UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

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IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA	CERCLA Docket No. 06-08-16
ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership L.P. Talen's Marine & Fuel, LLC Phillips 66 Company	
Respondents	**ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
DRAFT ADMINISTRATIVE SETTLEMENT AGREEMENT
AND ORDER ON CONSENT FOR
REMEDIAL INVESTIGATION / FEASIBILITY STUDY

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ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT
FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the parties listed in Appendix C (individually a "Respondent" and collectively the "Respondents"). The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study ("RI/FS") at or in connection with the SBA Shipyard Superfund Site located on the west bank of the Mermentau River at the end of Louisiana Highway 3166 (i.e., Castex Landing Road), about four miles southeast of downtown Jennings and two miles southwest of the village of Mermentau, and payment of Future Response Costs incurred by EPA in connection with the RI/FS.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607, and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on May 11, 1994, by EPA Delegation No. 14-14-C. This authority was further redelegated by the Regional Administrator of EPA Region 6 to the Director, Superfund Division by EPA Regional Delegation No. R6-14-14-C (June 8, 2001).

3. In accordance with Sections 104(b)(2) and 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), EPA notified the U.S. Department of Interior, U.S. Fish and Wildlife Service, United States Geological Survey, Louisiana Department of Environmental Quality, Louisiana Department of Health and Hospitals, Louisiana Department of Wildlife and Fisheries and the Louisiana Department of Natural Resources on September 14, 2016, of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal and State trusteeship.

4. EPA and Respondents recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact in Section V and the conclusions of law and determinations in Section VI. Respondents agree to comply with and be bound by the terms of this Settlement Agreement and further agree that they will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon EPA and upon Respondents and their heirs, successors and assigns. Any change in ownership or corporate

status of a Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement Agreement.

6. Respondents are jointly and severally liable for carrying out all activities required by this Settlement Agreement. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Settlement Agreement, the remaining Respondents shall complete all such requirements.

7. Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondents shall be responsible for any noncompliance with this Settlement Agreement.

8. Each undersigned representative of Respondents certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind Respondents to this Settlement Agreement.

III. STATEMENT OF PURPOSE

9. In entering into this Settlement Agreement, the objectives of EPA and Respondents are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Remedial Investigation as more specifically set forth in the Statement of Work ("SOW") attached as Appendix B to this Settlement Agreement; (b) to identify and evaluate remedial alternatives to prevent, mitigate, or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study as more specifically set forth in the SOW in Appendix B to this Settlement Agreement; and (c) to recover response and oversight costs incurred by EPA with respect to this Settlement Agreement.

10. The Work conducted under this Settlement Agreement is subject to approval by EPA and shall provide all appropriate and necessary information to assess Site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondents shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, and all applicable EPA guidances, policies, and procedures.

IV. DEFINITIONS

11. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or its appendices, the following definitions shall apply:

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601, *et seq.*

"DOJ" shall mean the United States Department of Justice and its successor departments, agencies, or instrumentalities.

"Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal or state holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall mean the effective date of this Settlement Agreement as provided in Section XXIX.

"EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

"EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs, after the Effective Date of this Settlement Agreement until the issuance of the Record of Decision for this Site, in reviewing or developing plans, reports, and other deliverables submitted pursuant to this Settlement Agreement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section XII (Site Access and Institutional Controls) (including, but not limited to, the cost of attorney time and any monies paid to secure access, including, but not limited to, the amount of just compensation), Paragraph 41 (emergency response), Paragraph 84 (Work takeover), and the costs incurred by the United States in enforcing the terms of this Settlement Agreement, including all costs incurred in connection with Section XV (Dispute Resolution), and all litigation costs. Future Response Costs shall also include Agency for Toxic Substances and Disease Registry ("ATSDR") costs regarding the Site.

"Institutional controls" shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements, and well drilling prohibitions.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable

rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.[1]

"LDEQ" shall mean the Louisiana Department of Environmental Quality and any successor departments or agencies of the State.

"NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral or an upper or lower case letter. References to paragraphs in the SOW will be so identified, e.g., "SOW Paragraph 15."

"Parties" shall mean EPA and Respondents.

"RCRA" shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, 42 U.S.C. §§ 6901, *et seq*.

"Respondent" or "Respondents" shall mean the entities identified in Appendix C.

"Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral. References to sections in the SOW will be so identified, e.g., "SOW Section V."

"Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent, the SOW, all appendices attached hereto (listed in Section XXVII) and all documents incorporated by reference into this document including without limitation EPA-approved submissions. EPA-approved submissions (other than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by EPA. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Settlement Agreement shall control.

"Site" shall mean the SBA Shipyard Superfund Site, encompassing approximately 98 acres located on the west bank of the Mermentau River at the end of Louisiana Highway 3166 (i.e., Castex Landing Road). *See* Appendix A. The Site is about four miles southeast of downtown Jennings and two miles southwest of the village of Mermentau. The Site is bordered to the north by residents, south and west by wetlands, and east by the Mermentau River.

"SBA Shipyard Special Account" shall mean the special account, within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

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[1] The Superfund currently is invested in 52-week MK notes. The interest rate for these MK notes changes on October 1 of each year. Current and historical rates are available online at http://www.epa.gov/ocfopage/finstatement/superfund/int_rate.htm.

"State" shall mean the State of Louisiana.

"Statement of Work" or "SOW" shall mean the Statement of Work for development of a RI/FS for SBA Shipyard as set forth in Appendix B to this Settlement Agreement. The Statement of Work is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"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 material" under LAC 33:V.109.

"Work" shall mean all activities Respondents are required to perform under this Settlement Agreement, except those required by Section XIV (Retention of Records).

V. FINDINGS OF FACT

12. The Site is situated on approximately 98 acres of land located in a rural-industrial area at 9040 Castex Landing Road, Jennings, Jefferson Davis Parish, Louisiana 70546. The Site is within Section 19 of Range 2W, Township 105 and is located at the end of Louisiana Highway 3166) which is on the west bank of the Mermentau River. The Site is approximately four miles southeast of downtown Jennings and two miles southwest of the village of Mermentau. The Site is bordered to the north by residents, south and west by wetlands, and east by the Mermentau River and wetlands.

The Site primarily consists of two separately-owned parcels of property, one southern and one northern. The southern and northern properties are generally divided by a property line that runs just north of the large barge slip. Suzanne Smaihall Cornelius, (heir of Louis Smaihall, principal of SBA Shipyards, Inc.) and SBA Shipyards, Inc. (now inactive) own the southern property, which historically was operated as a barge cleaning operation. Bunge Street Properties, LLC, f/k/a Leevac Shipyards, Inc., owns the northern property, which historically was operated as a vessel construction and repair operation.

13. SBA Shipyards, Inc. ("SBA") began operations at the Site on about 1965. Initially, it performed vessel construction and repair operations on what is now the northern parcel. In the 1970s, SBA constructed the graving dock on the northern parcel and dredged the barge slip and constructed the barge cleaning facility on what is now the southern parcel. Leevac Shipyards, Inc. ("Leevac") entered into a lease with option to purchase for the northern vessel construction and repair facility with SBA in 1993. Leevac operated vessel construction and repair operations on the northern parcel beginning in 1993. Leevac then exercised its option to purchase in 1998 and acquired the northern parcel at that time and continued its operations. SBA continued to operate its barge cleaning operations on the southern parcel up until approximately 2006, when Mr. Smailhall died.

Vessel construction and repair utilized two launch slips with on-land rails to haul and launch vessels and eventually a graving dock with a moving gate where a vessel could enter and the dock de-watered to allow construction and repairs on dry land. Both SBA and Leevac activities included sandblasting, cutting and painting, as well as fabricating and repairing vessels. Barge cleaning operations were conducted by SBA only on the southern parcel. SBA converted a small barge placed on land adjacent to the barge slip into its "boiler barge," which it used to generate steam for use in cleaning barges and it also served as the barge cleaning control room.

SBA cleaned barges and other vessels that had contained as last cargos a variety of materials, including, but not limited to: acrylates, asphalt, carbon tetrachloride, coal tar, coke oven tar, carbon black, carbon oil, , caustic soda, creosote, cumene, black oil and black oil slop, bunker crude, diesel fuel, heavy grease, waste water, ethyl acrylates, kerosene, lube oil, methanol, number 6 oil , rust, scale, styrene, sour gas oil, soy bean oil, sulphuric acid, tallow, and vinyl acetate.

SBA used a large partially buried barge, as well as above-grade tanks constructed from cut-up barges, to store liquids, sludges, solids and other materials during the barge cleaning process. SBA also constructed and used an unlined surface impoundment called the Oil Pit to store liquids, sludges, solids and other materials. Aside from the Oil Pit, SBA used three other unlined surface impoundments, called Water Pits 1, 2 and 3, to receive wastewater, sludges, and solids from the barge cleaning process.

14. Records reviews indicate that SBA unsuccessfully undertook efforts to bio-remediate Water Pit 1 during 1990 and 1991. SBA proposed to implement a RCRA Facility Investigation (RFI) and submitted an RCRA RFI Work Plan in 1996, that proposed the compete closure of the impoundments and tanks. EPA issued a RCRA 3008(a) Compliance Order to SBA on July 1, 1997. On September 9, 1997 SBA entered into a Consent Agreement and Final Order (CAFO) with EPA to resolve all issues presented in the Compliance Order regarding storage, disposal and treatment of hazardous waste without a permit, and clean-up the facility. However, SBA was unable to implement any of the actions required under the CAFO.

15. Thereafter, in December 10, 2002 EPA entered into an Order and Agreement for Interim Measures/Removal Action (IM/RA) of Hazardous/Principal Threat Wastes at SBA Shipyards, Inc., Docket No. RCRA-6-2002-0908, pursuant to RCRA Section 3008(h) ("2002 Order/Agreement") with SBA and SSIC Remediation, LLC ("SSIC"), an entity formed by certain former customers of SBA's barge cleaning operations to conduct this work. Interim removal activities were conducted from March 2001 through January 2005 under the 2002 Order/Agreement. Interim removal activities consisted of the removing, solidifying, and recycling and/or disposing off-site the waste in the Oil Pit and Water Pit 2 and then over-excavation of the Oil Pit and Water Pit 2; removal and scrapping of above ground storage tanks; draining and refilling of Water Pit 3; removing all pumpable materials from the partially buried barge and disposing those materials off-site, then welding shut all hatches to that barge; and surface scrapping of all visible materials from a former land treatment unit. By letter dated February 24, 2006, EPA Region 6's RCRA branch reviewed and approved the completion report of the IM/RA activities and concluded that the completion report fulfilled the 2002

Order/Agreement. The IM/RA, however, was intended as an interim response; hazardous substance remained onsite after the IM/RA.

