Work Plan is only for SMA 5 – Former Pig Iron Foundry and its associated SWMUs and AOC.

SMA 5 contains three SWMUs and one Area of Concern (AOC, [Figure 1-3](#)). They include:

- SMWU 43 – Pig Machine Slurry Pits
- SWMU 44 – Blast Furnace Ash Boiler Pit
- SWMU 45 – Slag Drying Beds
- AOC C – Former Pig Iron Foundry

### **1.1 Background**

The roots of the facility can be traced back to 1881 when Sloss-Sheffield Steel and Iron Company first began producing pig iron in Birmingham, Alabama. In 1920, where ERP Coke sits today, Sloss-Sheffield Steel and Iron Company built two modern coke oven batteries to serve its own needs as well as those of other customers. As Birmingham's steel industry grew, so did the need for furnace coke, which prompted the construction of three more batteries at the site during the 1950s.

As American industry evolved in the ensuing years, so did the operation of the facility. Today, ERP Coke is a highly efficient, technologically advanced operation serving a variety of customers in the furnace and foundry markets.



The operation now consists of three batteries with a total of 120 coke ovens which produce approximately 460,000 tons of coke each year. A highly experienced operating staff provides assurance of adherence to strict operating, environmental, and safety standards.

The original coke manufacturing facility began operation in 1920 as Sloss Sheffield Steel and Iron Company. Beginning in 1952, the company experienced a series of corporate reorganizations and several name changes culminating in a name change to Walter Coke, Inc. in June 2009, and then the purchase of the coke plant assets by ERP Compliant Coke, LLC occurred in February 2016. The following operations have occurred at the facility:

- The biological treatment facility (BTF), designed to treat wastewater generated at the facility, was constructed in 1973-74, first received wastewater in 1975 and is still in operation today. SMA 1 includes the BTF Process Area.
- Land Disposal Areas (LDAs) have been used at various times over the life of the facility. Biological sludge, blast furnace sludge, and construction and demolition debris have been placed in the land disposal areas. SMA 2 includes the LDA.
- Coke manufacturing has occurred since 1920, and 120 coke ovens continue to operate. SMA 3 includes the Coke Manufacturing Plant.
- Chemical manufacturing began at the facility in 1948, and all chemical manufacturing operations ceased in 2002. In addition, a mineral wool plant, which manufactured mineral fiber used in the production of ceiling tile and insulating products, was built in late 1947 and was decommissioned in 2010. SMA 4 includes the FCP and the mineral wool piles.
- An iron blast furnace that produced pig iron from iron ore began operation in 1958; blast furnace operations ceased in 1981, and the blast furnace was decommissioned in 1984. SMA 5 includes the Former Pig Iron Foundry (FPIF).

The land around the ERP Coke facility is zoned for industrial and residential use, and a significant number of other industrial facilities remain operational in the area. Before 1957, the area was primarily industrial, with a significant number of other facilities, including coke and cement manufacturing plants, pipe manufacturing plants, and limestone quarry operations. Residential neighborhoods were constructed on properties in the area of ERP Coke only after 1957 (USEPA, 1990). The most likely future land use for the ERP Coke facility is industrial.

## **1.2 Corrective Measures Study (CMS) Overview**

Terracon on behalf of ERP Coke, submitted the *Corrective Measures Study (CMS) SMA-5 – Former Pig Iron Foundry (Revision 1.2)* on April 14, 2017. The purpose of the CMS Report was



to summarize the evaluation, analysis, and selection of appropriate corrective measures at SMA 5.

Based on the activities conducted during the CMS for SMA, it was determined that:

- The only known contaminated media in SMA 5 is soil.
- The non-cancer remediation threshold for soil was not breached.
- The cancer remediation screening level ( $10^{-6}$ ) soil was breached for an industrial setting for several COCs; however, the cumulative risk of the COCs were below the  $1E^{-04}$  remediation trigger.
- The cancer and non-cancer remediation thresholds for soil were not breached for a construction setting.
- Leachability from soil to groundwater was determined not to be a threat based on COC soil concentrations and groundwater monitoring conducted around SMA 5.
- The soil contamination is not deemed to be a principal threat in need of active remediation.

Based on the conclusions of the detailed analysis that was performed individually and collectively with respect to six alternatives discussed in the CMS, Alternative 2 - Land Use Controls was recommended as the corrective action alternative (CAA) for SMA 5.

The *Final (Remedy) Decision for the Former Pig Iron Foundry* from the US EPA dated February 2018 indicated that they concurred with the recommendations from the CMS for SMA 5. Section III. Selected Remedy of the US EPA document concluded:

The recommended remedy found in the facility's April 14, 2017, Corrective Measure Study Report and proposed to the public on October 1, 2017, is identified as Alternative 2: Land Use Controls. This alternative can reasonably be concluded to satisfy the Facility-Specific Corrective Action Objectives found in Table 3; therefore, it is US EPA's Final Decision that Alternative 2, which consists of the following components, be the remedy for the Former Pig Iron Foundry.

- Land Use Controls: The Land Use Controls are administrative means to protect current and future human exposure to unacceptable environmental contamination. This protection will be accomplished through the following techniques/components:
  - Land Use Control Plan (LUCP) developed by the Facility (and overseen by EPA)
  - An Environmental Covenant secured under the Alabama Uniform Environmental Covenants Act, Ala. Code §§ 35-19-1 to 35-19-14 (2007 Cum. Supp.)



### **1.3 Supporting Documents**

There are several documents which were previously prepared and submitted to the USEPA that will be used in conjunction with this CMI Work Plan and during the implementation of the corrective measures. They are:

- Community Involvement Plan (Revision 4.0) dated June 26, 2018.
- Quality Assurance Project Plan (QAPP) (Revision 1.1) dated June 26, 2018.
- Interim Measures (IM) Groundwater Sampling and Analysis Plan (Revision 1.0) dated October 9, 2012.
- Site Specific Health and Safety Plan (Revision 1.1) dated June 26, 2018.



## **2.0 CORRECTIVE MEASURES REQUIREMENTS**

### **2.1 Corrective Action Objectives**

Corrective Action Objectives were developed during the CMS Report to address both potential risk to human health and regulatory requirements. Potential risks to human health were estimated based on an industrial land use scenario, which is consistent with the current and potential future land use for the ERP site. The regulatory policy addressed was the protection of beneficial uses of groundwater.

### **2.2 Media Cleanup Standards**

As discussed in the OSWER Directive 9355.0-30 dated April 22, 1991, acceptable risk levels for cumulative carcinogenic risks to an individual based on exposure assumptions can range from  $10^{-4}$  to  $10^{-6}$  as long as the cumulative excess lifetime carcinogen site risk is less than  $10^{-4}$  and the noncancer hazard quotient (HQ) is less than 1. In order to meet the goal of the cumulative excess lifetime carcinogen site risk being less than  $10^{-4}$  across all media, the analytical samples from each sample media were screened against the calculated PCS at an ELCR of  $10^{-5}$  or a HQ of 1.0. If the risk for a particular constituent did not exceed the ELCR of  $10^{-5}$  or a HQ of 1.0, then the constituent was screened out because it did not exceed the target risk level for corrective action. If a receptor exceeded the  $10^{-5}$  ELCR or HQ of 1.0 for a constituent, then the media in which it exceeded the ELCR or HQ was considered for corrective action. If multiple receptors exceeded the target risk levels for a specific media, then the most conservative PCS value for the  $10^{-5}$  ELCR or 1.0 HQ was used to screen the data.

The ERP Coke facility including all of SMA 5 is industrial, and future land use will continue to be industrial. Therefore, PCSs were calculated for only the Industrial/Commercial Worker scenario and the construction worker scenario for completed exposure pathways as appropriate.

The cumulative risk over all pathways was below the 1E-04 remediation trigger. In addition, the cancer and non-cancer remediation thresholds for soil were not breached for a construction setting. Therefore, Land Use Controls were found to be the remedial action necessary to protect current and future human exposure to unacceptable environmental contamination.

### **2.3 Regulatory Policy**

Groundwater is not used for drinking water or other beneficial uses at ERP Coke and is not used for drinking water downgradient in the North Birmingham area. However, unless otherwise designated by the US EPA, all groundwater is considered suitable, or potentially suitable, for municipal or domestic water supply.



Groundwater in SMA 5 was not found to be impacted, therefore, groundwater remediation is not part of the corrective measures.



### 3.0 CORRECTIVE MEASURES

The Final (Remedy) Decision for the Former Pig Iron Foundry document from US EPA dated February 2018 stated: “The recommended remedy found in the facility’s April 14, 2017, Corrective Measure Study Report and proposed to the public on October 1, 2017, is identified as Alternative 2: Land Use Controls. This alternative can reasonably be concluded to satisfy the Facility-Specific Corrective Action Objectives found in Table 3; therefore, it is US EPA’s Final Decision that Alternative 2, which consists of the following components, be the remedy for the Former Pig Iron Foundry”.

- Land Use Controls: The Land Use Controls are administrative means to protect current and future human exposure to unacceptable environmental contamination. This protection will be accomplished through the following techniques/components:
  - Land Use Control Plan (LUCP) developed by the Facility (and overseen by US EPA)
  - An Environmental Covenant secured under the Alabama Uniform Environmental Covenants Act, Ala. Code §§ 35-19-1 to 35-19-14 (2007 Cum. Supp.)

#### 3.1 Land Use Control Plan

A Land Use Control Plan (LUCP) will be prepared in accordance with the *Sample Federal Facility Land Use Control ROD Checklist and Selected Language* document found at the website <https://www.epa.gov/fedfac/sample-federal-facility-land-use-control-rod-checklist-and-suggested-language-luc-checklist>. This LUCP will be submitted to the US EPA within 120 days of approval of the CMI Work Plan.

The LUCP will at a minimum include:

- n A description of the land along with the certified land survey location of the boundary with respect to state plane coordinates,
- n Placing a deed restriction on the property to limit the site to Industrial/Commercial Land Use.
- n An explanation of the land use control including permits to perform any digging activities and the proper personal protective equipment (PPE) that must be used to protect workers, and the use of a fence and signs as necessary to prevent unauthorized access,
- n Identification of the facility program point-of-contact designated responsible for implementing the LUCP,
- n An on-site compliance monitoring program (if needed),
- n Notification procedures to USEPA and ADEM whenever the facility anticipates a major change in land use,
- n An annual field inspection and report submitted to USEPA and ADEM to document the effectiveness of the land use controls (if needed),



- n A certification of the annual report (if needed) by the designated official to continue compliance with the LUCP,
- n A procedure to notify USEPA and ADEM immediately upon discovery of any unauthorized major change in land use or any activity inconsistent with the LUCP and the actions that would be implemented to ensure protectiveness, and
- n A procedure to provide notification to US EPA and ADEM of transfer, by sale or lease, of SMA 5.

### **3.2 Environmental Covenant**

ERP Coke will subcontract a surveying firm to provide a legal description of the boundaries of SMA 5. Following receipt of the legal description from the survey, Terracon will work with ERP Coke to prepare the Environmental Covenant and provide a draft to US EPA and ADEM for approval. Following US EPA and ADEM's approval of the draft Environmental Covenant, Terracon will file the Covenant with the Jefferson County Court of Probate. The recorded Covenant will be provided to ADEM and US EPA. We anticipate the process to record the covenant can be completed within 120 days following approval of the CMI Work Plan. A copy of the Alabama Uniform Environmental Covenants Program Division 335-5 is included as [Appendix A](#). In addition, a model Environmental Covenant is included as [Appendix B](#).

### **3.3 Estimated Costs and Financial Assurance**

The estimated costs for implementing this CMI Work Plan are included as [Appendix C](#). According to the Order on Consent for ERP Compliant Coke, LLC ALD 000 828 848 dated July 2016, ERP will obtain a financial assurance mechanism described and allowable under 40 CFR 264.413 through 264.151 Subpart H within 60 calendar days of US EPA's approval of the CMI cost estimate; however, since this work will be completed within a year, financial assurance should not be necessary.