16. In October 2012, the U.S. Coast Guard and the LDEQ responded to a reported release at the barge cleaning portion of the Site from an attempt to scrap the "boiler barge" and the partially buried storage barge by parties contracted by the owner of the southern portion of the Site.

During 2014 to 2015, EPA conducted a CERCLA emergency removal action and an Oil Pollution Act of 1990 (OPA) removal action after LDEQ reported barge scrapping activities and releases of visible liquids at the Site.

Between December 2012 and September 2014, EPA conducted a preliminary assessment, site inspection and expanded site inspection. As part of the EPA activities, the Agency conducted sampling activities at the Site. During those site activities, EPA sampling documented releases or threats of releases of hazardous substances in the subsurface and groundwater of the Site, the Mermentau River, and wetlands surrounding the Site. Numerous hazardous substances were identified at the Site including petroleum hydrocarbons, numerous polycyclic aromatic hydrocarbons ("PAHs"), dioxins/furans, metals, and volatile organic compounds ("VOCs"). Petroleum and non-petroleum substances found at portions of the Site are or were comingled.

17. Specific PAHs founds at the Site include: acenaphthene; anthracene; acenaphthylene; benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; 1,1'-biphenyl; carbazole; chrysene; dibenzofuran; dibenz(a,h)anthracene; fluoranthene; fluorine; indeno(1,2,3-cd)pyrene; 2-methylnaphthalene; naphthalene; phenanthrene; and pyrene.

Specific dioxins/furans found at the Site include: Chlorinated Dibenzo-p-Dioxins and Chlorinated Dibenzofurans. Those with some of the highest TEQs include: 2,3,4,7,8-Pentacholordibenzofuran; 2,3,4,6,7,8-Hexacholordibenzofuran ("HxCDF"); 1,2,3,6,7,8-HxCDF; 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin; and Octachlorodibenzo-p-dioxin.

Specific metals found at the Site include: arsenic; chromium; cobalt; lead; mercury; manganese; cadmium; copper; nickel; zinc; and barium.

Specific VOCs and Semi VOCs found at the Site include: benzene; cyclohexane; methylcyclohexane; 1,2-dichlorobenzene; ethylbenzene; tetrachloroethene; styrene; isopropylbenzene; tetrachloroethene; xylene; cis-1,2-dichloroethane; toluene; and vinyl chloride.

18. Local residents reportedly use the Mermentau River for recreational fishing. During the ESI, EPA observed a family of five fishing in the Site's barge slip. HRS documentation of EPA's findings identifies a human food fishery in the Mermentau River, both within and outside the zone of contamination; and Lake Arthur at the terminus of the 15-mile target distance limit.

19. EPA's findings identifies the predominant threat to human populations, animals, or the food chain is the potential for exposure by direct contact with PAHs, VOCs, dioxins/furans, and metals.

20. Pursuant to CERCLA Section 105, 42 U.S.C. § 9605, the SBA Shipyard site was listed on the National Priorities List (81 FR 62397) on September 9, 2016.

21. The entities listed in Appendix C are covered persons under CERCLA.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth in Section V, EPA has determined that:

22. The SBA Shipyard Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

23. The contamination found at the Site, as identified in the Findings of Facts above, include "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

24. The conditions at the Site, as described in the Findings of Fact in Section V above, constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

25. Each Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

26. Respondents are responsible parties under Sections 104, 107, and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607, and 9622. Each Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response action and for response costs incurred and to be incurred at the Site. Respondents arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment of hazardous substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

27. The actions required by this Settlement Agreement are necessary to protect the public health, welfare, or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

28. EPA has determined that Respondents are qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Settlement Agreement.

VII. SETTLEMENT AGREEMENT AND ORDER

29. Based upon the foregoing Findings of Fact and Conclusions of Law and Determinations, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

30. Selection of Contractors, Personnel. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Within twenty-one (21) days after the Effective Date, and before the Work outlined below begins, Respondents shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out such Work. With respect to any proposed contractor, Respondents shall demonstrate that the proposed contractor has a quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995, or most recent version), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001; Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondents shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Respondents' demonstration to EPA's satisfaction that Respondents are qualified to perform properly and promptly the actions set forth in this Settlement Agreement. If EPA disapproves in writing of any person's technical qualifications, Respondents shall notify EPA of the identity and qualifications of the replacements within twenty-one (21) days after the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondents. During the course of the RI/FS, Respondents shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing their names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

31. Respondents designate Michael Pisani of Michael Pisani & Associates as Project Coordinator who shall be responsible for administration of all actions by Respondents required by this Settlement Agreement His contact information is: mpisani@mpisani.com; Suite 1430, Energy Center, 1100 Poydras Street, New Orleans, LA 70163. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site Work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within twenty-one (21) days following EPA's disapproval. Respondents shall have the right to change their Project Coordinator, subject to EPA's right to disapprove. Respondents shall notify EPA ten (10) days before such a change is made. The initial notification may be made orally but shall

be promptly followed by a written notification. Receipt by Respondents' Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondents.

32. EPA has designated Valmichael Leos as its Remedial Project Manager. EPA will notify Respondents of a change of its designated Remedial Project Manager. Except as otherwise provided in this Settlement Agreement, Respondents shall direct all submissions required by this Settlement Agreement to the Remedial Project Manager, Valmichael Leos, at leos.valmichael@epa.gov or U.S. Environmental Protection Agency, Region 6 Superfund Division (6SF-RL), 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202-2733.

33. EPA's Remedial Project Manager shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and On-Scene Coordinator ("OSC") by the NCP. In addition, EPA's Remedial Project Manager shall have the authority consistent with the NCP, to halt any Work required by this Settlement Agreement, and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA Remedial Project Manager from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

34. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify the RI/FS Work Plan.

IX. WORK TO BE PERFORMED

35. Respondents shall conduct the RI/FS in accordance with the provisions of this Settlement Agreement, the SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" ("RI/FS Guidance") (OSWER Directive # 9355.3-01, October 1988 or subsequently issued guidance), "Guidance for Data Useability in Risk Assessment" (OSWER Directive #9285.7-09A, April 1992 or subsequently issued guidance), and guidance referenced therein, and guidances referenced in the SOW, as may be amended or modified by EPA. The Remedial Investigation ("RI") shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Feasibility Study ("FS") shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and Section 300.430(e) of the NCP, 40 C.F.R. § 300.430(e). Upon request by EPA, Respondents

shall submit in electronic form all portions of any plan, report, or other deliverable Respondents are required to submit pursuant to provisions of this Settlement Agreement.

36. Upon receipt of the draft FS report, EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the durability, reliability, and effectiveness of any proposed Institutional Controls.

37. Modification of the RI/FS Work Plan.

a. If at any time during the RI/FS process, Respondents identify a need for additional data, Respondents shall submit a memorandum documenting the need for additional data to the EPA Remedial Project Manager within thirty (30) days after identification. EPA in its discretion will determine whether the additional data will be collected by Respondents and whether it will be incorporated into plans, reports, and other deliverables.

b. In the event of unanticipated or changed circumstances at the Site, Respondents shall notify the EPA Remedial Project Manager by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the unanticipated or changed circumstances warrant changes in the RI/FS Work Plan, EPA shall modify or amend the RI/FS Work Plan in writing accordingly. Respondents shall perform the RI/FS Work Plan as modified or amended.

c. EPA may determine that in addition to tasks defined in the initially approved RI/FS Work Plan, other additional Work may be necessary to accomplish the objectives of the RI/FS. Subject to Paragraph 37.d below, Respondents agree to perform these response actions in addition to those required by the initially approved RI/FS Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a complete RI/FS.

d. Respondents shall confirm their willingness to perform the additional Work in writing to EPA within seven (7) days after receipt of the EPA's written notification and request. If Respondents object to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution). The SOW and/or RI/FS Work Plan shall be modified in accordance with the final resolution of the dispute.

e. Respondents shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Work Plan or written RI/FS Work Plan supplement. EPA reserves the right to conduct the Work itself at any point, to seek reimbursement from Respondents, and/or to seek any other appropriate relief.

f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.

38. Off-Site Shipment.

a. Respondents may ship hazardous substances, pollutants and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents will be deemed to be in compliance with CERCLA Section 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondents obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 200.440(b). Respondents may ship Investigation Derived Waste from the Site to an off-Site facility only if Respondents comply with EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992).

b. Respondents may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide written notice to the appropriate state environmental official in the receiving facility's state and to the EPA RPM. This written notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondents also shall notify the state environmental official referenced above and the EPA RPM of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondents shall provide the written notice after the award of the contract for remedial investigation and feasibility study and before the Waste Material is shipped.

39. Meetings. Upon fourteen (14) days prior written notice from EPA, Respondents and/or their designated Project Coordinator shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion or upon request by the Respondents.

40. Bi-Monthly Progress Reports. In addition to the plans, reports, and other deliverables set forth in this Settlement Agreement, Respondents shall provide to EPA bi-monthly progress reports by the 15th day of every other month. This obligation to submit bi-monthly reports shall terminate upon the issuance of the Record of Decision for the Site. At a minimum, with respect to the preceding two-months period, these progress reports shall (a) describe the actions that have been taken to comply with this Settlement Agreement during that preceding two-months period, (b) include all results of sampling and tests and all other data received by Respondents, (c) describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion, and (d) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

41. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence during arising from or relating to performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action. Respondents shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the EPA Remedial Project Manager or, in the event of his/her unavailability, the OSC or the Regional Duty Officer at (866) 372-7745 of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondents shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs).

b. In addition, in the event of any release of a hazardous substance from the Site, Respondents shall immediately notify the EPA Remedial Project Manager, the OSC or the Regional Duty Officer at (866) 372-7745 and the National Response Center at (800) 424-8802. Respondents shall submit a written report to EPA within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. §§ 11004, *et seq.*

X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

42. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Settlement Agreement, in a notice to Respondents EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Respondents at least one notice of deficiency and an opportunity to cure within forty-five (45) days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

43. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 42.a, 42.b, 42.c, or 42.e, Respondents shall proceed to take any action required by the plan, report, or other deliverable, as approved or modified by EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, Respondents shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 42.c and the submission had a material

defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

44. Resubmission.

a. Upon receipt of a notice of disapproval, Respondents shall, within forty-five (45) days after completing discussions with EPA regarding the notice of disapproval or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI, shall accrue during the 45-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 45 and 46, respectively.

b. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for stipulated penalties under Section XVI (Stipulated Penalties) for any deficient portion of the submission.

c. Respondents shall not proceed with any activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: Scoping; RI/FS Work Plan; RI/FS Sampling and Analysis Plan; RI/FS Health and Safety Plan; Community Involvement Plan; Site Characterization; Risk Assessments; Treatability Studies; Remedial Investigation Report; and Feasibility Study. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondents shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement Agreement.

d. For all remaining deliverables not listed above in Paragraph 11.c, Respondents shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS. If EPA's decision to stop Respondents from proceeding further is unrelated to a violation of this Settlement Agreement by Respondents, Respondents shall not be subject to stipulated penalties for any resulting non-compliance with this Settlement Agreement.

45. If EPA disapproves a resubmitted plan, report, or other deliverable, or portion thereof, EPA may again direct Respondents to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report, or other deliverable. Respondents shall implement any such plan, report, or deliverable as corrected, modified, or developed by EPA, subject only to Respondents' right to invoke the procedures set forth in Section XV (Dispute Resolution).

46. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondents shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Respondents invoke the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is

revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified, or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.

47. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondents shall incorporate and integrate information supplied by EPA into the final reports.

48. All plans, reports, and other deliverables submitted to EPA under this Settlement Agreement (other than progress reports) shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

49. Neither failure of EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Respondents' deliverables, Respondents are responsible for preparing deliverables acceptable to EPA.

XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

50. Quality Assurance. Respondents shall assure that Work performed, samples taken, and analyses conducted conform to the requirements of the SOW, the QAPP, and guidances identified therein. Respondents will assure that field personnel used by Respondents are properly trained in the use of field equipment and in chain of custody procedures. Respondents shall only use laboratories that have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001; Reissued May 2006) or equivalent documentation as determined by EPA.

51. Sampling.

a. All results of sampling, tests, modeling, or other data (including raw data) generated by Respondents, or on Respondents' behalf, during the period that this Settlement Agreement is effective, shall be submitted to EPA in the next bi-monthly progress report as described in Paragraph 40. EPA will make available to Respondents validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.

b. Respondents shall verbally notify EPA and the State at least fifteen (15) days prior to conducting significant field events as described in the SOW, RI/FS Work Plan, or Sampling and Analysis Plan. At EPA's verbal or written request, or the request of EPA's oversight assistant, Respondents shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) or the State of any samples collected in implementing this

Settlement Agreement. All split samples of Respondents shall be analyzed by the methods identified in the QAPP.

52. Access to Information.

a. Subject to Subparagraphs b and c, Respondents shall provide to EPA and the State, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondents shall also make available to EPA and the State, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

b. Respondents may assert business confidentiality claims covering part or all of the Records submitted to EPA and the State under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Records determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA and the State, or if EPA has notified Respondents that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondents. Respondents shall segregate and clearly identify all Records submitted under this Settlement Agreement for which Respondents assert business confidentiality claims.

c. Respondents may assert that certain Records are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondents assert such a privilege in lieu of providing Records, they shall provide EPA the State with the following: (i) the title of the Record; (ii) the date of the Record; (iii) the name, title, affiliation (e.g., company or firm), and address of the author of the Record; (iv) the name and title of each addressee and recipient; (v) a description of the contents of the Record; and (vi) the privilege asserted by Respondents. However, no Records created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other Records evidencing conditions at or around the Site.

53. In entering into this Settlement Agreement, Respondents waive any objections to any data gathered, generated, or evaluated by EPA, the State or Respondents in the performance or oversight of the Work that has been verified according to the quality assurance/quality control ("QA/QC") procedures required by the Settlement Agreement or any EPA-approved RI/FS Work Plans or Sampling and Analysis Plans. If Respondents object to any other data relating to the RI/FS, Respondents shall submit to EPA a report that specifically identifies and explains their

objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within fifteen (15) days after the monthly progress report containing the data.

XII. SITE ACCESS AND INSTITUTIONAL CONTROLS

54. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by any of Respondents, such Respondents shall, commencing on the Effective Date, provide EPA the State, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

55. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within sixty (60) days after the Effective Date. Respondents shall immediately notify EPA if after using their best efforts they are unable to obtain such agreements. For purposes of this Paragraph, "best efforts" may include the payment of reasonable sums of money in consideration of access, e.g., the costs associated with reimbursing the owner for new gate locks. Respondents shall describe in writing their efforts to obtain access. If Respondents cannot obtain access agreements, EPA may either (a) obtain access for Respondents or assist Respondents in gaining access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as EPA deems appropriate; (b) perform those tasks or activities with EPA contractors; or (c) terminate the Settlement Agreement. Respondents shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs). If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondents shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all costs incurred in performing such tasks or activities. Respondents shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports, and other deliverables.

56. Notwithstanding any provision of this Settlement Agreement, EPA and the State retain all of their access authorities and rights as well as all of their rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. COMPLIANCE WITH OTHER LAWS

57. Respondents shall comply with all applicable state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-Site and requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIV. RETENTION OF RECORDS

58. During the pendency of this Settlement Agreement and for a minimum of 10 years after commencement of construction of any remedial action, each Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 10 years after commencement of construction of any remedial action, Respondents shall also instruct their contractors and agents to preserve all Records of whatever kind, nature, or description relating to performance of the Work.

59. At the conclusion of this document retention period, Respondents shall notify EPA at least ninety (90) days prior to the destruction of any such Records, and, upon request by EPA, Respondents shall deliver any such Records to EPA. Respondents may assert that certain Records are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondents assert such a privilege, they shall provide EPA with the following: (a) the title of the Record; (b) the date of the Record; (c) the name and title of the author of the Record; (d) the name and title of each addressee and recipient; (d) a description of the subject of the Record; and (f) the privilege asserted by Respondents. However, no Records created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

60. Each Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since the earlier of notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA and State requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XV. DISPUTE RESOLUTION

61. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

62. If Respondents object to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, they shall notify EPA in writing of their objection(s) within fourteen (14) days after such action, unless the objection(s) has/have been resolved informally. EPA and Respondents shall have sixty (60) days from EPA's receipt of Respondents' written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be granted verbally but must be confirmed in writing.

63. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Branch Chief level or higher will issue a written decision. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondents' obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section unless EPA agrees otherwise in writing. Following resolution of the dispute, as provided by this Section, Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs, and regardless of whether Respondents agree with the decision.

XVI. STIPULATED PENALTIES

64. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 65 and 66 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondents shall include completion of the Work under this Settlement Agreement or any activities contemplated under any RI/FS Work Plan or other plan approved under this Settlement Agreement identified below, in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

65. Stipulated Penalty Amounts - Work (Including Payments).

a. The following stipulated penalties shall accrue per day for any noncompliance identified in Paragraph 11.b:

Penalty Per Violation Per Day	Period of Noncompliance
$ 500.00	1st through 14th day
$ 1,000.00	15th through 30th day
$ 3,000.00	31st day and beyond

b. Compliance Milestones.

- Establishment and maintenance of financial assurance in compliance with the timelines and other substantive and procedural requirements of Section XXVI (Financial Assurance)

- Scoping Phase Meeting

- Final RI/FS Work Plan

- Final RI Report

- Final FS Report

- Failure to make timely payments of Future Response Costs or timely establishment of an escrow account in dispute.

66. Stipulated Penalty Amounts - Reports.

a. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports or other plans or deliverables (e.g., those identified in Paragraph 66.b or the SOW) pursuant to this Settlement Agreement:

Penalty Per Violation Per Day	Period of Noncompliance
$ 250.00	1st through 14th day
$ 500.00	15th through 30th day
$ 1,000.00	31st day and beyond

b. Plans and Reports.

- Bi-monthly Progress Reports

- Final RI/FS Sampling and Analysis Plan (SAP)

- Final RI/FS Site Health and Safety Plan

- Final Technical Memorandum on Modeling of Site Characteristics (if required by EPA)

- Final Baseline Human Health Risk Assessment (if required by EPA)

- Final Screening Level Ecological Risk Assessment Report (if required by EPA)

- Final Baseline Ecological Risk Assessment (BERA) Problem Formulation Report (if required by EPA)

- Final BERA Work Plan and Sampling and Analysis Plan (if required by EPA)

- Final BERA Report (if required by EPA)

- Final Treatability Study (TS) Work Plan, Sampling and Analysis Plan, and Health and Safety Plan

- Final TS Report

67. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 84 (Work Takeover), Respondents shall be liable for a stipulated penalty in the amount of $200,000.

68. All 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 final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section X (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondents of any deficiency; and (b) with respect to a decision by the EPA management official designated in Paragraph 63 of Section XV (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

69. Following EPA's determination that Respondents have failed to comply with a requirement of this Settlement Agreement, EPA will give Respondents written notification of the same and describe the noncompliance. EPA will send Respondents a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondents of a violation.

70. Payment.

a. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) days after Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the dispute resolution procedures under Section XV (Dispute Resolution).

b. Respondents shall make all payments required by this Paragraph to EPA by Fedwire Electronic Funds Transfer to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference stipulated penalties, Site/Spill ID Number A6FX, and the CERCLA docket number for this action. At the time of payment, Respondents shall send notice that payment has been made:

(1) by email to: acctsreceivable.cinwd@epa.gov;

(2) by mail to: EPA Cincinnati Finance Office, 26 Martin Luther King Drive, Cincinnati, Ohio 45268; and

(3) by mail to: Chief, Enforcement Assessment Section, U.S. EPA Region 6, 1445 Ross Ave., Suite 1200 (6SF-TE), Dallas, TX 75202-2733.

Such notice shall reference Site/Spill ID Number A6FX and the CERCLA docket number for this action.

71. The payment of penalties shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement Agreement.

72. Penalties shall continue to accrue as provided in Paragraph 68 during any dispute resolution period, but need not be paid until thirty (30) days after the dispute is resolved by agreement or by receipt of EPA's decision.