### **3.4 Schedule of Activities**

Upon US EPA's approval of this CMI Work Plan, the following activities will be performed:

- n A financial assurance mechanism will be provided to US EPA within 60 days of approval of this document.
- n A survey of SMA 5 will be conducted; and
- n Following completion of the survey, an environmental covenant will be placed on SMA 5.
- n A LUCP will be submitted to US EPA within 120 days of approval of this document.
- n Quarterly Progress Reports will be prepared in accordance with the AO.



### **3.5 Reports**

Quarterly Progress Reports will continue until all of the sites corrective measures have been completed. Upon Completion of the LUCP and filing of the Environmental Covenant, A Corrective Measures Completion Report will be prepared and submitted to the USEPA.



## 4.0 REFERENCES

ADEM, 2008 (Revision 2), *Alabama Risk-Based Corrective Action Guidance Manual*.

Agency for Toxic Substances and Disease Registry (ATSDR). 2016 (accessed). “Minimal Risk Levels for (MRLs) for Hazardous Substances.” Centers for Disease Control. Available on-line at: <http://www.atsdr.cdc.gov/mrls/mrlolist.asp>.

Arcadis and CH2M Hill. 2009. Phase III RCRA Facility Investigation (RFI). Sloss Industries, Birmingham, Alabama.

Schaum, J., K. Hoang, R. Kinerson, J. Moya, and R.G.M. Wang. 1994. Estimating Dermal and Inhalation Exposure to Volatile Chemicals in Domestic Water. Ch. 13 in: *Water Contamination and Health*, R.G.M. Wang ed., Marcel Dekker, Inc., New York, NY.

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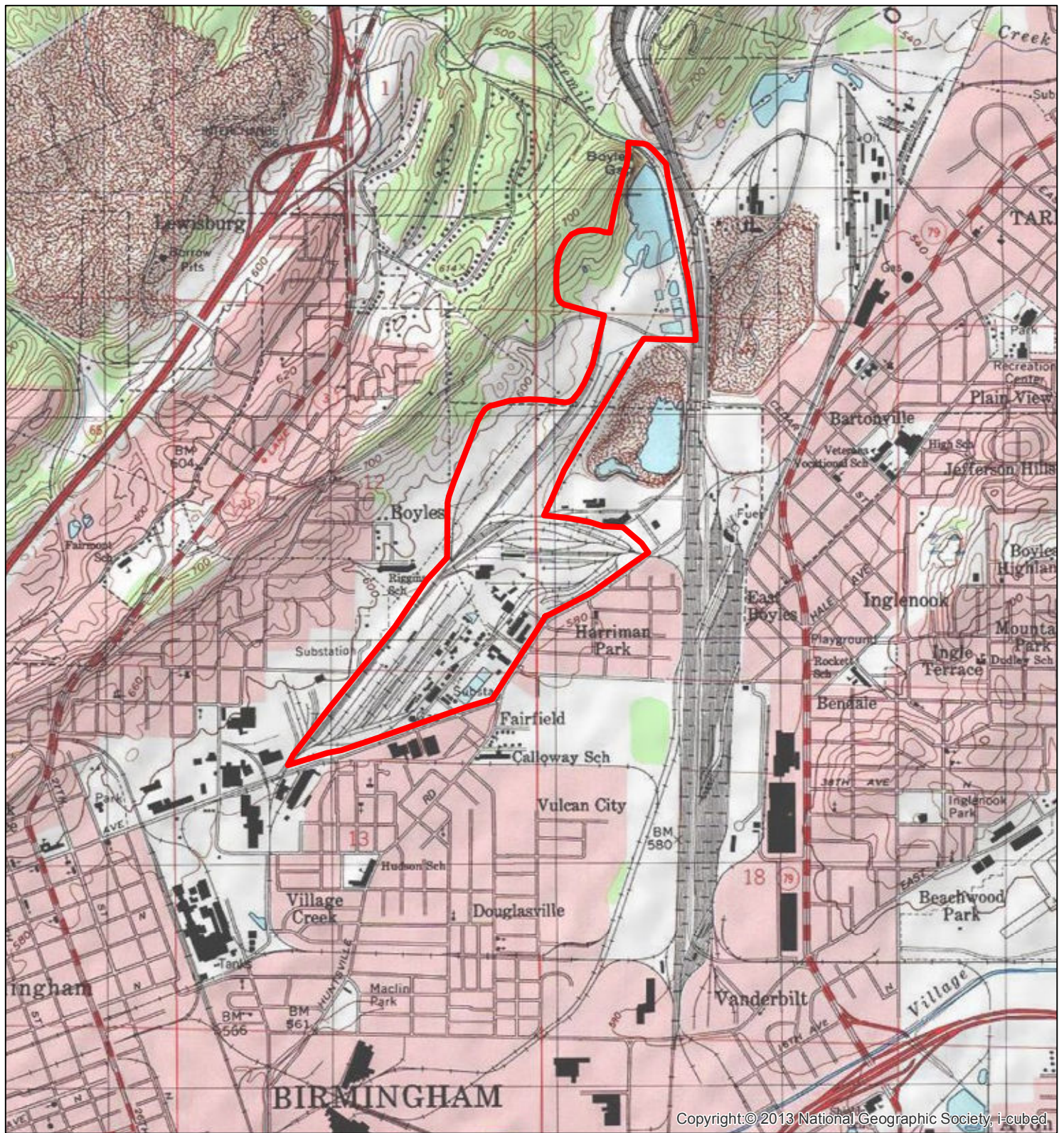
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## Figures





### Legend

— Facility Boundary

### DATA SOURCES:

- Topographic Map: North Birmingham, AL, 7.5 Minutes Quadrangle, 1997

0 1,000 2,000 4,000  
Feet



Project No. E1187063

Drawn By: JDF

Reviewed By: TWR

Date: September 2014

# Terracon

2147 Riverchase Office Road  
Birmingham, AL 35244  
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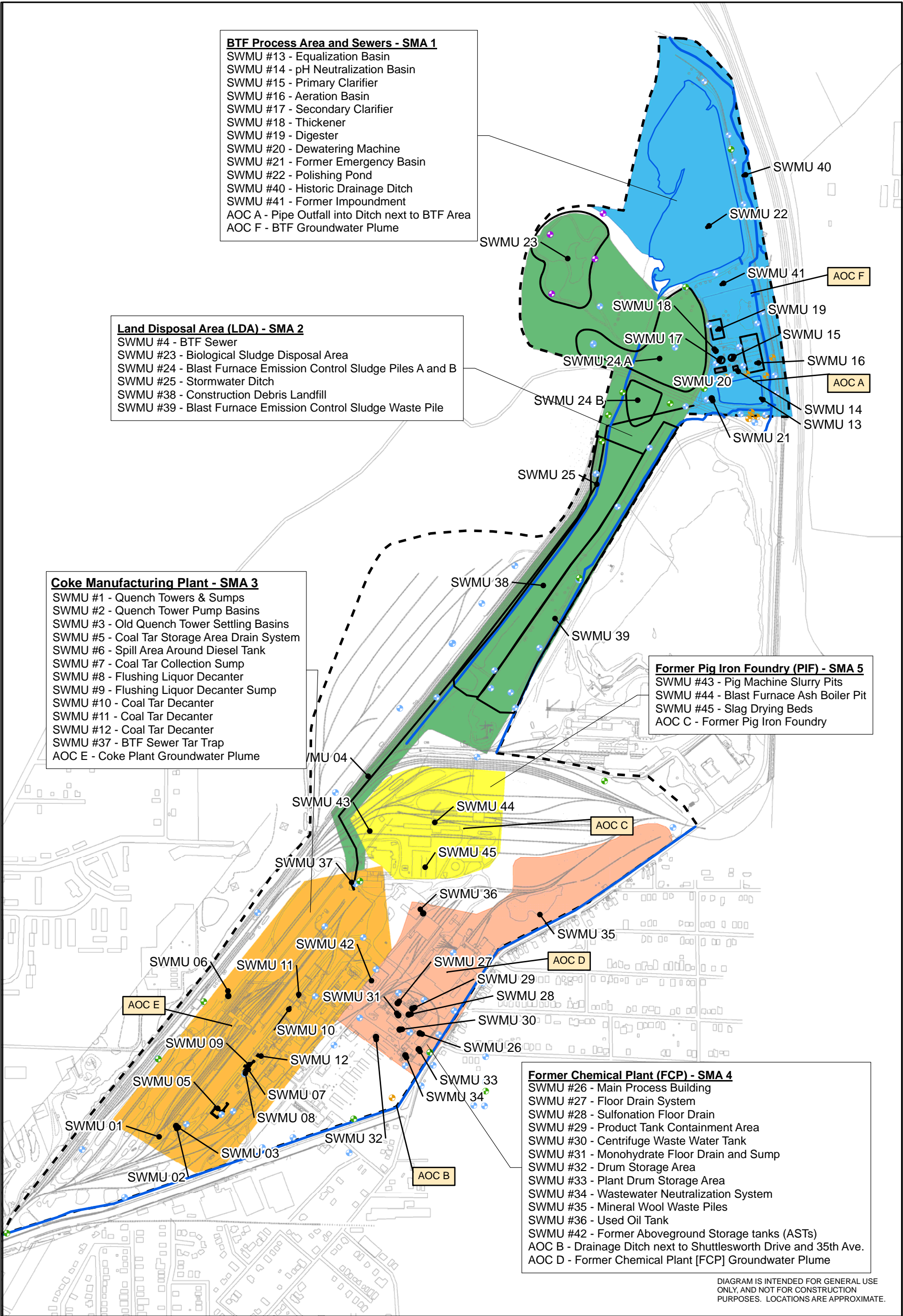
### Facility Location Map

ERP COKE  
3500 35th AVENUE NORTH  
BIRMINGHAM, ALABAMA

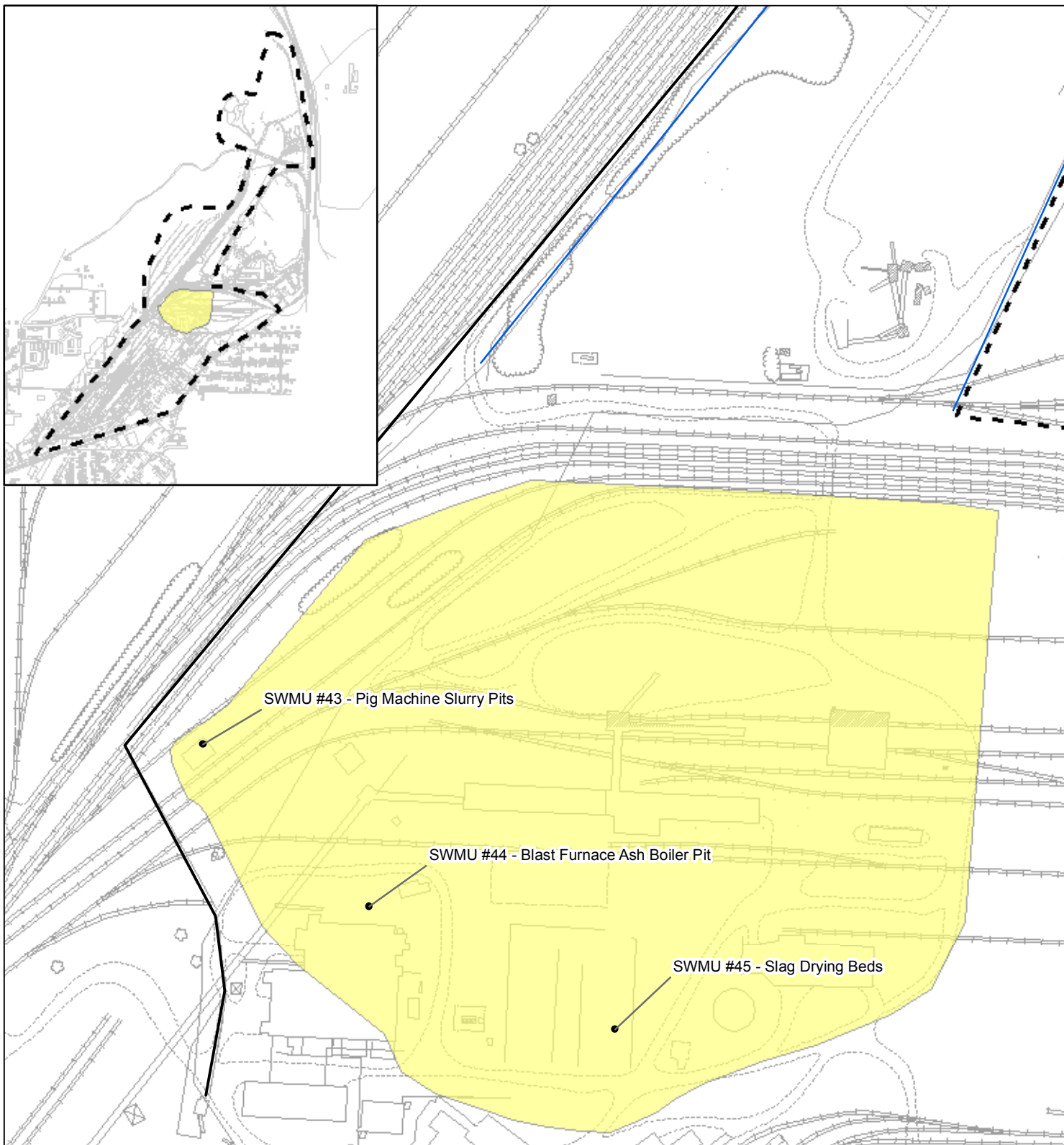
### Figure

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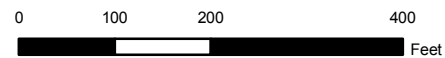