73. If Respondents fail to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 70.a.

74. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(*l*) of CERCLA, 42 U.S.C. § 9622(*l*), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 122(*l*) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement Agreement, except in the case of willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by EPA), Paragraph 84 (Work Takeover). Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XVII. FORCE MAJEURE

75. Respondents agree to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, *force majeure* is defined as any event arising from causes beyond the control of Respondents or of any entity controlled by Respondents, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondents' best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

76. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondents

shall notify EPA orally within five (5) days when Respondents first knew that the event might cause a delay. Within five (5) days thereafter, Respondents shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' 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 Respondents, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Failure to comply with the above requirements shall preclude Respondents from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

77. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondents in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. PAYMENT OF RESPONSE COSTS

78. Pre-Payment of Future Response Costs. Respondents shall pay to EPA all Future Response Costs not inconsistent with the NCP.

a. Within thirty (30) days after the Effective Date, Respondents shall pay to EPA $150,000 as an initial payment toward Future Response Costs. Payment shall be made in accordance with Paragraphs 70.b. The total amount paid shall be deposited by EPA in the SBA Shipyard Special Account. These funds shall be retained and used by EPA to conduct or finance future response actions at or in connection with the Site.

b. When the amount deposited in the SBA Shipyard Special Account in accordance with Paragraph 78.a has been exhausted per the Superfund Cost Recovery Package Imaging and On-Line System ("SCORPIOS") Report, EPA will send Respondents the first bill requiring payment that includes a SCORPIOS Report, which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, and the United States Department of Justice. Respondents shall make all payments within thirty (30) days after Respondents' receipt of each bill requiring payment, except as otherwise provided in Paragraph 80, and in accordance with Paragraph 70.b.

c. On a periodic basis after the first bill under Paragraph 78.b, EPA will send Respondents a bill requiring payment that includes a SCORPIOS Report, which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, and the United States Department of Justice. Respondents shall make all payments within thirty (30) days after

Respondents' receipt of each bill requiring payment, except as otherwise provided in Paragraph 80, and in accordance with b.

d. The total amount to be paid by Respondents pursuant to Paragraphs 78.b and 78.c shall be deposited by EPA in the SBA Shipyard Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that EPA may deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the SBA Shipyard Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site. Any decision by EPA to deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund for this reason shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of this Settlement Agreement or in any other forum.

e. After EPA issues the Notice of Completion of Work pursuant to Paragraph 118 and a final accounting of the SBA Shipyard Special Account, including crediting Respondents for any amounts received under Paragraph 78.a, 78.b, or 78c, the EPA will: (1) offset the next Future Response Costs bill by the unused amount paid by Respondents pursuant to Paragraphs 78.a, 78.b, or 78.c, or (2) remit and return to Respondents any unused amount of the funds paid by Respondents pursuant to Paragraphs 78.a, 78.b, or 78.c.

79. Interest. If Respondents do not pay the Future Response Costs prepayment amount in Paragraph 78.a within thirty (30) days of the Effective Date of this Order, or do not pay Future Response Costs within thirty (30) days after Respondents' receipt of a bill, Respondents shall pay interest on the unpaid balance of Future Response Costs. The interest on unpaid Future Response Costs shall begin to accrue on the Effective Date of this Order or on the date of the bill and shall continue to accrue until the date of payment. If the EPA receives a partial payment, interest shall accrue on any unpaid balance. Payments of interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section XVI. Respondents shall make all payments required by this Paragraph in the manner described in Paragraph 70.b.

80. At most on a quarterly basis, Respondents may request periodic SCORPIOS reports other than those sent with bills requiring payment under Paragraphs 78.b and 78.c. Respondents may contest payment of any Future Response Costs required of Respondents pursuant to Paragraph 78 if they determine that the EPA has made an accounting error or if they believe the EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within twenty-one (21) days of the Effective Date of this Order and/or twenty-one (21) days of receipt of the SCORPIOS report or the bill. Such written objection shall be sent to the EPA RPM. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondents shall within the 21-day period pay all uncontested Future Response Costs to the EPA in the manner described in Paragraph 70.b. Simultaneously, Respondents shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Louisiana and remit to that escrow account funds equivalent to the amount of the contested

Future Response Costs. Respondents shall send to the EPA RPM a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondents shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If the EPA prevails in the dispute, within five (5) days of the resolution of the dispute, Respondents shall pay the sums due (with accrued interest) to the EPA in the manner described in Paragraph 70.b. If Respondents prevail concerning any aspect of the contested costs, Respondents shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to the EPA in the manner described in Paragraph 70.b. Respondents shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse the EPA for its Future Response Costs.

XIX. COVENANT NOT TO SUE BY EPA

81. In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondents of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Paragraph 78 (Payment of Future Response Costs). This covenant not to sue extends only to Respondents and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY EPA

82. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

83. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:

a. liability for failure by Respondents to meet a requirement of this Settlement Agreement;

b. liability for costs not included within the definition of Future Response Costs;

c. liability for performance of response action other than the Work;

d. criminal liability;

e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site not paid as Future Response Costs under this Settlement Agreement.

84. Work Takeover.

a. In the event EPA determines that Respondents have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Respondents may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by EPA in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondents shall pay pursuant to Section XVIII (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

b. In the event EPA assumes the performance of all or any portion of the Work, EPA shall notify Respondents in writing. Such takeover notification shall identify that all or a specifically designated portion of the Work shall be assumed by EPA.

XXI. COVENANT NOT TO SUE BY RESPONDENTS

85. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of the Work or arising out of the response actions for which the Future Response Costs have or will be incurred, including any claim under the United States Constitution, the State Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law; or

c. any claim pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law relating to the Work or payment of Future Response Costs.

86. Respondents agree not to seek judicial review of the final rule listing the Site on the NPL based on a claim that changed site conditions that resulted from the performance of the Work under this Settlement Agreement in any way affected the basis for listing the Site.

87. Except as expressly provided in Paragraphs 90 (Claims Against De Micromis Parties) and 92 (Claims Against *De Minimis* and Ability to Pay Parties), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Section XX (Reservations of Rights by EPA), other than in Paragraph 83.a (liability for failure to meet a requirement of the Settlement Agreement) or 83.d (criminal liability), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

88. Respondents reserve, and this Settlement Agreement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondents' plans, reports, other deliverables, or activities.

89. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

90. Claims Against De Micromis Parties. Respondents agree not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) or 113 of CERCLA) that they may have for all matters relating to the Site against any person where the person's liability to Respondents with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances

contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

91. The waiver in Paragraph 90 shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against such Respondent. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:

a. that such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of RCRA, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. that the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site.

92. Claims Against *De Minimis* and Ability to Pay Parties. Respondents agree not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) or 113 of CERCLA) that they may have for response costs relating to the Site against any person that has entered or in the future enters into a final Section 122(g) *de minimis* settlement or a final settlement based on limited ability to pay with EPA with respect to the Site as of the Effective Date. This waiver shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person if such person asserts a claim or cause of action relating to the Site against such Respondent.

XXII. OTHER CLAIMS

93. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents.

94. Except as expressly provided in Paragraphs 90 (Claims Against De Micromis Parties), 92 (Claims Against *De Minimis* and Ability to Pay Parties), and Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

95. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIII. EFFECT OF SETTLEMENT/CONTRIBUTION

96. Except as provided in Paragraphs 90 (Claims Against De Micromis Parties) and 92 (Claims Against *De Minimis* and Ability to Pay Parties), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Section XXI (Covenant Not to Sue by Respondents), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

97. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and that Respondents are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Future Response Costs. The Parties further agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondents have, as of the Effective Date, resolved their liability to the United States for the Work and Future Response Costs.

98. Nothing herein diminishes or enlarges any rights, obligations or protections afforded by or set forth in the December 10, 2002 RCRA Section 3008(h) Order and Agreement for Interim Measures/Removal Action, Docket No. RCRA-6-2002-0908.

99. Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify EPA in writing no later than sixty (60) days prior to the initiation of such suit or claim. Each Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement, notify EPA in writing within ten (10) days after service of the complaint or claim upon it. In addition, each Respondent shall notify EPA within ten (10) days after service or receipt of any Motion for Summary Judgment and within ten (10) days after receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.

100. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other relief relating to the Site, Settling Parties 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 in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing

in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XIX (Covenant Not to Sue By EPA).

101. Effective upon signature of this Settlement Agreement by a Respondent, such Respondent agrees that the time period commencing on the date of its signature and ending on the date EPA receives from such Respondent the payment(s) required by Section XVIII (Payment of Response Costs) and, if any, Section XVI (Stipulated Penalties) shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by the United States related to the "matters addressed" as defined in Paragraph 97 and that, in any action brought by the United States related to the "matters addressed," such Respondent will not assert, and may not maintain, any defense or claim based upon principles of statute of limitations, waiver, laches, estoppel, or other defense based on the passage of time during such period. If EPA gives notice to Respondents that it will not make this Settlement Agreement effective, the statute of limitations shall begin to run again commencing ninety (90) days after the date such notice is sent by EPA.

XXIV. INDEMNIFICATION

102. Respondents shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and representatives in carrying out actions pursuant to this Settlement Agreement. In addition, Respondents agree to pay the United States all costs incurred by the United States, including but not limited to attorneys' fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Settlement Agreement. Neither Respondents nor any such contractor shall be considered an agent of the United States.

103. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

104. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site.

XXV. INSURANCE

105. At least fourteen (14) days prior to commencing any on-Site Work under this Settlement Agreement, Respondents shall secure, and shall maintain for the duration of this Settlement Agreement, commercial general liability insurance with limits of $1 million dollars, for any one occurrence, along with umbrella coverage, and automobile insurance with limits of $1 million dollars, combined single limit, naming the EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondents pursuant to this Order. Within the same period, Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondents shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Settlement Agreement. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondents need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

106. Within thirty (30) days after the Effective Date, Respondents shall establish and maintain financial security for the benefit of EPA in the amount of $1.5 million in one or more of the following forms, in order to secure the full and final completion of Work by Respondents:

a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;

b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA equaling the total estimated cost of the Work;

c. a trust fund administered by a trustee acceptable in all respects to EPA;

d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work;

e. a written guarantee to pay for or perform the Work provided by one or more parent companies of Respondents, or by one or more unrelated companies that have a substantial business relationship with at least one of Respondents, including a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or

f. a demonstration of sufficient financial resources to pay for the Work made by one or more of Respondents, which shall consist of a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

107. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondents shall, within thirty (30) days after receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 106, above. In addition, if at any time EPA notifies Respondents that the anticipated cost of completing the Work has increased, then, within thirty (30) days after such notification, Respondents shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondents' inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

108. If Respondents seek to ensure completion of the Work through a guarantee pursuant to Paragraph 11.e or 11.f, Respondents shall (a) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (b) resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date, or such other date as agreed by EPA, to EPA. For the purposes of this Settlement Agreement, wherever 40 C.F.R. Part 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the dollar amount to be used in the relevant financial test calculations shall be the current cost estimate of $1.5 million for the Work at the Site plus any other RCRA, CERCLA, TSCA, or other federal environmental obligations financially assured by the relevant Respondent or guarantor to EPA by means of passing a financial test.

109. If, after the Effective Date, Respondents can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 106 of this Section, Respondents may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondents shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution). Respondents may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

110. Respondents may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondents may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

111. Respondents' obligation to demonstrate financial assurance under this Settlement Agreement shall terminate upon EPA's issuance of the Record of Decision for this Site.

XXVII. INTEGRATION/APPENDICES

112. This Settlement Agreement and its appendices and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

"Appendix A" is the map of the Site.

"Appendix B" is the SOW.

"Appendix C" lists the Respondents of this Settlement Agreement.

XXVIII. ADMINISTRATIVE RECORD

113. EPA will determine the contents of the administrative record file for selection of the remedial action for this Site. Respondents shall submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Upon request of EPA, Respondents shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports, and other reports. Upon request of EPA, Respondents shall additionally submit any previous studies conducted under state, local, or other federal authorities relating to selection of the response action, and all communications between Respondents and state, local, or other federal authorities concerning selection of the response action. At EPA's discretion, Respondents shall establish a community information repository at or near the Site, to house one copy of the administrative record.

XXIX. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

114. After signature by Respondents and the Director, Superfund Division, the delegatee of the Regional Administrator for this matter, this Settlement Agreement shall be effective forty-five (45) calendar days after the fully executed Settlement Agreement is transmitted to Respondents or their counsel by EPA.

115. This Settlement Agreement may be amended by mutual agreement of EPA and Respondents. Amendments shall be in writing and shall be effective when signed by EPA. EPA Remedial Project Managers do not have the authority to sign amendments to the Settlement Agreement.

116. Minor modifications to the requirements of the RI/FS Work Plan, specifically those which do not materially or significantly affect the nature, scope, or timing of the Work to be performed, may be made by mutual agreement of the Respondents' Project Coordinator and EPA's Remedial Project Manager. Whether a modification is minor is to be determined by EPA.

Any such modifications must be in writing and signed by both the Respondents' Project Coordinator and EPA's Remedial Project Manager. The effective date of the modification shall be the date of signature by the EPA Remedial Project Manager.

117. No informal advice, guidance, suggestion, or comment by the EPA Remedial Project Manager or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXX. NOTICE OF COMPLETION OF WORK

118. When EPA determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to, e.g., payment of future response costs, payment of oversight costs, payment of any stipulated penalties demanded by the EPA, and record retention, EPA will provide written notice to Respondents. If EPA determines that any Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the RI/FS Work Plan if appropriate in order to correct such deficiencies, in accordance with Paragraph 37 (Modification of the RI/FS Work Plan). Failure by Respondents to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement Agreement.

It is so ORDERED AND AGREED this 18th day of November, 2016.

BY: _____ DATE: 11/18/16

Carl E. Edlund, P.E.
Director, Superfund Division
Region 6
U.S. Environmental Protection Agency

EFFECTIVE DATE: JANUARY 5, 2017

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company Respondents Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	CERCLA Docket No. 06-08-16 **ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

THE UNDERSIGNED RESPONDENT enters into this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study in the matter of CERCLA Docket No. 06-08-16 relating to the SBA Shipyard Site, Jennings, Jefferson Davis Parish, Louisiana:

FOR RESPONDENT: ACBL Oldco, LLC

1701 E. Market St., Jeffersonville IN 47130
Print Address

BY: _____ 10/25/16
Signature Date

Dawn R. Landry, SVP & GC
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.

Sean P. Gallagher, Sr. Corporate Counsel
Print Name and Contact information
1701 E. Market St.
Jeffersonville IN 47130

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company Respondents Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	CERCLA Docket No. 06-08-16 **ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

THE UNDERSIGNED RESPONDENT enters into this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study in the matter of CERCLA Docket No. 06-08-16 relating to the SBA Shipyard Site, Jennings, Jefferson Davis Parish, Louisiana:

FOR RESPONDENT: American Commercial Barge Line LLC

1701 E. Market St., Jeffersonville IN 47130
Print Address

BY: _____ 10/25/16
Signature Date

Dawn R. Landry, SVP & GC
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.

Sean P. Gallagher, Sr. Corporate Counsel
Print Name and Contact information 1701 E. Market St.
Jeffersonville IN 47130

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company Respondents Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	CERCLA Docket No. 06-08-16 **ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

THE UNDERSIGNED RESPONDENT enters into this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study in the matter of CERCLA Docket No. 06-08-16 relating to the SBA Shipyard Site, Jennings, Jefferson Davis Parish, Louisiana:

FOR RESPONDENT: ASHLAND LLC

500 Hercules Road, Wilmington, DE 19808
Print Address

BY: RL Williams — 10/25/16
Signature — Date

Richmond L. Williams
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.

Richmond L. Williams (302) 594-7020 rlwilliams@ashland.com
Print Name and Contact information

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company Respondents Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	CERCLA Docket No. 06-08-16 **ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

THE UNDERSIGNED RESPONDENT enters into this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study in the matter of CERCLA Docket No. 06-08-16 relating to the SBA Shipyard Site, Jennings, Jefferson Davis Parish, Louisiana:

FOR RESPONDENT: Canal Barge Company, Inc.

835 Union St., New Orleans, LA 70112
Print Address

BY: _____ 10/28/16
Signature Date

W Spencer Murphy - General Counsel
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.

Spencer Murphy
835 Union St., New Orleans, LA 70112
Print Name and Contact information

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA	)	CERCLA Docket No. 06-08-16
ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company	)	
Respondents	)	**ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	

THE UNDERSIGNED RESPONDENT enters into this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study in the matter of CERCLA Docket No. 06-08-16 relating to the SBA Shipyard Site, Jennings, Jefferson Davis Parish, Louisiana:

FOR RESPONDENT: Cenac Towing Co., LLC

P.O. Box 2617, Houma, LA 70361
Print Address

BY: _____ October 21, 2016
Signature Date

Arlen B. Cenac, Jr.
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.

Andre C. Broussard, Jr., P.O. Box 2617 Houma, LA 70361

Print Name and Contact information

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company Respondents Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	CERCLA Docket No. 06-08-16 **ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

THE UNDERSIGNED RESPONDENT enters into this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study in the matter of CERCLA Docket No. 06-08-16 relating to the SBA Shipyard Site, Jennings, Jefferson Davis Parish, Louisiana:

FOR RESPONDENT: Hornbeck Offshore Transportation, LLC

103 Northpark Boulevard, Suite 300, Covington, LA 70433
Print Address

BY: _____ November 7, 2016
Signature Date

Samuel A. Giberga
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.

Kathleen A. Harrison, Hornbeck Offshore, 103 Northpark Blvd, Ste 300, Covington, LA 70433, kathleen.harrison@hornbeckoffshore.com Ph: 985-624-1235; Fax: 985-727-6841

Samuel A. Giberga, Hornbeck Offshore, 103 Northpark Blvd, Ste. 300, Covington, LA 70433, samuel.giberga@hornbeckoffshore.com Ph: 985-727-6804; Fax: 985-727-2006
Print Name and Contact information

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company Respondents Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	CERCLA Docket No. 06-08-16 **ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

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FOR RESPONDENT: Martin Energy Services LLC

4200 Stone Road, Kilgore, Texas 75662
Print Address

BY: _____ 11/4/16
Signature Date

Robert D. Bondurant
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.
John Ben Blackburn, Assistant General Counsel

4200 Stone Road, Kilgore, Texas 75662 (903) 983-6200
Print Name and Contact information

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company Respondents Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	CERCLA Docket No. 06-08-16 **ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

THE UNDERSIGNED RESPONDENT enters into this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study in the matter of CERCLA Docket No. 06-08-16 relating to the SBA Shipyard Site, Jennings, Jefferson Davis Parish, Louisiana:

FOR RESPONDENT: Martin Operating Partnership L.P., by Martin Operating GP LLC, its general partner, by Martin Midstream Partners L.P., its sole member, by Martin Midstream GP LLC, its general partner

4200 Stone Road, Kilgore, Texas 75662
Print Address

BY: _____ 11/4/16
Signature Date

Robert D. Bondurant
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.
John Ben Blackburn, Assistant General Counsel

4200 Stone Road, Kilgore, Texas 75662 (903) 983-6200
Print Name and Contact information

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company Respondents Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	CERCLA Docket No. 06-08-16 **ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

THE UNDERSIGNED RESPONDENT enters into this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study in the matter of CERCLA Docket No. 06-08-16 relating to the SBA Shipyard Site, Jennings, Jefferson Davis Parish, Louisiana:

FOR RESPONDENT: Phillips 66 Company, a Delaware corporation, as successor in interest to certain liabilities of ConocoPhillips Company (as successor in interest to Conoco Inc. and Continental Oil Company)

Phillips 66 Operations Center, 1075 W. Sam Houston Parkway N., Suite 200, Houston, Texas 77042
Print Address

BY: Steve Belin
Signature

11/1/16
Date

Steve Belin
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.