- SMA 5 - Former Pig Iron Foundry
- Facility Boundary
- Base



NOTES:  
 - SMA = Soil Management Area  
 - SWMU = Solid Waste Management Unit  
 - Management Area Boundaries Are Approximations

Project No.	E1187063
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Former Pig Iron Foundry

ERP COKE  
 3500 35th AVENUE NORTH  
 BIRMINGHAM, ALABAMA

Figure

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Appendix A  
Alabama Uniform Environmental Covenants Program Division 335-5



**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**LAND DIVISION - UNIFORM ENVIRONMENTAL COVENANTS PROGRAM**  
**DIVISION 335-5**

**1400 Coliseum Blvd.**  
**Montgomery, Alabama 36110**

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**CITE AS**

**ADEM Admin. Code r. 335-5-x-xx**

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**REVISED EFFECTIVE: MARCH 26, 2013**



**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
LAND DIVISION - UNIFORM ENVIRONMENTAL COVENANTS PROGRAM**

**DIVISION 335-5**

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**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
LAND DIVISION - UNIFORM ENVIRONMENTAL COVENANTS PROGRAM**

**CHAPTER 335-5-1  
GENERAL**

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<b>335-5-1-.03</b>	<b>Definitions</b>
<b>335-5-1-.04</b>	<b>Holder</b>
<b>335-5-1-.05</b>	<b>Registry of Environmental Covenants</b>
<b>335-5-1-.06</b>	<b>Fees</b>
<b>335-5-1-.07</b>	<b>Process for Entering a Covenant</b>

**335-5-1-.01 Purpose.** These regulations are promulgated to establish minimum requirements governing environmental covenants pursuant to the Alabama Uniform Environmental Covenants Act, Code of Alabama 1975, §§35-19-1 to 35-19-14.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-1; 35-19-13.

**History:** May 26, 2009.

**335-5-1-.02 Applicability.**

(1) These regulations apply to a property or site undergoing a response action that does not return the property to unrestricted use.

(a) An environmental covenant is required for a site if the approved environmental response project plan places a land use control on the site because it is not being remediated to unrestricted use, unless exempt in 335-5-1-.02(3).

(b) The Department, when considering the environmental response project plan for a site, may require the owner or operator or other responsible person to enter into an environmental covenant with the owner of the off-site parcels or properties to ensure that the remedy approved in the plan is protective of human health and the environment.

(c) An owner or operator or other responsible person whose environmental response project plan includes other off-site parcels or properties may voluntarily include the off-site parcels or properties in an environmental covenant.



(d) Failure to enter into an environmental covenant with an off-site property owner, for any reason, does not release or absolve the site owner or operator or other responsible person from any obligation to perform required remediation activities addressing on-site or off-site contamination, including land use controls. Lack of an environmental covenant may require the owner or operator or other responsible person to perform additional activities in the approved environmental response project plan to ensure effectiveness of the response action and the protection of human health and the environment for current and future uses of the on-site and/or off-site property.

(2) These regulations apply to environmental covenants arising from environmental response projects conducted under any of the following ADEM programs:

- (a) Scrap tire remediation sites subject to 335-4.
- (b) Soil and groundwater remediation sites subject to 335-6-8, 335-6-15 and 335-6-16.
- (c) Solid waste disposal sites subject to 335-13.
- (d) Hazardous waste disposal sites subject to 335-14.
- (e) Voluntary cleanup program sites subject to 335-15.
- (f) Dry cleaner remediation sites subject to 335-16.
- (g) Sites subject to the Alabama Hazardous Substance Cleanup Fund Act, Code of Alabama 1975, §§22-30A-1 to 22-30A-11, and
- (h) Sites being remediated by potentially responsible parties or the United States Environmental Protection Agency which are subject to the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9601 et seq).

(3) For properties or sites owned by the federal government which are legally unable to execute an environmental covenant during the period of federal ownership, the following requirements shall apply:

- (a) During the period of federal ownership.
- (1) In lieu of an environmental covenant, a Notice of Environmental Use Restriction for properties or sites owned by the federal government shall be prepared and submitted to ADEM for approval that gives notice of the current and future use of the federal property. The Notice shall:
  - (i) Contain a provision that an environmental covenant shall be executed with ADEM and appropriately filed at such time the property is transferred to a non-federal owner.



(ii) Contain a provision that the Notice does not convey a property interest.

(iii) Contain a provision that, if the property is transferred to another federal agency, the environmental use restrictions shall remain in effect and be binding upon the recipient federal agency.

(iv) Be incorporated into the installation master plan or facility property management plan and shall be recorded into the land records of the property in compliance with 335-5-3-.02.

(v) Contain a provision that all cleanup plans, decision documents, permits and other instruments relying upon or referencing the Notice shall include appropriate conditions requiring that the Notice remain in place for the duration of federal ownership, and that a covenant shall be executed and filed at such time as the property is transferred to an owner that is not the federal government, and conditioning the continued approval of any selected remedies relying upon or referencing the Notice or covenant upon the timely execution and filing of a covenant at the time the property is transferred to an owner that is not the federal government.

(vi) Contain a provision that all other regulations applying to an environmental covenant shall apply to the Notice.

(b) At the time of transfer of property subject to 335-5-1-.02(3)(a) to non-federal ownership, an environmental covenant pursuant to this Division shall be executed.

(4) These regulations apply to interests in real property which are in existence at the time an environmental covenant is created or amended.

(a) An interest that has priority under other law is not affected by an environmental covenant unless the person owning the interest subordinates that interest to the covenant.

(b) A person owning a prior interest is not required to subordinate that interest to an environmental covenant or to agree to be bound by the covenant.

(c) A subordination agreement may be contained in an environmental covenant covering real property or in a separate record. If the environmental covenant covers commonly owned property in a common interest community, the subordination agreement may be signed by any person authorized by the governing board of the owners' association.

(d) An agreement by a person to subordinate a prior interest to an environmental covenant affects the priority of that person's interest but does not automatically impose any affirmative obligation on the person with respect to the environmental covenant.



**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §35-19-13.

**History:** May 26, 2009; March 26, 2013.

**335-5-1-.03 Definitions.** For the purpose of this Division, the following words and phrases, unless the context of 335-5 plainly indicates otherwise, shall have the following meanings:

(a) Activity and Use Limitations - Restrictions or obligations created under this Act with respect to real property.

(b) ADEM or Department - The Alabama Department of Environmental Management.

(c) Alabama Uniform Environmental Covenants Act or "Act" - Code of Alabama 1975, §§ 35-19-1 to 35-19-14.

(d) Common Interest Community - A condominium, cooperative, or other real property with respect to which a person, by virtue of the person's ownership of a parcel of real property, is obligated to pay property taxes or insurance premiums, or for maintenance, or improvement of other real property described in a recorded covenant that creates the common interest community.

(e) Director - The Director of the Alabama Department of Environmental Management or his or her designated representative.

(f) Environmental Covenant - A servitude arising under an environmental response project that imposes activity and use limitations.

(g) Environmental Response Project - A plan or work performed for environmental remediation of real property and conducted under a federal or state program governing environmental remediation of real property.

(h) Holder - The grantee of an environmental covenant that meets the requirements of 335-5-2-.01.

(i) Land Use Controls - Any restriction or control that serves to protect human health and the environment by limiting the use of or exposure to any portion of a property or site, including water resources. These controls include, but are not limited to:

1. Engineering controls for remedial actions directed toward containing or controlling the migration of contaminants through the environment. These include, but are not limited to, stormwater conveyance systems, slurry walls, liner systems, caps, leachate collection systems, pump-and-treat systems, and groundwater recovery systems. Engineering controls are classified as:



(i) Class 1, which include multi-layer caps or liner systems, soil vapor extraction systems, groundwater pump-and-treat systems, leachate and groundwater recovery systems, stormwater conveyance systems, slurry walls and active ventilation of closed spaces.

(ii) Class 2, which include clay or soil caps or liner systems, sub-structural vapor barriers, and passive ventilation of closed spaces.

(iii) Class 3, which include asphalt caps and fencing systems.

(iv) For other engineering controls not listed, ADEM shall determine the classification of the engineering control upon the request of an owner or operator or other responsible person.

2. Institutional controls that are legal or contractual restrictions on property use which remain effective after remediation is completed and are used to meet an approved environmental response project plan or proposal. These include, but are not limited to, deed notations, deed restrictions, groundwater use restrictions, restrictive covenants, conservation easements, and limited development rights. Institutional controls are classified as:

(i) Class 1, which includes any water use restriction.

(ii) Class 2, which include restrictive covenants for industrial or commercial use only or no schools or daycares, and imposition of conservation easements or limited developmental rights.

(iii) Class 3, which include restrictive covenants for no excavations, for use as greenspace only, and no hunting or fishing.

(iv) For other institutional controls not listed, ADEM shall determine the classification of the institutional control upon the request of an owner or operator or other responsible person.

(j) Owner or Operator - Includes the following:

1. In the case of a property or site, any person owning or operating that property or site.

2. Any person who owned, operated, or otherwise controlled activities at a property or site immediately prior to conveyance of title of that property or site to a unit of state or local government or loss of control of that property or site due to bankruptcy, foreclosure, tax delinquency, or abandonment.

3. The definition does not include the following:

(i) A person acting solely in a fiduciary capacity who can show evidence of ownership and who did not actively participate in the management, disposal, or release of hazardous wastes, hazardous constituents, hazardous substances or petroleum product from the property or site.



(ii) A unit of a state or local government which acquired ownership or control involuntarily through bankruptcy, tax delinquency, abandonment, or any other circumstance where the government involuntarily acquires title by virtue of its function as sovereign. This exclusion shall not apply to any state or local government that has caused or contributed to the release of hazardous wastes, hazardous constituents, or hazardous substances from the property or site.

(k) Person - An individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, public corporation, government, governmental subdivision, agency, or instrumentality, or any other legal or commercial entity.

(l) Property or Site - A parcel of land defined by boundaries of a legal description where a hazardous waste, hazardous constituent, hazardous substance or petroleum product has been or is suspected to have been deposited, discharged, stored, disposed of, placed, or otherwise come to be located.

(m) Record - Information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form.

(n) Response Action - Action taken in the event of a release or threatened release of a hazardous waste, hazardous substance, petroleum product, or other pollutant into the environment to remove or to prevent or minimize the threat to public health or the environment.