Brandi C. Sablatura, Phillips 66 Operations Center, 1075 W. Sam Houston Parkway N., Suite 200, Houston, Texas 77042, 832.765.1260

Print Name and Contact information

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF: SBA SHIPYARD SUPERFUND SITE JENNINGS, JEFFERSON DAVIS PARISH, LOUISIANA ACBL Oldco, LLC American Commercial Barge Line LLC Ashland LLC Canal Barge Company, Inc. Cenac Towing Company, LLC Hornbeck Offshore Transportation, LLC Martin Energy Services LLC Martin Operating Partnership LP Talen's Marine & Fuel, LLC Phillips 66 Company Respondents Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	CERCLA Docket No. 06-08-16 **ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

THE UNDERSIGNED RESPONDENT enters into this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study in the matter of CERCLA Docket No. 06-08-16 relating to the SBA Shipyard Site, Jennings, Jefferson Davis Parish, Louisiana:

FOR RESPONDENT: Talen's Marine & Fuel, LLC

4200 Stone Road, Kilgore, Texas 75662
Print Address

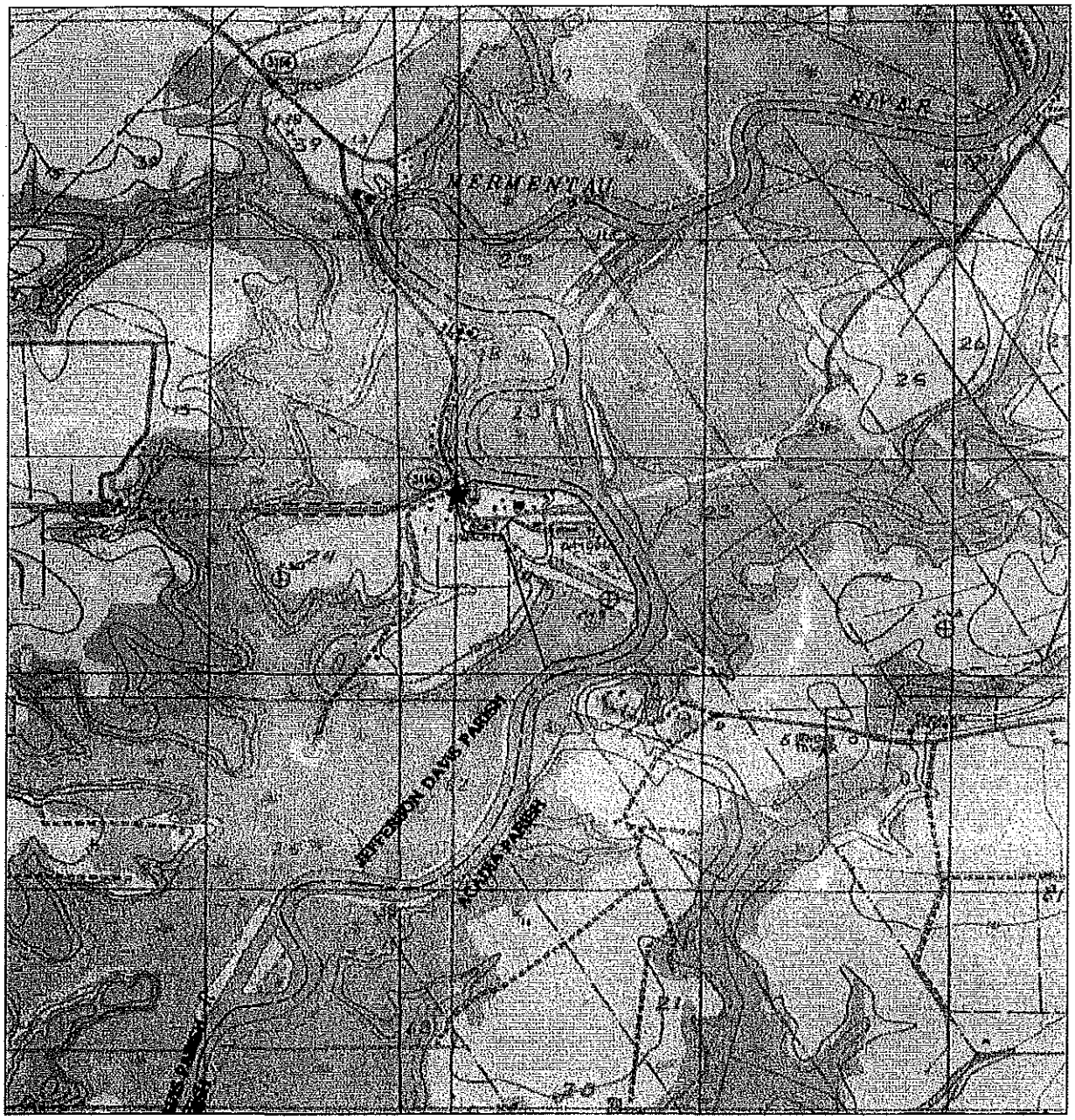
BY: _____ 11/4/16
Signature Date

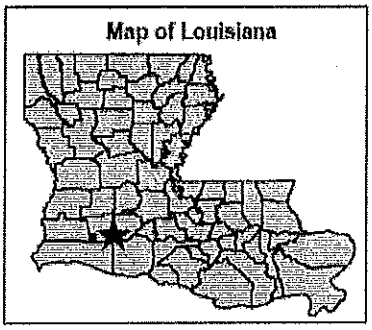
Robert D. Bondurant
Print Name of Signatory

Written notice to the following notification contact person will constitute complete satisfaction of any written notice requirement (if any) of this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study with respect to the Respondent who has signed above.
John Ben Blackburn, Assistant General Counsel

4200 Stone Road, Kilgore, Texas 75662 (903) 983-6200
Print Name and Contact information

APPENDIX A: SITE MAP
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
SBA SHIPYARD SUPERFUND SITE
JENNINGS, LOUISANA





Legend

★ Site Entrance

SBA Shipyard, Inc.

N
W E
S

1:24,000

0 0.2 0.4 0.8 Miles

US EPA Region 6
START-3

Figure 1. Site Location Map
(SBA Shipyard)
9040 Castex Landing Road, Highway 3166,
Jefferson Davis Parish, Jennings, LA 70546

CERCLIS: LAD003434155
TDO #: TO-0009-12-10-02

May 2013

APPENDIX B: STATEMENT OF WORK
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
SBA SHIPYARD SUPERFUND SITE
JENNINGS, LOUISANA

APPENDIX B: DRAFT STATEMENT OF WORK
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
SBA SHIPYARD SUPERFUND SITE
JENNINGS, LOUISANA

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APPENDIX B
DRAFT STATEMENT OF WORK
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
SBA SHIPYARD SUPERFUND SITE
JENNINGS, JEFFERSON DAVIS PARISH, LOUISANA

1. INTRODUCTION

1. This Statement of Work (SOW) provides an overview of work that will be carried out by respondents as they implement a Remedial Investigation and Feasibility Study (RI/FS) for the SBA Shipyard site (Site). This RI/FS SOW is attached to the Administrative Order on Consent (AOC) for Remedial Investigation/Feasibility Study for the Site and is a supporting document for the AOC. Technical work described in the SOW is intended to provide more information to Respondents for purposes of implementing the AOC and is not intended to change the meaning of any AOC language. This SOW is also consistent with both the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the National Contingency Plan (NCP). Any discrepancies between the AOC and SOW are unintended, and whenever necessary, the AOC will control in any interpretive disputes.

2. The RI/FS is expected to be an iterative process. This SOW outlines a decision process that will be used to focus sampling programs to gather data that are needed for the decision process. The U.S. Environmental Protection Agency (EPA) understands there may be concern on the part of Respondents that such an iterative process could lead to substantial increases in the size, cost, and scope of the RI/FS. However, EPA has an obligation under CERCLA to protect human health and the environment wherever hazardous substances have been discharged or migrated in the environment. To balance these competing interests, EPA's Office of Solid Waste and Emergency Response is promoting more effective strategies (i.e., Triad Approach) for characterizing, monitoring, and cleaning up hazardous waste sites. The Triad Approach integrates systematic planning, dynamic work plans, and on-site analytical tools used to support decisions about hazardous waste sites. Additional information regarding the Triad Approach is attached and can be found at the following website: http://www.clu-in.org/conf/tio/triad_012303.

If presented by Respondents, EPA may consider, where technically appropriate, the phasing of the RI/FS to address (1) on-site source areas (source control units) and (2) off-site contaminant migration. This phased strategy may be presented in the RI/FS Draft Work Plan and the Draft Sampling and Analysis Plan and shall be subject to the approval of the EPA.

3. The purpose of the RI/FS is to investigate the nature and extent of contamination for the Site, to assess the potential risk to human health and the environment, to develop and evaluate potential remedial action alternatives, and to recommend a preferred alternative. The RI and FS are interactive and will be conducted concurrently, to the extent practicable in a manner that allows information and data collected during the RI to influence the development of remedial alternatives during the FS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

4. Respondents will conduct the RI/FS and will produce draft RI and FS reports that are in accordance with the AOC. The RI/FS will be consistent with the Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA (U.S. EPA, Office of Emergency and Remedial Response, October 1988) Data Quality Objectives (DQOs) planning process (EPA QA /G-4. August

2000), and other applicable guidance that EPA uses in conducting an RI/FS (a list of the primary guidance is attached), including potentially applicable guidance released by EPA after the effective date of this SOW. EPA is aware that not all guidance used for the RI/FS purposes may by applicable to the Site. EPA Project Managers for sites have the authority under the NCP to determine when application of any guidance would be inappropriate. Respondents may raise such guidance issues they consider appropriate during the implementation of the AOC. EPA's decisions regarding guidance applicability will be incorporated into document approval correspondence or in other written correspondence as appropriate.

5. The RI/FS Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA describes the suggested report format and content for the draft RI and FS reports. Respondents will furnish all necessary personnel, materials, and services needed for, or incidental to performing the RI/FS, except as otherwise specified in the AOC.

6. At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in one or more Records of Decision (RODs). The response action alternatives selected by EPA will meet the cleanup standards specified in Section 121 of CERCLA, 42 U.S.C. § 9621; the selected remedy will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs), will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, including sustainability considerations, and will address the statutory preference for treatment as a principal element, as appropriate under the NCP. The final RI/FS report, as approved by EPA, will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support development of one or more RODs.

As specified in Section 104(a)(I) of CERCLA, 42 U.S.C. § 9604(a)(I), EPA will provide oversight of Respondents' activities throughout implementation of the AOC. Respondents will support EPA's initiation and conduct of activities related to implementation of oversight activities.

Purpose of the Statement of Work

7. This SOW sets forth certain requirements of the AOC for implementation of the Work pertaining to the RI/FS for the Site. The Respondents shall undertake the RI/FS according to the AOC, including, but not limited to, this SOW.

Objectives of the Remedial Investigation/Feasibility Study

8. The objectives of the RI/FS are to investigate the nature and extent of contamination at or from the Site and to develop and evaluate potential remedial alternatives, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, 42 U.S.C. § 9601, et seq.); as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA); and in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (National Contingency Plan (NCP)). Specifically, these objectives are to determine the presence or absence, types, and quantities (concentrations) of contaminants; mechanism of contaminant release to pathway(s); direction of pathway(s) transport; boundaries of source(s) and pathway(s); and environmental/public health receptors.