(o) Responsible Person - Any person who has contributed or is contributing to a release of any hazardous waste, hazardous constituent or hazardous substance at a property. This term includes any person who has contributed or is contributing to a release of petroleum and petroleum-based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading, and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils. This term includes persons described in §§107(a)(1) through 107(a)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 USC Section 9601, et seq. (CERCLA). This term excludes persons described in §107(b) of CERCLA.

(p) Restricted Use - Any use of a property or site other than unrestricted use.

(q) State - The State of Alabama.

(r) Unrestricted Use - The designation of acceptable future use at a property or site where the remediation levels, based on either background or standard exposure factors, shall have been attained in all media to allow the property or site to be used for any purpose.



**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-2; 35-19-13.

**History:** May 26, 2009; March 26, 2013.

#### **335-5-1-.04 Holder.**

(1) Any person may be a holder. An environmental covenant may identify more than one holder. The holder's interest is an interest in real property.

(2) A right of the Department under the Act or under an environmental covenant, other than a right as a holder, is not an interest in real property.

(3) The Department is bound by any obligation it assumes in an environmental covenant, but does not assume obligations merely by signing an environmental covenant.

(4) Any other person who signs an environmental covenant is bound by the obligations the person assumes in the covenant; however, signing the covenant does not change the person's obligations, rights, or protections granted to or imposed upon that person under other law, except as provided in the covenant.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-3; 35-19-13.

**History:** May 26, 2009.

#### **335-5-1-.05 Registry of Environmental Covenants.**

(1) The Department shall establish and maintain a registry that contains all environmental covenants and any amendment or termination of those covenants executed pursuant to 335-5.

(2) In addition to the requirements of 335-5-1-.05(1), the registry may contain any other information concerning environmental covenants and the real property subject to them which the Department considers appropriate.

(3) The full text of the covenant, amendment, or termination and any other information required by ADEM shall be submitted to ADEM within thirty (30) days of its recording in the land records of the county where the property is located for inclusion in the ADEM Registry of Environmental Covenants. The person submitting the covenant may be the owner, operator, other responsible person, grantor or any holder of the covenant.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-12; 35-19-13.

**History:** May 26, 2009; March 26, 2013.



**335-5-1-.06 Fees.** The Department may assess fees to implement the provisions of the Act.

(a) A Processing and Review Fee shall be required to cover the cost of processing the covenant application and for reviewing the draft and final covenants. For sites utilizing both institutional controls and engineering controls, the processing and review fees shall be the greater of the applicable fees.

(b) A Registry Recording Fee shall be required to cover cost of establishing and maintaining the ADEM Registry of Environmental Covenants, for entering the site in this Registry, and for performing routine inspections at the site for a period of thirty (30) years to determine compliance with the covenant restrictions. For sites with more than one classification of institutional or engineering control, the Registry Recording Fee shall be the greater of the applicable fees.

(c) An owner or operator or other responsible person desiring to enter an environmental covenant shall submit a draft environmental covenant and all required fees.

(d) Fees required pursuant to this section are included in 335-1-6-.04, Schedule J.

(e) Exemptions. The following sites are exempt from paying fees in 335-1-6-.04, Fee Schedule J and in 335-5-1-.06, as specified below. These sites will be entered in the ADEM Registry of Environmental Covenants.

(1.) A site that is enrolled in the ADEM Voluntary Cleanup Program pursuant to 335-15 is exempt from paying processing and review fees in Fee Schedule J.

(2.) A site regulated under the programs listed in 335-5-1-.02(2) that has a provision for a post-closure permit which is renewable by payment of a permit fee and a provision for routine inspection by the Department or other environmental regulatory agency is exempt from paying all fees in Fee Schedule J.

(3.) A site regulated under the programs listed in 335-5-1-.02(2) that has a provision for cost reimbursement to the Department as contained in a cooperative agreement, a memorandum of agreement or an administrative order is exempt from paying the Processing and Review Fees in Fee Schedule J, to the extent such costs are reimbursable under these agreements.

(f) An owner or operator or other responsible person desiring to enter an environmental covenant for an environmental response project containing multiple individually deeded parcels off-site of the property or site which are subject to the environmental response project plan may submit an alternative fee schedule to the Department as part of its formal submittal of the environmental covenant in lieu of fees required in 335-1-6-.04, Fee Schedule J.



(1.) If submitting an alternative fee schedule, the owner or operator or other responsible person shall be required to pay the applicable processing and review fees found in 335-1-6-.04, Fee Schedule J for each individually worded covenant for off-site property that is different from land use controls or restrictions found in other covenants utilized for other individually deeded parcels off-site of the property or site subject to the environmental response project plan.

(2.) If submitting an alternative fee schedule, the owner or operator or other responsible person shall propose how to reimburse the Department for the registry recording fee which covers its cost to inspect each individually deeded off-site parcel to determine compliance with the covenant. The method to reimburse the Department shall be included in an order or agreement executed between the owner or operator or other responsible person and the Department. The length of time in years over which inspections will be conducted by the Department shall be negotiable and included in the covenant.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §35-19-13.

**History:** May 26, 2009; March 26, 2013.

### **335-5-1-.07 Process for Entering a Covenant.**

(1) The owner or operator, the other responsible person or the person conducting an environmental response project may use land use control in lieu of remediating the property to a level supporting unrestricted use. The ADEM organizational unit under which the response action is being conducted shall approve the environmental response project plan which proposes a land use control.

(2) For properties not remediated to a level supporting unrestricted use, an environmental covenant is required in accordance with 335-5-1-.02. To enter an environmental covenant, the owner or operator, the other responsible person or the person conducting an environmental response project shall submit the following to the ADEM organizational unit under which the response action is being conducted:

- (a) A draft of the proposed environmental covenant.
- (b) The applicable fees in Fee Schedule J of 335-1-6 and 335-5-1-.06.
- (c) All pertinent information required in 335-5-2-.01(1).

(3) ADEM shall review and approve the draft covenant or request modifications. If requesting modifications to the draft covenant, ADEM shall provide the applicant with its reasons for requesting change. Upon submittal by the applicant of acceptable modifications, ADEM shall approve the draft covenant.



(4) Following ADEM review and approval of the draft covenant, the applicant shall submit two copies of the final covenant which complies with 335-5-2 for signature by the Director. Upon execution by the Director, both copies shall be returned to the applicant.

(5) Upon receiving the executed copies of the covenant from ADEM, the applicant shall have the covenant recorded in the land records of the county where the site is located, in compliance with 335-5-3-.02.

(6) One copy of the recorded covenant shall be submitted to ADEM in compliance with 335-5-1-.05(3) for entry into the ADEM Registry of Environmental Covenants.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-3; 35-19-13.

**History:** May 26, 2009; March 26, 2013.



**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
LAND DIVISION - UNIFORM ENVIRONMENTAL COVENANTS PROGRAM**

**CHAPTER 335-5-2  
ENVIRONMENTAL COVENANTS**

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**335-5-2-.01 Covenant Contents.**

(1) An environmental covenant is not effective unless it includes all of the following information:

(a) A statement that the instrument is an environmental covenant executed pursuant to the Act.

(b) A legally sufficient description of the real property subject to the covenant.

(c) A description of the activity and use limitations on the real property.

(d) Identification of every holder.

(e) The signatures of the Director, every holder, and unless waived by the Department in writing, every owner of the fee simple of the real property subject to the covenant.

(f) The name and location of any administrative record for the environmental response project reflected in the environmental covenant.

(2) The covenant may also contain any other information, restrictions, and requirements, including but not limited to any of the following:

(a) Requirements for notice following transfer of a specified interest in the property subject to the covenant.

(b) Requirements for notice concerning proposed changes in use of, applications for building permits for, or proposals for any site work affecting the contamination on, the property subject to the covenant.

(c) Requirements for periodic reports of compliance with the covenant.



(d) Rights of access to the property which are granted in connection with implementation or enforcement of the covenant.

(e) A brief narrative description of the contamination and remedy, including the contaminants of concern, the pathways of exposure, limits on exposure, and the location and extent of the contamination.

(f) Limitations on amendment or termination of the covenant in addition to those provided in 335-5-4-.02.

(g) Rights of the holder in addition to the holder's right to enforce the covenant pursuant to 335-5-5-.01.

(h) The name of the person who shall submit the environmental covenant to ADEM for listing in the registry required in 335-5-1-.05.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-4; 35-19-13.

**History:** May 26, 2009.

### **335-5-2-.02 Covenant Rules.**

(1) An environmental covenant that complies with the Act and 335-5 runs with the land.

(2) An environmental covenant that is otherwise effective is valid and enforceable even if one or more of the following conditions apply:

(a) It is not appurtenant to an interest in real property.

(b) It can be or has been assigned to a person other than the original holder.

(c) It is not of a character that has been recognized traditionally at common law.

(d) It imposes a negative burden.

(e) It imposes an affirmative obligation on a person having an interest in the real property or on the holder.

(f) The benefit or burden does not touch or concern real property.

(g) There is no privity of estate or contract.

(h) The holder dies, ceases to exist, resigns, or is replaced.

(i) The owner of an interest subject to the environmental covenant and the holder are the same person.



(3) An environmental covenant or an instrument that created restrictions or obligations with respect to real property and which was recorded before the effective date of 335-5 is not invalidated because it may not comply with all provisions of the Act or 335-5, or because it was identified as an easement, servitude, deed restriction, or other interest. 335-5 does not apply in any other respect to such an instrument.

(4) Neither the Act nor 335-5 invalidates or renders unenforceable any interest, whether designated as an environmental covenant or other interest, which is otherwise enforceable under the laws of this State.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-5; 35-19-13.

**History:** May 26, 2009.

**335-5-2-.03 Relationship to Other Land Use Law.** Neither the Act nor 335-5 authorizes use of real property which is otherwise prohibited by zoning, by other law which regulates the use of real property, or by a recorded instrument that has priority over the environmental covenant. An environmental covenant may prohibit or restrict a use of real property which is authorized by zoning or by law other than the Act.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-6; 35-19-13.

**History:** May 26, 2009.



**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
LAND DIVISION - UNIFORM ENVIRONMENTAL COVENANTS PROGRAM**

**CHAPTER 335-5-3  
NOTICE AND RECORDATION**

**TABLE OF CONTENTS**

<b>335-5-3-.01</b>	<b>Notices of Covenants</b>
<b>335-5-3-.02</b>	<b>Recording Covenants</b>

**335-5-3-.01 Notices of Covenants.**

(1) A copy of the environmental covenant shall be provided by the owner or operator or other responsible person and in the manner required by the Department to each of the following:

- (a) Each person who signed the covenant.
  - (b) Each person holding a recorded interest in the real property subject to the covenant.
  - (c) Each person in possession of the real property subject to the covenant.
  - (d) Each municipality or other unit of local government in which the real property subject to the covenant is located, and
  - (e) Any persons that are due notice under the relevant regulatory program pursuant to which the environmental covenant is being granted.
- (2) The validity of a covenant is not affected by failure to provide a copy of the covenant as required under 335-5-3-.01(1).

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-7; 35-19-13.

**History:** May 26, 2009.

**335-5-3-.02 Recording of Covenants.**

(1) An environmental covenant and any amendment or termination of the covenant must be recorded by the owner or operator or other responsible person in every county where any portion of the real property subject to the covenant is located. The environmental covenant shall be indexed to the grantor's property in the land records. For purposes of indexing, a holder shall be treated as a grantee.



(2) Except as otherwise provided in 335-5-4-.01(3), an environmental covenant is subject to the laws of the State governing recording and priority of interests in real property.

(3) Content of Recording Instrument. In lieu of recording the entire covenant, a notice may be recorded which must contain all of the following:

(a) A legally sufficient description and any available street address of the real property subject to the covenant.

(b) The names and addresses of the owner of the fee simple interest in the real property, the Department, and the holder if other than the Department.

(c) A statement that the covenant, amendment, or termination is available in a registry at the Department.

(d) A statement that the notice is notification of an environmental covenant executed pursuant to this Act.

(4) The requirements of 335-5-3-.02(3) are satisfied with a statement, executed with the same formalities as a deed in the State of Alabama, in substantially the following form:

(a) This notice is filed in the land records of the Probate Office of \_\_\_\_\_ County, Alabama, pursuant to Section 12 of the Alabama Uniform Environmental Covenants Act.

(b) This notice and the covenant, amendment, or termination to which it refers may impose significant obligations with respect to the property described below.

(c) A legal description of the property is attached as Exhibit A to this notice. The address of the property that is subject to the environmental covenant is [insert address of property] [not available].

(d) The name and address of the owner of the fee simple interest in the real property on the date of this notice is [insert name of current owner of the property and the owner's current address as shown on the tax records of the jurisdiction in which the property is located].

(e) The environmental covenant, amendment, or termination was signed by the Director of the Alabama Department of Environmental Management.

(f) The environmental covenant, amendment, or termination was filed in the registry on [insert date of filing].

(g) The full text of the covenant, amendment, or termination and any other information required by the Department is on file and available for inspection and copying in the registry maintained for that purpose by the Alabama Department of Environmental Management.



**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§ 35-19-8; 35-19-12; 35-19-13.

**History:** May 26, 2009; March 26, 2013



**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
LAND DIVISION - UNIFORM ENVIRONMENTAL COVENANTS PROGRAM**

**CHAPTER 335-5-4  
DURATION AND AMENDMENT**

**TABLE OF CONTENTS**

<b>335-5-4-.01</b>	<b>Duration of Covenants</b>
<b>335-5-4-.02</b>	<b>Amendment of Covenants</b>

**335-5-4-.01 Duration of Covenants.**

(1) An environmental covenant is perpetual unless any of the following conditions apply:

(a) Its term is limited to a specific duration or terminated by the occurrence of a specific event.

(b) It is terminated or modified pursuant to 335-5-4-.01(2).

(c) It is terminated or modified by consent pursuant to 335-5-4-.02.

(d) It is terminated by foreclosure of an interest that has priority over the environmental covenant.

(e) It is terminated or modified in an eminent domain proceeding, but only if all of the following requirements are satisfied:

1. The Department is a party to the proceeding.

2. All persons identified in 335-5-4-.02(1) and (2) are given notice of the pendency of the proceeding.

3. The court determines, after hearing, that the termination or modification will not adversely affect human health, public welfare, or the environment.

(2) If the Department determines that the intended benefits of the covenant can no longer be realized, or are no longer protective of human health and the environment, it shall give notice of at least thirty (30) days to all persons identified in 335-5-4-.02(1) and (2), of its intention to petition a court, under the doctrine of changed circumstances, for termination of the covenant or reduction of its burden on the real property subject to the covenant. The Department's determination or its failure to make a determination upon request is subject to review pursuant to the Alabama Administrative Procedures Act, Code of Alabama 1975, §§41-22-1 to 41-22-27 (AAPA). After the applicable



provisions of AAPA have been satisfied, the Department may petition a court to terminate or reduce the covenant.

(3) Except as otherwise provided in 335-5-4-.01(1) and (2), an environmental covenant may not be extinguished, limited, or impaired through issuance of a tax deed, foreclosure of a tax lien, or by application of the doctrine of adverse possession, prescription, abandonment, waiver, lack of enforcement, or acquiescence, or a similar doctrine.

(4) An environmental covenant may not be extinguished, limited, or impaired by the application of any law relating to marketable title or dormant mineral interests.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-9; 35-19-13.

**History:** May 26, 2009.

### **335-5-4-.02 Amendment of Covenants.**

(1) Unless otherwise specified in the environmental covenant, no environmental covenant may be amended or terminated by consent unless the amendment or termination is signed by all of the following:

(a) The Department. Where the Department waives this requirement, the current owner of the fee simple of the real property subject to the covenant shall sign.

(b) Each person who originally signed the covenant, unless a person, in a signed record, waives the right to consent or a court finds that a person no longer exists or cannot be located or identified with the exercise of reasonable diligence.

(c) Except as otherwise provided in 335-5-4-.02(4)(b), the holder.

(2) If an interest in real property is subject to an environmental covenant, the interest is not affected by an amendment of the covenant unless the current owner of the interest consents to the amendment or waives, in a signed record, the right to consent to amendments.

(3) Except for an assignment undertaken pursuant to a governmental reorganization, an assignment of an environmental covenant to a new holder is an amendment.

(4) Except as otherwise provided in an environmental covenant:

(a) A holder may not assign its interest without consent of the other parties.



(b) A holder may be removed and replaced by agreement of the parties specified in 335-5-4-.02(1)(a) and (b).

(c) A court of competent jurisdiction may fill a vacancy in the position of holder.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-10; 35-19-13.

**History:** May 26, 2009.



**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
LAND DIVISION - UNIFORM ENVIRONMENTAL COVENANTS PROGRAM**

**CHAPTER 335-5-5  
ENFORCEMENT**

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<b>335-5-5-.01</b>	<b>Enforcement of Covenants</b>
<b>335-5-5-.02</b>	<b>Duties of the Department</b>

**335-5-5-.01 Enforcement of Covenants.**

(1) Pursuant to Code of Alabama 1975, §22-22A-5, ADEM may pursue enforcement action for violation of an environmental covenant established under 335-5.

(2) A civil action for injunctive or other equitable relief for violation of an environmental covenant may be maintained by any of the following parties or entities:

- (a) A party to the covenant.
- (b) The Department.
- (c) Any person to whom the covenant expressly grants power to enforce.
- (d) A person whose collateral, liability, or interest in the real property may be affected by the alleged violation of the covenant.
- (e) A municipality or other unit of local government in which the real property subject to the covenant is located.

(3) A person is not responsible for or subject to liability for environmental remediation solely because that person has the right to enforce an environmental covenant.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-11; 35-19-13.

**History:** May 26, 2009.



**335-5-5-.02 Duties of the Department.**

(1) The Department is designated as the administering agency for the Act and 335-5 and is authorized to administer and enforce the Act and these regulations through the authorities granted to it by the Environmental Management Act, Code of Alabama 1975, §§22-22A-1, et seq.

(2) The designation provided in subsection (1) does not imply that the Department shall assume any administration or enforcement functions other than those directly related to the environmental covenant.

(3) With respect to an environmental response project, the Act does not limit the regulatory authority of the Department under other law.

**Authors:** James L. Bryant; Lawrence A. Norris.

**Statutory Authority:** Code of Alabama 1975, §§35-19-11; 35-19-13.

**History:** May 26, 2009.



Appendix B  
Model Environmental Covenant



## ENVIRONMENTAL COVENANT

The **NAME** (hereinafter "Grantor") grants an Environmental Covenant (hereinafter "Covenant") this \_\_\_\_ day of \_\_\_\_\_, 201**X**, to the following entities pursuant to The Alabama Uniform Environmental Covenants Act, Ala. Code §§ 35-19-1 to 35-19-14 (2014 Cum. Supp.) (hereinafter "the Act" or "Act"), and the regulations promulgated thereunder: the Alabama Department of Environmental Management and the identified holders or other applicable parties: **HOLDER(S) NAME(S) IF APPLICABLE**.

**WHEREAS**, the Grantor was the owner of certain real property located in the City of **XXXXXXX**, Alabama, identified as the former **SITE NAME** situated at **PHYSICAL ADDRESS**, in **COUNTY NAME** County, Alabama, (hereinafter "the Property"). The property which was conveyed to Grantor by deed dated **DEED DATE**, and recorded in the Office of the Judge of Probate for **COUNTY NAME** County, Alabama, in Deed Book **XXX** at Page **XX**;

**WHEREAS**, the Property is more particularly described as the following:

**COMPLETE LEGAL SURVEY DEED DESCRIPTION OF AFFECTED AREA;**

**WHEREAS**, this instrument is an Environmental Covenant developed and executed pursuant to the Act and the regulations promulgated thereunder;

**WHEREAS**, a release/disposal of hazardous substances, including, but not limited to, **IDENTIFIED CONTAMINANT(S) AND MEDIA**, occurred on the Property;

**WHEREAS**, the selected "remedial action" for the Property, which has now been implemented, providing in part, for the following actions:

**DESCRIPTION OF REMEDIAL ACTION**

**WHEREAS**, pursuant to the approved Remedial Action Plan, the Grantor and assignees agreed to perform operation and maintenance activities at the Property to address the effects of the release/disposal, which includes controlling exposure to the hazardous wastes, hazardous constituents, hazardous substances, pollutants, or contaminants;

**WHEREAS**, the Remedial Action Plan requires institutional controls to be implemented to address the effects of the release/disposal and to protect the remedy so that exposure to the hazardous waste, hazardous constituents, hazardous substances, pollutants, or contaminants is controlled by restricting the use of the Property and the activities on the Property;

**WHEREAS**, hazardous wastes, hazardous constituents, hazardous substances, pollutants, or other contaminants remain on the Property, specifically contamination has



occurred in (LIST ENVIRONMENTAL MEDIA, SUCH AS GROUNDWATER, SURFACE SOILS, SUBSURFACE SOILS, SURFACE WATER, ETC.) and the following contaminant(s) remain at the site: (LIST ALL CONTAMINANTS REMAINING IN GROUNDWATER, SOIL, SEDIMENT, AND SURFACE WATERS);

**WHEREAS**, the purpose of this Covenant is to ensure protection of human health and the environment by placing restrictions on the Property to reduce the risk to human health to below the target risk levels for those hazardous wastes, hazardous constituents, hazardous substances, pollutants, or contaminants that remain on the Property;

**WHEREAS**, further information concerning the release/disposal and the activities to correct the effects of the release/disposal may be obtained by contacting Chief, Land Division, Alabama Department of Environmental Management ("ADEM"), or his or her designated representative, at 1400 Coliseum Boulevard, Montgomery, Alabama, 36110; and

**WHEREAS**, the Administrative Record concerning the Property is located at:

XXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXX

and

Alabama Department of Environmental Management  
1400 Coliseum Boulevard  
Montgomery, Alabama 36110

**NOW, THEREFORE**, Grantor hereby grants this Environmental Covenant to ADEM and the identified Holders, and declares that the Property shall hereinafter be bound by, held, sold, used, improved, occupied, leased, hypothecated, encumbered, and/or conveyed subject to the following requirements set forth in paragraphs 1 through 3 below:

1. **DEFINITIONS**

Owner. "Owner" means the GRANTOR, its successors and assigns in interest.

2. **USE RESTRICTIONS**

The following activity(ies) shall not take place on the identified Property without first obtaining written approval from ADEM through modification of this covenant:

**EXAMPLE:** Property is restricted to Industrial Use Only.



**Use of groundwater for potable purposes.**

**3. GENERAL PROVISIONS**

- A. **Restrictions to Run with the Land.** This Environmental Covenant runs with the land pursuant to Ala. Code §35-19-5 (2014 Cum Supp.); is perpetual, unless modified or terminated pursuant to the terms of this Covenant pursuant to Ala. Code §35-19-9 (Cum Supp. 2014); is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof; inures to the benefit of and passes with each and every portion of the Property; and binds the Owner, the Holders, all persons using the land, all persons, their heirs, successors and assigns having any right, title or interest in the Property, or any part thereof who have subordinated those interests to this Environmental Covenant, and all persons, their heirs, successors and assigns who obtain any right, title or interest in the Property, or any part thereof after the recordation of this Environmental Covenant.
- B. **Notices Required.** In accordance with Ala. Code §35-19-4(b) (2014 Cum Supp.), the Owner shall send written notification, pursuant to Section J, below, following transfer of a specified interest in, or concerning proposed changes in use of, applications for building permits for, or proposals for any site work affecting the contamination on, the Property. Said notification shall be sent within fifteen (15) days of each event listed in this Section.
- C. **Registry/Recordation of Environmental Covenant; Amendment; or Termination.** Pursuant to Ala. Code §35-19-12(b) (2014 Cum Supp.), this Environmental Covenant and any amendment or termination thereof, shall be contained in ADEM's registry for environmental covenants. After an environmental covenant, amendment, or termination is filed in the registry, a notice of the covenant, amendment, or termination may be recorded in the land records in lieu of recording the entire covenant in compliance with §35-19-12(b). Grantor shall be responsible for filing the Environmental Covenant within thirty (30) days of the final required signature upon this Environmental Covenant.
- D. **Compliance Certification.** In accordance with Ala. Code §35-19-4(b) (2014 Cum Supp.), the Owner shall submit an annual report to the Director of the EPA Region 4 Superfund Division, and to the Chief of the ADEM Land Division, on the anniversary of the date this Covenant was signed by the Grantor. Said report shall detail the Owner's compliance, and any lack of compliance with the terms of the Covenant.
- E. **Right of Access.** The Owner hereby grants ADEM; ADEM's agents, contractors and employees; the Owner's agents, contractors and employees; and any Holders the right of access to the Property for implementation or enforcement of this Environmental Covenant.