Scope of Remedial Investigation and Feasibility Study

9. The general scope of the RI/FS shall be to address all contamination at the Site resulting from the hazardous substances subject to CERCLA present at the Site.

Description of the Site

10. The Site is situated on approximately 98 acres of land located in a rural-industrial area at 9040 Castex Landing Road, Jennings, Jefferson Davis Parish, Louisiana 70546. The Site is within Section 19 of Range 2W, Township 105 and is located at the end of Louisiana Highway 3166) which is on the west bank of the Mermentau River. The Site is approximately four miles southeast of downtown Jennings and two miles southwest of the village of Mermentau. The Site is bordered to the north by residents, south and west by wetlands, and east by the Mermentau River and wetlands.

The Site primarily consists of two separately-owned parcels of property, one southern and one northern. The southern and northern properties are generally divided by a property line that runs just north of the large barge slip. Suzanne Smaihall Cornelius, (heir of Louis Smaihall, principal of SBA Shipyards, Inc.) and SBA Shipyards, Inc. (now inactive) owns the southern property, which historically was operated as a barge cleaning operation. Bunge Street Properties, LLC, f/k/a Leevac Shipyards, Inc., owns the northern property, which historically was operated as vessel construction and repair operation.

SBA Shipyards, Inc. ("SBA") began operations at the Site in about 1965. Initially, it performed vessel construction and repair operations on what is now the northern parcel. In the 1970s, SBA constructed the graving dock on the northern parcel and dredged the barge slip and constructed the barge cleaning facility on what is now the southern parcel. Leevac Shipyards, Inc. ("Leevac") entered into a lease with option to purchase for the northern vessel construction and repair facility with SBA in 1993. Leevac operated vessel construction and repair operations on the northern parcel beginning in 1993. Leevac then exercised its option to purchase in 1998 and acquired the northern parcel at that time and continued its operations. SBA continued to operate its barge cleaning operations on the southern parcel up until approximately 2006, when Mr. Smailhall died.

Vessel construction and repair utilized two launch slips with on-land rails to haul and launch vessels and eventually a graving dock with a moving gate where a vessel could enter and the dock de-watered to allow construction and repairs on dry land. Both SBA and Leevac activities included sandblasting, cutting and painting, as well as fabricating and repairing vessels.
Barge cleaning operations were conducted by SBA only on the southern parcel. SBA converted a small barge placed on land adjacent to the barge slip into its "boiler barge," which it used to generate steam for use in cleaning barges and it also served as the barge cleaning control room.

SBA cleaned barges and other vessels that had contained as last cargos a variety of materials, including, but not limited to: acrylates, asphalt, carbon tetrachloride, coal tar, coke oven tar, carbon black, carbon oil, caustic soda, creosote, cumene, black oil and black oil slop, bunker crude, diesel fuel, heavy grease, waste water, ethyl acrylates, kerosene, lube oil, methanol, number 6 oil, rust; scale, styrene, sour gas oil, soy bean oil, styrene, sulphuric acid, tallow, and vinyl acetate.

SBA also used a large partially buried barge, as well as above-grade tanks constructed from cut-up barges, to store liquids, sludges, solids and other materials during the barge cleaning process. SBA also constructed and used an unlined surface impoundment called the Oil Pit to store liquids, sludges, solids and other materials. Aside from the Oil Pit, SBA used three other unlined surface impoundments, called Water Pits 1, 2 and 3, to receive wastewater, sludges, and solids from the barge cleaning process.

Records reviews indicate that SBA unsuccessfully undertook efforts to bio-remediate Water Pit 1 during 1990 and 1991. SBA proposed to implement a RCRA Facility Investigation (RFI) and submitted an RCRA RFI Work Plan in 1996, that proposed the compete closure of the impoundments and tanks. EPA issued a RCRA 3008(a) Compliance Order to SBA on July 1, 1997. On September 9, 1997 SBA entered into a Consent Agreement and Final Order (CAFO) with EPA to resolve all issues presented in

the Compliance Order regarding storage, disposal and treatment of hazardous waste without a permit, and clean-up the facility. However, SBA was unable to implement any of the actions required under the CAFO.

Thereafter, in December 10, 2002 EPA entered into an Order and Agreement for Interim Measures/Removal Action (IM/RA) of Hazardous/Principal Threat Wastes at SBA Shipyards, Inc., docket number RCRA-6-2002-0908, pursuant to RCRA Section 3008(h) ("2002 Order/Agreement") with SBA and SSIC Remediation, LLC ("SSIC"), an entity formed by certain former customers of SBA's barge cleaning operations to conduct this work. Interim removal activities were conducted from March 2001 through January 2005 under the 2002 Order/Agreement. Interim removal activities consisted of the removing, solidifying, and recycling and/or disposing off-site the waste in the Oil Pit and Water Pit 2, and then over-excavation of the Oil Pit and Water Pit 2; removal and scrapping of above ground storage tanks; draining and refilling of Water Pit 3; removing all pumpable materials from the partially buried barge and disposing those materials off-site, then welding shut all hatches to that barge; and surface scrapping of all visible materials from a former land treatment unit. By letter dated February 24, 2006, EPA Region 6's RCRA branch reviewed and approved the completion report of the IM/RA activities and concluded that the completion report fulfilled the 2002 Order/Agreement. The IM/RA, however, was intended as an interim response; hazardous substance remained onsite after the IM/RA.

In October 2012, the U.S. Coast Guard and the LDEQ responded to a reported release at the barge cleaning portion of the Site from an attempt to scrap the "boiler barge" and the partially buried storage barge by parties contracted by the owner of the southern portion of the Site. During 2014 to 2015, EPA conducted a CERCLA emergency removal action and an Oil Pollution Act of 1990 (OPA) removal action after LDEQ reported barge scrapping activities and releases of visible liquids at the Site.

Between December 2012 and September 2014, EPA conducted a preliminary assessment, site inspection and expanded site inspection. As part of EPA activities, the Agency conducted sampling activities at the Site. During those site activities, EPA sampling documented releases or threats of releases of hazardous substances in the subsurface and groundwater of the Site, the Mermentau River, and wetlands surrounding the Site. Numerous hazardous substances were identified at the Site including petroleum hydrocarbons, numerous polycyclic aromatic hydrocarbons ("PAHs"), dioxins/furans, metals, and volatile organic compounds ("VOCs"). Petroleum and non-petroleum substances found at portions of the Site are or were comingled.

Specific PAHs founds at the Site include: acenaphthene; anthracene; acenaphthylene; benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; 1,1'-biphenyl; carbazole; chrysene; dibenzofuran; dibenz(a,h)anthracene; fluoranthene; fluorine; indeno(1,2,3-cd)pyrene; 2-methylnaphthalene; naphthalene; phenanthrene; and pyrene.

Specific dioxins/furans found at the Site include: Chlorinated Dibenzo-p-Dioxins and Chlorinated Dibenzofurans. Those with some of the highest TEQs include: 2,3,4,7,8-Pentacholordibenzofuran; 2,3,4,6,7,8-Hexacholordibenzofuran ("HxCDF"); 1,2,3,6,7,8-HxCDF; 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin; and Octachlorodibenzo-p-dioxin.

Specific metals found at the Site include: arsenic; chromium; cobalt; lead; mercury; manganese; cadmium; copper; nickel; zinc; and barium.

All of the aforementioned investigations, studies and reports may be used by the Respondents to supplement the work required to complete the RI/FS required in this SOW.

II. PERFORMANCE STANDARDS

12. The Performance Standards for this RI/FS shall include substantive requirements, criteria, or limitations which are specified in the AOC, including, but not limited to, this SOW. Submissions approved by the EPA are an enforceable part of the AOC: consequently, cleanup goals and other substantive requirement, criteria, or limitations which are specified in EPA-approved submissions are Performance Standards. The EPA will use the Performance Standards to determine if the work, including, but not limited to, the RI/FS, has been completed. The Respondents shall ensure that the RI/FS is consistent with the EPA's "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (EPA 1988b, hereinafter "the RI/FS guidance") and other applicable sections of EPA guidance cited herein.

III. ROLE OF THE EPA

13. The EPA's approval of deliverables, including, but not limited to, submissions, allows the Respondents to proceed to the next steps in implementing the Work of the RI/FS. The EPA's approval does not imply any warranty of performance, nor does it imply that the RI/FS, when completed, will function properly and be ultimately accepted by the EPA. The EPA retains the right to disapprove submissions during the RI/FS. The EPA may disapprove deliverables including, but not limited to, submissions concerning such matters as the contractor selection, plans and specifications, work plans, processes, sampling, analysis and any other deliverables within the context of the AOC. If a submission is unacceptable to the EPA, the EPA may require the Respondents to make modifications in the submission, and the EPA may require the Respondents to do additional work to support those modifications. That is, if a submission reports certain work that is unacceptable to the EPA, the EPA may require the Respondents to modify the submission text and to perform the work until it is acceptable to the EPA. The Respondents shall modify the submission and perform the work as required by the EPA.

IV. RESPONDENTS' KEY PERSONNEL

Respondent's Project Coordinator

14. When necessary, as determined by the EPA, the EPA will meet with the Respondents and discuss the performance and capabilities of the Respondents' Project Coordinator. When the Project Coordinator's performance is not satisfactory, as determined by the EPA, the Respondents shall take action, as requested by the EPA, to correct the deficiency. If, at any time, the EPA determines that the Project Coordinator is unacceptable for any reason, the Respondents, at the EPA's request, shall bar the Project Coordinator from any work under the AOC and give notice of the Respondents' selected new Project Coordinator to the EPA.

Respondent's Quality Assurance Manager

15. Oversight, including, but not limited to confirmation sampling, by the Respondents' Quality Assurance Manager (QA Manager) will be used to provide confirmation and assurance to the Respondents and to the EPA that the Respondents are performing the RI/FS in a manner that will meet the Performance Standards. The QA Manager shall ensure that the work performed by the Respondents meets the standards in the Quality Assurance Project Plan described in this SOW. The QA Manager shall selectively test and inspect the work performed by the Respondents.