- F. **ADEM Reservations.** Notwithstanding any other provision of this Environmental Covenant, ADEM retains all of its access authorities and rights, as well as all of its rights to require additional land/water use restrictions, including enforcement authorities related thereto.
- G. **Representations and Warranties.** Grantor hereby represents and warrants to the other signatories hereto:
- i) That the Grantor has the power and authority to enter into this Environmental Covenant, to grant the rights and interests herein provided and to carry out all obligations hereunder;
  - ii) That the Grantor is the sole owner of the Property and holds fee simple title which is free, clear and unencumbered;
  - iii) That \_\_\_\_\_ has agreed to subordinate its interests in the Property to the Environmental Covenant, pursuant to Ala. Code §35-19-3(d) (2014 Cum. Supp.) in accordance with the subordination agreement *[attached hereto as Exhibit \_\_\_\_ or recorded at \_\_\_\_\_]*;
  - iv) That the Grantor has identified all other parties that hold any interest (e.g., encumbrance) in the Property and notified such parties of the Grantor's intention to enter into this Environmental Covenant;
  - v) That this Environmental Covenant will not materially violate, contravene, or constitute a material default under, any other agreement, document, or instrument to which Grantor is a party, by which Grantor may be bound or affected;
  - vi) That this Environmental Covenant will not materially violate or contravene any zoning law or other law regulating use of the Property;
  - vii) That this Environmental Covenant does not authorize a use of the Property which is otherwise prohibited by a recorded instrument that has priority over the Environmental Covenant.
- H. **Compliance Enforcement.** In accordance with Ala. Code §35-19-11(b) (2014 Cum Supp.), the terms of the Environmental Covenant may be enforced by the parties to this Environmental Covenant; any person to whom this Covenant expressly grants power to enforce; any person whose interest in the real property or whose collateral or liability may be affected by the alleged violation of the Covenant; or a municipality or other unit of local



government in which the real property subject to the Covenant is located, in accordance with applicable law. The parties hereto expressly agree that ADEM has the power to enforce this Environmental Covenant. Failure to timely enforce compliance with this Environmental Covenant or the use or activity limitations contained herein by any person shall not bar subsequent enforcement by such person and shall not be deemed a waiver of the person's right to take action to enforce any non-compliance. Nothing in this Environmental Covenant shall restrict ADEM, or the Grantor, from exercising any authority under applicable law.

- I. **Modifications/Termination.** Any modifications or terminations to this Environmental Covenant must be made in accordance with Ala. Code §§35-19-9 and 35-19-10 (2014 Cum Supp.).
- J. **Notices.** Any document or communication required to be sent pursuant to the terms of this Environmental Covenant shall be sent to the following persons:

ADEM

Chief, Land Division  
Alabama Department of Environmental Management  
1400 Coliseum Boulevard  
Montgomery, AL 36110

Grantor

Responsible Party Name  
Position  
Company  
Mailing Address,  
City, Alabama ZIP

Holder(s) or Other Applicable Party(ies)

Name  
Position  
Company Name  
Mailing Address  
City, Alabama

- K. **No Property Interest Created in ADEM.** This Environmental Covenant does not in any way create any interest by ADEM in the Property that is subject to the Environmental Covenant. Furthermore, the act of approving this Environmental Covenant does not in any way create any interest by ADEM in the Property in accordance with Ala. Code §35-19-3(b) (2014 Cum. Supp.).



- L. **Severability.** If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.
- M. **Governing Law.** This Environmental Covenant shall be governed by and interpreted in accordance with the laws of the State of Alabama.
- N. **Recordation.** In accordance with Ala. Code §35-19-8(a) (2014 Cum. Supp.), Grantor shall record this Environmental Covenant and any amendment or termination of the Environmental Covenant in every county in which any portion of the real property subject to this Environmental Covenant is located. Grantor agrees to record this Environmental Covenant within fifteen (15) days after the date of the final required signature upon this Environmental Covenant.
- O. **Effective Date.** The effective date of this Environmental Covenant shall be the date upon which the fully executed Environmental Covenant has been recorded, in accordance with Ala. Code §35-19-8(a) (2014 Cum. Supp.).
- P. **Distribution of Environmental Covenant.** Within fifteen (15) days of filing this Environmental Covenant, the Grantor shall distribute a recorded and date stamped copy of the recorded Environmental Covenant in accordance with Ala. Code §35-19-7(a) (2014 Cum Supp.). However, the validity of this Environmental Covenant will not be affected by the failure to provide a copy of the Covenant as provided herein.
- Q. **ADEM References.** All references to ADEM shall include successor agencies, departments, divisions, or other successor entities.
- R. **Grantor References.** All references to the Grantor shall include successor agencies, departments, divisions, or other successor entities.
- S. **Other Applicable Party(ies).** All references to Other Applicable Party(ies) shall include successor agencies, departments, divisions, or other successor entities.



Property owner has caused this Environmental Covenant to be executed pursuant to The Alabama Uniform Environmental Covenants Act, on this \_\_\_\_ day of \_\_\_\_\_, 201X.

**IN TESTIMONY WHEREOF**, the parties have hereunto set their hands this the day and year first above written.

**NAME OF GRANTOR**

This Environmental Covenant is hereby approved by the **NAME OF GRANTOR**, Alabama this \_\_\_\_ day of \_\_\_\_\_, 201X.

By: \_\_\_\_\_

Name & Title

Grantor

STATE OF \_\_\_\_\_ )

COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_, a \_\_\_\_\_ in and for said County in said State or Commonwealth, hereby certify that \_\_\_\_\_, whose name as \_\_\_\_\_ [title] of \_\_\_\_\_ [Grantor] is signed to the foregoing conveyance and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, (s)he, as such officer and with full authority executed the same voluntarily for and as the act of said corporation.

Given under my hand this the \_\_\_\_ day of \_\_\_\_\_, 201X

Notary Public: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_



**OTHER APPLICABLE PARTY(IES)**

This Environmental Covenant is hereby approved by any **OTHER APPLICABLE PARTY(IES)** this \_\_\_\_ day of \_\_\_\_\_, 201**X**.

By: \_\_\_\_\_  
Name & Title

Holder

STATE OF \_\_\_\_\_ )  
 )  
COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_, a \_\_\_\_\_ in and for said County in said State or Commonwealth, hereby certify that \_\_\_\_\_, whose name as \_\_\_\_\_ [title] of \_\_\_\_\_ [Party] is signed to the foregoing conveyance and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, (s)he, as such officer and with full authority executed the same voluntarily for and as the act of said corporation.

Given under my hand this the \_\_\_\_ day of \_\_\_\_\_, 201**X**

Notary Public: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_



**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

This Environmental Covenant is hereby approved by the State of Alabama this \_\_\_\_ day of \_\_\_\_\_, 201X.

By: \_\_\_\_\_

Phillip D. Davis  
Chief, Land Division  
Alabama Department of Environmental Management

State of Alabama}

Montgomery, County}

I, the undersigned Notary Public in and for said County and State, hereby certify that Phillip D. Davis, whose name as Chief, Land Division, Alabama Department of Environmental Management is signed to the foregoing conveyance, and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he approved the same voluntarily on the day the same bears date and with full authority to do so.

Given under my hand and official seal this \_\_\_\_ day of \_\_\_\_\_, 201X

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_



STATE OF ALABAMA

COUNTY OF XXXXXXXXXXXXX

I, \_\_\_\_\_, Clerk of the XXXX County Court, do certify that the foregoing Environmental Covenant *[and, if applicable, attached Subordination Agreement]* was lodged in my office for record, and that I have recorded it, this \_\_\_\_ day of \_\_\_\_\_, 201X in the Deed Recordation Book ### on Page ###.

\_\_\_\_\_  
County Clerk

This instrument prepared by:

GRANTOR  
Mailing Address  
City, Alabama ZIP



## SUBORDINATION AGREEMENT

[Name of Interest Holder] (hereinafter "Subordinator of Interest"), of [address], [county], [State], is the holder of a [type of interest, lien, mortgage, easement, etc] granted by \_\_\_\_\_ to \_\_\_\_\_, dated \_\_\_\_\_ and recorded with the \_\_\_\_\_ County Clerks Office in [Deed, Lis Pendens, etc.] Book \_\_\_\_\_, Page \_\_\_\_\_.

[Name of Interest Holder] hereby assents to the grant of this Environmental Covenant granted by (Property Owner) to (Grantees i.e. Holders) and recorded with the \_\_\_\_\_ County Clerk in Deed Book \_\_\_\_\_, Page \_\_\_\_\_ [to be filled in upon recordation simultaneously with filing of Environmental Covenant] [Or to the grant of the attached Environmental Covenant granted by (Grantor) to (Grantees, i.e. Holders)] and agrees that the [type of interest] shall be subject to said Environmental Covenant and to the rights, covenants, restrictions and easements created by and under said Environmental Covenant insofar as the interests created under the [type of interest] affect the Property or Impacted Area identified in the Environmental Covenant and as if for all purposes said Environmental Covenant had been executed, delivered and recorded prior to the execution, delivery and recordation and/or registration of the [type of interest].

The execution of this subordination agreement by [Name of Interest Holder] shall not subject such person to liability for environmental remediation pursuant to (Applicable Alabama Legal Authorities), provided that such person shall not otherwise be liable for environmental remediation under another provision of law.

The execution of this subordination agreement by [Name of Interest Holder] shall not be presumed to impose any affirmative obligation on the person with respect to said Environmental Covenant.

[Name of Interest Holder] act of subordinating his/her/its prior interest in the Property to said Environmental Covenant shall not affect the priority of that interest in relation to any other interests that exist in relation to the property.

[Name of Interest Holder] further assents specifically to the subsequent recordation and/or registration of a modification to the Environmental Covenant, in accordance with the terms as referenced in the Environmental Covenant and agrees that [type of interest] shall be subject to the Modified Environmental Covenant and to the rights, covenants, restrictions, and easements created thereby and there under insofar as the interests created under the [type of interest] affect the Property or Impacted Areas as so modified and as if for all purposes said Modified Environmental



Covenant had been executed, delivered and recorded prior to the execution, delivery and recordation of the [type of interest].

[Name of Interest Holder] has caused this instrument to be executed this [ ] day of [ ], 201X.

\_\_\_\_\_  
Name of Interest Holder

\_\_\_\_\_  
Date

STATE OF [ ] )  
 )  
COUNTY OF [ ] )

I, [ ], a [ ] in and for said County in said State or Commonwealth, hereby certify that [ ], whose name as [ ] [title] of [ ] [Party] is signed to the foregoing conveyance and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, (s)he, as such officer and with full authority executed the same voluntarily for and as the act of said corporation.

Given under my hand this the \_\_\_\_ day of \_\_\_\_\_, 201X

Notary Public: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

[To be added if not attached to the Covenant]

STATE OF ALABAMA

COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, Clerk of the \_\_\_\_\_ County Court, do certify that the foregoing Subordination Agreement was lodged in my office for record, and that I have recorded it, and the certificate thereon, this [ ] day of [ ], 201X.



---

County Clerk



## Appendix C Cost Estimate



ERP Compliant Coke, LLC  
3500 35th Avenue North  
Birmingham, Alabama  
ALD 000 828 848  
Terracon Project No. E1187063

June 28, 2018

**Budgetary Cost Estimate for CMI SMA 5**

		Total
Subtasks	Description	
1	LUCP	\$30,400
2	Environmental Covenant	\$29,990
<b>Subtotal Closure Cost Estimate for CMI for SMA 5</b>		<b>\$60,390</b>
Engineering Expenses (10% of closure costs)		\$6,039.0
<b>Subtotal Engineering Expenses and Closure Cost Estimate for SMA 5</b>		<b>\$66,429.0</b>
Contingency Allowance (Contingency Allowances are typically 20% engineering and closure costs)		\$13,285.80
<b>Total Closure Cost Estimate for SMA 5</b>		<b>\$79,714.80</b>





September 7, 2018

United States Environmental Protection Agency  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8960

Attention: Mr. Wesley Hardegree

Re: **Corrective Measures Implementation (CMI) Work Plan Addendum  
SMA 5 – Former Pig Iron Foundry  
Administrative Order on Consent - Docket # RCRA 04-2012-4255  
ERP Compliant Coke  
3500 35<sup>th</sup> Avenue North  
Birmingham, Jefferson County, Alabama  
USEPA ID No. ALD 000 828 848  
Terracon Project No. E1187063**

Dear Mr. Hardegree:

On behalf of ERP Compliant Coke, LLC (ERP Coke), Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed *Corrective Measures Implementation (CMI) Work Plan Addendum for SMA 5 - Former Pig Iron Foundry* for the above-referenced site. These revisions have been prepared in response to Final Comments dated July 27, 2018.

The only comment for the USEPA letter that applied to SMA 5 was Comment 5 which read:

**SMA 4, Section 3.7/3.8 and SMA 5, Section 3.4/3.5:** The schedule of activities and reporting needs to be better presented/organized. For example:

- n SMA 4, Section 3.7, SMA 5, Section 3.4: There is no time period provided for the completion of the survey.
- n SMA 4, Section 3.7: There is no overall length of time provided for the pilot study.
- n SMA 4, Section 3.7, Section 3.8; SMA 5, Section 3.4: The work plan needs to clarify a little more the transition and reporting to occur as the project transitions from the ISCO pilot phase - including the possible Steam pilot - to full scale. Does the Pilot Study Report, which is mentioned in these sections and due 60 days after completion of field activities, refer to completion of the ISCO test or completion of both the ISCO test and any needed Steam test? In other words, since there is one confirmed pilot study, ISCO, and one alternative pilot study, Steam, will the Pilot Test Report be for the ISCO test alone, or will the Pilot Test Report be held until both ISCO and (if needed) Steam are performed?





- n SMA 4, Sections 3.7 and 3.8: The schedule of activities and reporting do not account for review and development of the Environmental Covenant with the regulatory agencies. For example, Section 3.7 just states that an Environmental Covenant will be placed on SMA 4 after the survey, and Section 3.8 simply states that a report documenting the filing of the EC will be submitted within 180 days of CMI work plan approval.
- n SMA 4, Section 3.7 and 3.8: There is a conflict in when the UIC permit application is to be submitted. Section 3.7 says the UIC permit will be requested within 30 days of CMI work plan approval; Section 3.8 says the UIC permit application will be submitted within 60 days of CMI work plan approval.

The new EPA administration is very keen on visual presentation of schedules. Therefore, EPA developed a rough Gantt Chart based on its understanding of the proposed schedule and the delay in the cost estimate review (see attached) [Note: This chart did not attempt to include the option for the Steam Pilot.] In order to help clarify many of the questions raised in other comments on the schedule and for future use in project tracking, the work plan needs to include a Gantt Chart covering at least the following main tasks:

Task 1: LUCP

Task 2: Environmental Covenant


Task 3 - Financial Assurance

Based on this comment, we have prepared a Gantt Chart which outlines the three Tasks associated with SMA 5. The Gantt Chart is attached.

If you should have any questions, please do not hesitate to contact us at (205) 942-1289.

Sincerely,

**Terracon Inc.**

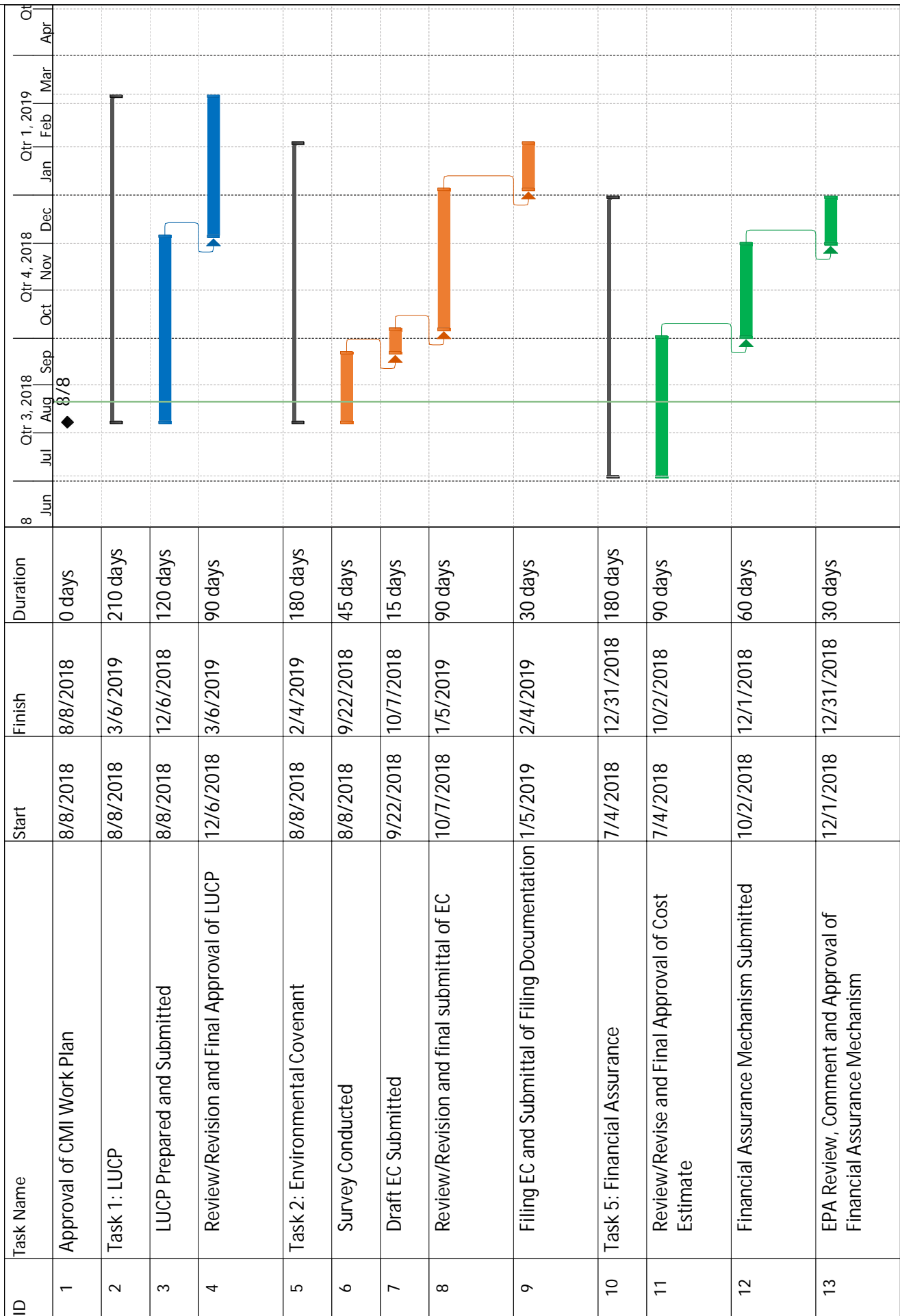
  
Terrell W. Warfield, G #8  
Principal Geologist

cc: Ms. Meredith Anderson; USEPA Region 4  
ADEM



# CMI SMA 5 First Year Timeline

ERP Compliant Coke, LLC







October 29, 2018

United States Environmental Protection Agency  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8960

Attention: Mr. Wesley Hardegree

Re: **Response to EPA Comments on Cost Estimate from  
Corrective Measures Implementation (CMI) Work Plan SMA 4 (June 24, 2018)  
Administrative Order on Consent - Docket # RCRA 04-2012-4255  
ERP Compliant Coke  
3500 35<sup>th</sup> Avenue North  
Birmingham, Jefferson County, Alabama  
USEPA ID No. ALD 000 828 848  
Terracon Project No. E1187063**

Dear Mr. Hardegree:

On behalf of ERP Compliant Coke, LLC (ERP Coke), Terracon Consultants, Inc. (Terracon) is pleased to submit this response to the USEPA letter *Corrective Measures Implementation Work Plans, SMA 4 - Former Chemical Plant* dated September 28, 2018. The individual comments and responses are provided below.

#### **USEPA Comment No. 1**

Subtask 2 (LUCP): The unit costs for “Prepare LUCP” and “Revise LUCP to address comments” are listed as \$20,000 and \$4,000, respectively. However, the same costs for SMA 5 are listed as \$25,600 and \$4,800. Shouldn’t the unit costs be equivalent? Which unit cost is correct?

#### **ERP Coke Response No. 1**

When preparing the cost estimate, the thought was the level of detail on each SMA will be different. The original plan was to prepare the LUCP for SMA 5 first since it there was not as many items involved. This initial preparation would then lower the cost for preparing the LUCP for SMA 4 since some of the preparation for the SMA 5 LUCP would carry over into the SMA 4 LUCP. For Consistency sake, we can revise the cost estimate to make them the same. To be conservative, we will revise both to use the \$25,600 and \$4,800.





## **USEPA Comment No. 2**

Subtask 3 (Environmental Covenant): The unit cost for “ADEM Processing and Review Fees” is listed as \$6,425. However, the same cost for SMA 5 is listed as \$4,285. Shouldn’t the unit costs be equivalent? Which unit cost is correct?

## **ERP Coke Response No. 2**

There is a difference in costs due to the different types of controls implemented in each SMA. Based on the Fee Schedule J in Alabama Administrative Code 335-1-7-.00. We recommended SMA 4 has engineering controls which requires a fee of \$6,425. For SMA 5 there are only institutional controls which require a fee of \$4,285.

## **USEPA Comment No. 3**

Subtasks 1 (LUCP) and 2 (Environmental Covenant): The estimated costs for SMA 5 are solely related to the initial establishment of the Institutional Controls (i.e., the Environmental Covenant, and the LUCP). However, once the Environmental Covenant and Land Use Control Plan are in place, there will be some minor on-going costs. Specifically, there will need to be an annual field inspection and certified report documenting the continuance of and effectiveness of the land use controls and ECs. Please revise the cost estimate to account for the ongoing administrative costs associated with the LUCP and ECs.

## **ERP Coke Response No. 3**

The financial assurance estimate has been revised to include the annual inspection and reporting of the effectiveness of the land use controls and ECs.

Please find a revised Appendix C - Budgetary Cost Estimate for CMI SMA 5.



## CLOSING

If you should have any questions, please do not hesitate to contact us at (205) 942-1289.

Sincerely,

**Terracon**



Terrell W. Rippstein, P.G. #8  
Principal Geologist

cc: Ms. Meredith Anderson; USEPA Region 4  
ADEM



ERP Compliant Coke, LLC  
3500 35th Avenue North  
Birmingham, Alabama  
ALD 000 828 848  
Terracon Project No. E1187063

October 29, 2018

**Budgetary Cost Estimate for CMI SMA 5**

		Total
Subtasks	Description	
1	LUCP	\$30,400
2	Environmental Covenant	\$29,990
3	Annual Inspection and Documentation	\$31,500
<b>Subtotal Closure Cost Estimate for CMI for SMA 5</b>		<b>\$91,890</b>
Engineering Expenses (10% of closure costs)		\$9,189.0
<b>Subtotal Engineering Expenses and Closure Cost Estimate for SMA 5</b>		<b>\$101,079.0</b>
Contingency Allowance (Contingency Allowances are typically 20% engineering and closure costs)		\$20,215.80
<b>Total Closure Cost Estimate for SMA 5</b>		<b>\$121,294.80</b>



**ERP Compliant Coke, LLC**  
**3500 35th Avenue North**  
**Birmingham, Alabama**  
**ALD 000 828 848**  
Terracon Project No. E1187063

October 29, 2018

**Budgetary Cost Estimate for CMI SMA 5**

**1) LUCP**  
**(Section 3.1 of CMI Work Plan for SMA 5)**

<b>Task</b>	<b>Units</b>	<b>Number of Units</b>	<b>Unit Cost</b>	<b>Cost Estimate</b>
Prepare LUCP	Ea	1	\$25,600	\$ 25,600
Revise LUCP to address comments	Ea	1	\$4,800	\$ 4,800
<b>SUBTOTAL</b>			<b>\$</b>	<b>30,400</b>

**2) Environmental Covenant**  
**(Section 3.2 of CMI Work Plan for SMA 5)**

<b>Task</b>	<b>Units</b>	<b>Number of Units</b>	<b>Unit Cost</b>	<b>Cost Estimate</b>
Survey	Ea	1	\$6,000	\$ 6,000
Prepare Environmental Covenant	Ea	1	\$6,000	\$ 6,000
ADEM Processing and Review Fees	Ea	1	\$4,285	\$ 4,285
ADEM Reistry and Recording Fees	Ea	1	\$13,705	\$ 13,705
<b>SUBTOTAL</b>			<b>\$</b>	<b>29,990</b>

**3) Annual Inspection and Documentation**

<b>Task</b>	<b>Units</b>	<b>Number of Units</b>	<b>Unit Cost</b>	<b>Cost Estimate</b>
Yearly Site Reconnaissance	Ea	30	\$500	\$ 15,000
Annual Report	Ea	30	\$500	\$ 15,000
Mileage, Misc.	Ea	30	\$50	\$ 1,500
<b>SUBTOTAL</b>			<b>\$</b>	<b>31,500</b>



ERP Compliant Coke, LLC  
3500 35th Avenue North  
Birmingham, Alabama  
ALD 000 828 848  
Terracon Project No. E1187063

January 4, 2018

**Budgetary Cost Estimate for CMI SMA 5**

1) **LUCP**  
**(Section 3.1 of CMI Work Plan for SMA 5)**

Task	Units	Number of Units	Unit Cost	Cost Estimate
Prepare LUCP	Ea	1	\$25,600	\$ 25,600
Revise LUCP to address comments	Ea	1	\$4,800	\$ 4,800
<b>SUBTOTAL</b>			<b>\$</b>	<b>30,400</b>

2) **Environmental Covenant**  
**(Section 3.2 of CMI Work Plan for SMA 5)**

Task	Units	Number of Units	Unit Cost	Cost Estimate
Survey	Ea	1	\$6,000	\$ 6,000
Prepare Environmental Covenant	Ea	1	\$6,000	\$ 6,000
ADEM Processing and Review Fees	Ea	1	\$4,285	\$ 4,285
ADEM Reistry and Recording Fees	Ea	1	\$13,705	\$ 13,705
<b>SUBTOTAL</b>			<b>\$</b>	<b>29,990</b>



# Exhibit CX17





ERP Compliant Coke, LLC  
3500 35th Avenue North  
Birmingham, AL 35207-2918  
(205) 808-7803

August 2, 2019

Wes Hardegree, Project Manager  
RCRA Programs and Cleanup Branch  
United States Environmental Protection Agency  
Region 4  
61 Forsyth Street  
Atlanta, Georgia 30303-8960

RE: Transfer of Ownership

Dear Mr. Hardegree:

Please accept this letter as notification of transfer of ownership in relation to ERP Compliant Coke, LLC. As announced August 1, 2019 via press release, Bluestone Mineral, Inc. purchased the ERP Compliant Coke plant in Birmingham, Alabama. Bluestone is owned by the Justice family and is led by Jay Justice.

This transfer does not involve a name change and currently I will remain as the Facility Project Coordinator. All of my contact information is remaining the same.

If you have further questions or feel the need to have a discussion, don't hesitate to contact me.

Sincerely,

Don Wiggins  
Manager of Technical Services  
ERP Compliant Coke, LLC

Cc: Terry Rippstein, Terracon (via email)



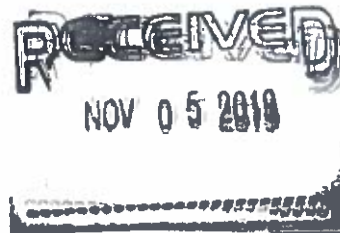
# Exhibit CX18





**Bluestone Coke, LLC**  
3500 35<sup>th</sup> Avenue North  
Birmingham, AL 35207  
(205) 808-7803

October 31, 2019



Wesley Hardegree  
RCRA Program and Cleanup Branch  
United States Environmental Protection Agency  
Region 4  
61 Forsyth Street  
Atlanta, Georgia 30303-8960

RE: Submission of Financial Assurance for Bluestone Coke, LLC  
SMA 5- Former Pig Iron Foundry  
EPA ID Number: ALD 000 828 848  
RCRA Docket Number: RCRA-04-2016-4250

Dear Mr. Hardegree:

We are pleased to provide you with a Certificate of Insurance for Closure and Post-Closure Care to satisfy the financial assurance requirements in the above-captioned matter.

Enclosed you will find an executed Certificate of Insurance for Closure and Post-Closure Care pursuant to 40 C.F.R. § 264.151(e).

Thank you for your attention to this matter. Please feel free to contact me with any questions.

Best regards,

  
Don Wiggins

Encl/



Name and Address of Insurer

(herein called the "Insurer"): James River Insurance Company, Ltd.  
65 Front Street, 6<sup>th</sup> Floor  
Hamilton HM12, Bermuda

Name and Address of Insured

(herein called the "Insured"): Bluestone Coke, LLC f/k/a ERP Compliant Coke, LLC  
3500 35<sup>th</sup> Avenue North  
Birmingham, Alabama 35207

Facilities Covered: SMA 5- Former Pig Iron Foundry  
EPA Identification Number: ALD 000 828 848  
Bluestone Coke, LLC  
3500 35<sup>th</sup> Avenue North  
Birmingham, AL 35207

Amount of insurance for closure and post-closure care: \$121,294.80

Face Amount: \$121,294.80

Policy Number: PKG 1891128

Effective Date: October 31, 2019

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for closure and post-closure care for the facility identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of 40 CFR 264.143(e), 264.145(e), 265.143(d), and 265.145(d), as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the EPA Regional Administrator(s) of the U.S. Environmental Protection Agency, the Insurer agrees to furnish to the EPA Regional Administrator(s) a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in 40 CFR 264.151(e) as such regulations were constituted on the date shown immediately below.

Authorized signature for Insurer: 

Printed Name:

William Izard

Title:

Director

Witness Signature: 

Date: October 31, 2019



# Exhibit CX19





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

December 18, 2019

Certified Mail  
Return Receipt Requested

Don Wiggins, Manager of Technical Services  
Bluestone Coke, LLC  
3500 35<sup>th</sup> Avenue North  
Birmingham, Alabama 35207

RE: Final Approval of Corrective Measures Implementation Work Plans (including cost estimates)  
SMA 4 - Former Chemical Plant  
EPA ID Number: ALD 000 828 848  
RCRA Docket Number: RCRA-04-2016-4250

Dear Mr. Wiggins:

The United States Environmental Protection Agency has completed its review of the September 7, 2018, Corrective Measures Implementation (CMI) Work Plan for the Former Chemical Plant.

SMA 4 - CMI Work Plan, Cost Estimate

The EPA's review found the September 7, 2018, CMI Work Plan to be acceptable. The Agency's review also found the September 16, 2019, revised cost estimate adequate for use in securing the initial corrective action Financial Assurance mechanism for SMA 4.

Recall that on July 27, 2018, the EPA issued an Interim Approval of the CMI Work Plan for SMA 4. The approval was interim (or conditional) because several tasks remained (see Table 1). Table 1 lists the outstanding tasks that had to be completed and their current status.

Table 1. Tasks to Complete CMI Work Plan for SMA 4	
Task	Status
Provide a Quality Assurance Project Plan (QAPP)	Submitted August 30, 2018.  EPA approved the QAPP on September 13, 2018.
Provide SMA 4 Sampling and Analysis Plan	Submitted September 28, 2018.  EPA approved the plan on October 18, 2018.



<p>EPA review of Cost Estimates Provide a Cost Estimate</p>	<p>EPA comments on the cost estimates issued on September 28, 2018. Revised cost estimates submitted October 29, 2018, and September 16, 2019.</p> <p>The Agency's review found the September 16, 2019, cost estimate adequate for use in securing the initial corrective action Financial Assurance mechanism.</p>
---	---

With the satisfactory completions of the above tasks, the September 7, 2018, CMI Work Plan now has Final (unconditional) Approval.

#### SMA 4 - Financial Assurance Mechanism

Please submit the Financial Assurance mechanism covering both SMA 4 **within sixty (60) calendar days** from receipt of this letter. Please see Attachment C of 2016 RCRA Section 3008(h) Administrative Order on Consent for more detailed information on the financial assurance mechanism.

#### SMA 4 - Land Use Control Plan (LUCP)

With the Final Approval of the CMI Work Plan, please submit the LUCP **within one hundred and twenty (120) calendar days** from receipt of this letter.

#### SMA 5 – Former Pig Iron Foundry – LUCP

Although the LUCP for SMA 5 is due **within one hundred and twenty (120) days** from receipt of the July 11, 2019, approval of the CMI Work Plan for SMA 5, with the approval today of the CMI work plan for SMA 4, if desired, the LUCP for SMA 5 can be submitted in conjunction with the LUCP for SMA 4.

If you have any questions concerning this matter, please contact me at (404) 562-9629 or [hardegree.wes@epa.gov](mailto:hardegree.wes@epa.gov).

Sincerely,



Wesley Hardegree, Project Manager  
RCRA Corrective Action Section  
RCRA Programs and Cleanup Branch

Cc: Corey Hendrix, EPA (via email)  
Terry Rippstein, Terracon (via email)  
Thomas Garrett, ADEM (via email)



## Certified Mail Form

US Environmental Protection Agency



HELLO GASTON, WILLIE

Date: 12/18/2019



## New Certified Mail Record

Certified No.:	7017145000079733769				
Express No.:					
To:	Don Wiggins Manager of Technical Services Bluestone Coke, LLC				
Street:	3500 35th Avenue North				
City:	Birmingham	State:	AL ▼	Zip:	35207
Sender:	Wes Hardegree	Extension:	29629	Floor:	10
Sender Location:	RCRA CORRECTIVE ACTION SECTION ▼				
Building:	AFC Tower	Unit:			
Alternate Sender:					Alternate Sender Extension:
Site Name:					Site ID:

Save Record



7017 1450 0000 7973 3769

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Mr. Don Wiggins, Manager of Technical Services  
 Bluestone Coke, LLC  
 3500 35th Avenue North  
 Birmingham, AL 35207

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Street

Box No.

City, State, .

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

Article Addressed to:

Mr. Don Wiggins, Manager of Technical Services  
 Bluestone Coke, LLC  
 3500 35th Avenue North  
 Birmingham, AL 35207

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X Harold Wilson

- ☐ Agent  
☐ Addressee

B. Received by (Printed Name)

HAROLD WILSON

C. Date of Delivery

12/20/19

D. Is delivery address different from item 1?

enter delivery address below:

- ☐ Yes  
☐ No



9590 9402 4175 8092 1108 59

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PS Form 3811, July 2015 PSN 7530-02-000-9053

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