V. TASKS TO BE PERFORMED AND DELIVERABLES

Conduct of the Remedial Investigation and Feasibility Study

16. This SOW specifies the Work to be performed and the deliverables which shall be produced by the Respondents. The Respondents shall conduct the RI/FS in accordance with this SOW and all applicable guidance that the EPA uses in conducting RI/FS projects under CERCLA, as amended by SARA, as well as any additional requirements in the AOC. The Respondents shall furnish all necessary personnel, materials, and services necessary for, and incidental to, performance of the RI/FS, except as otherwise specified in the AOC or SOW.

Submittal of Deliverables

17. All draft and final deliverables specified in this SOW shall be provided in hard copy and/or electronic, (specifically, Microsoft ® Word and Adobe ® PDF format) versions (deliverable method and quantity of copies will be specified by the RPM prior to deliverable deadlines), by the Respondents, to EPA, EPA's RI/FS Oversight Contractor, the Louisiana Department of Environmental Quality (LDEQ), and the Federal/State Natural Resource Trustees[1] (except for bi-monthly status reports, which will be provided to EPA only and in electronic format only). Final deliverables shall be provided in hard copy and electronic format (specifically, Adobe® PDF format) to the Information Repository established for the Site. The EPA shall be responsible for placing the required deliverables into the Information Repository. The Respondents shall provide the EPA with any other documentation for the Information Repository as requested by the EPA's Remedial Project Manager (RPM). Additionally, all deliverables specified in this SOW shall be submitted, by the Respondents, according to the requirements of this SOW and Appendix A of this SOW (Schedule of Deliverables/Meetings). In addition to the Deliverables identified in Appendix A, Respondents shall provide to EPA an updated database with the bi-monthly status report for reporting periods in which validated data have been uploaded to the database.

Development of Deliverables

18. All deliverables shall be developed in accordance with the guidance documents listed in Appendix B[2] (Guidance Documents) to this SOW. Subject to the provisions regarding EPA Approval of Plans and other Submissions in Section X of the AOC, if the EPA disapproves of or requires revisions to any of these deliverables, in whole or in part, the Respondents shall submit to the EPA, within sixty (60) days after completing discussion of EPA's directions or comments on the deliverable (and in no event later than ninety (90) calendar days after receiving EPA's comments or directions on the deliverable), revised plans which are responsive to such directions or comments.

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[1]The Federal/State Natural Resource Trustees for the Site have been identified as the U.S. Department of Interior, U.S. Fish and Wildlife Service, United States Geological Survey, Louisiana Department of Environmental Quality, Louisiana Department of Health and Hospitals, Louisiana Department of Wildlife and Fisheries and the Louisiana Department of Natural Resources .

[2]Appendix B of this SOW does not include all guidance documents that are applicable to the RI/FS for the Site. The Respondents should consult with EPA's Remedial Project Manager for additional guidance and to ensure that the guidance documents have not been superseded by more recent guidance.

Tasks to be Performed by the Respondents

19. The Respondents shall perform each of the following Tasks (Tasks 1-10) as specified in this SOW. These Tasks shall be developed in accordance with the guidance documents listed in Appendix B[2] (Guidance Documents) to this SOW and any additional guidance applicable to the RI/FS process.

Task 1: Scoping

20. The purpose of Task 1 (Project Planning) is to determine how the RI/FS will be managed and controlled. The following activities shall be performed by the Respondents as part of Task 1.

a) The Respondents shall contact the EPA's Remedial Project Manager within thirty (30) calendar days after the effective date of the AOC to schedule a scoping phase meeting or conference call.

b) The Respondents shall compile, review, and evaluate all existing Site data. The Respondents shall refer to Table 2-1 (Data Collection Information Sources) of the RI/FS Guidance for a list of data collection information sources. The Respondents shall exhaust, as necessary, all of those sources in compiling the data.

The Respondents shall compile all existing information describing hazardous substance sources, migration pathways, and potential human and environmental receptors. The Respondents shall compile all existing data relating to the varieties and quantities of hazardous substances released at or from the Site. The Respondents shall compile and review all available data relating to past disposal practices of any kind on and near the Site. The Respondents shall compile existing data concerning the physical and chemical characteristics of the hazardous substances and their distribution among the environmental media (ground water, soil, surface water, sediments, and air) on and near the Site.

The Respondents shall compile existing data which resulted from any previous sampling events that may have been conducted on and near the Site. The data will be reviewed for QA/QC purposes to assess if the data are reliable and able to be utilized in the RI/FS process. If the data are deemed not to be usable, the data will only be used to provide general information on the location, depth, and analytical laboratory results, which will provide assistance in selection of future sample locations. The Respondents shall gather existing data which describes previous responses that have been conducted on and near the Site by local, state, federal, or private parties.

The Respondents shall gather existing information regarding geology, hydrogeology, hydrology (including floodplains), meteorology (including previous hurricane activity), and ecology of the Site. The Respondents shall gather existing data regarding background ground water, background soil, background surface water, background sediments, and background air characteristics (if necessary). These data will be reviewed for QA/QC purposes to assess if the data are reliable and able to be utilized in the RI/FS process. If the data are deemed not to be usable, the data will only be used to provide general information on the location, depth, and analytical laboratory results that will provide assistance in selection of future sample locations. The Respondents shall gather existing data regarding demographics, land use, property boundaries, and zoning. The Respondents shall gather existing data (data that are available electronically via online data bases

will be sufficient if the data bases utilized are current), which identifies and locates residential, municipal, or industrial water wells on and near the Site. The Respondents shall gather existing data which identifies surface water uses for areas surrounding the Site including, but not limited to, downstream of the Site. The Respondents shall gather existing information describing the flora and fauna of the Site. The Respondents shall gather existing data regarding state and federally listed threatened, endangered, or rare species; sensitive environmental areas; or critical habitats on and near the Site. The Respondents shall compile any existing ecological assessment data. This may include, but is not limited to, results of acute or chronic toxicity tests using Site surface water and/or sediment, analysis of invertebrate and/or fish tissue concentrations, analysis of wildlife tissue and egg concentrations, and any wildlife or invertebrate census or community survey information.

The Respondents shall use data compiled and reviewed to describe additional data needed to characterize the Site, to better define potential ARARs, and to develop a range of preliminarily identified remedial alternatives. All previously collected data shall be reviewed to determine compliance with the data quality requirements for the project and that it is suitable for use in the RI/FS.

Task 2: Remedial Investigation and Feasibility Study Work Plan

21. The Respondents shall prepare and submit a Draft RI/FS Work Plan (WP) within ninety (90) calendar days after the Scoping Phase Meeting or conference call. The Respondents shall use information from appropriate EPA guidance and technical direction provided by the EPA's Remedial Project Manager as the basis for preparing the Draft RI/FS WP. The RI/FS shall be conducted in a manner that minimizes environmental impacts in accordance with the EPA's Principles for Greener Cleanups (EPA 2009a.) and EPA Region 6 Clean and Green Policy (EPA 2009b.) to the extent consistent with the National Contingency Plan (NCP), 40 CFR Part 300. The Best Management Practices available at http://www.cluin.org/greenremediation/ shall be considered.

22. The Respondents shall develop the Draft RI/FS WP in conjunction with the Draft RI/FS Sampling and Analysis Plan (Task 3 (RI/FS Sampling and Analysis Plan)) and the Draft RI/FS Site Health and Safety Plan (Task 4 (RI/FS Site Health and Safety Plan)), although each plan may be submitted to the EPA under separate cover. The Draft RI/FS WP shall include a comprehensive description of the Work to be performed, the methodologies to be utilized, and a corresponding schedule for completion. In addition, the Draft RI/FS WP shall include the rationale for performing the required activities.

23. Specifically, the Draft RI/FS WP shall present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the Draft RI/FS WP shall include a Site background summary setting forth the Site description which includes the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, geology, and demographics; the Site's ecological, cultural and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the

Site. In addition, the Draft RI/FS WP shall include a description of the Site management strategy developed during scoping, and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The Draft RI/FS WP shall reflect coordination with treatability study requirements (Task 8 (Treatability Studies)) and will show a process for and manner of identifying Federal and State chemical-, location-, and action-specific ARARs.

24. Finally, the major part of the Draft RI/FS WP shall be a detailed description of the Tasks (Tasks 1-10) to be performed, information needed for each Task and for the Baseline Human Health and Ecological Risk Assessments, information to be produced during and at the conclusion of each Task, and a description of the Work products and deliverables that the Respondents will submit to the EPA. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the EPA's guidance documents; monthly reports to the EPA as specified in Appendix A (Schedule of Deliverables/Meetings); and meetings and presentations to the EPA at the conclusion of each major phase of the RI/FS. The Respondents shall refer to the EPA's guidance document entitled, "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA 1988b) which describes the RI/FS WP format and the required content.

25. The Respondents are responsible for fulfilling additional data and analysis needs identified by the EPA consistent with the general scope and objectives of this RI/FS. Because of the nature of the Site and the iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. If any significant additional Work is required to meet the objectives stated in the RI/FS WP, based upon new information obtained during the RI/FS, the Respondents shall submit a Draft RI/FS WP Amendment to the EPA for review and approval prior to any additional Work being conducted in accordance with the AOC and SOW. The EPA may, at its discretion, give verbal approval for Work to be conducted prior to providing written approval of the Draft RI/FS WP Amendment.

26. Subject to the provisions in Section X of the AOC, the Respondents shall prepare and submit to the EPA a final RI/FS Work Plan within sixty (60) calendar days after completing discussion of EPA's comments on the draft RI/FS Work Plan (and in no event later than ninety (90) calendar days after receipt of the EPA's comments on the draft RI/FS Work Plan).

Task 3: RI/FS Sampling and Analysis Plan

27. The Respondents shall prepare and submit to the EPA a Draft RI/FS Sampling and Analysis Plan (SAP) within ninety (90) calendar days after the Scoping Phase Meeting or conference call. This Draft RI/FS SAP shall provide a mechanism for planning field activities and shall consist of an RI/FS Field Sampling Plan and Quality Assurance Project Plan as follows:

a) The RI/FS Field Sampling Plan (FSP) shall define in detail the sampling and data gathering methods that will be used for the project to define the nature and extent of contamination and risk assessment-related studies (Task 7, Risk Assessments). It shall include, but not be limited to, sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The RI/FS FSP shall contain a completed Sample Design Collection Worksheet and a Method Selection Worksheet. These worksheet templates can be found in the EPA's guidance document entitled, "Guidance for Data Usability in Risk Assessment" (EPA 1992a). In addition, the FSP shall include a comprehensive description

of the Site including geology; location; and physiographic, hydrological, ecological, cultural, and natural resource features; a brief synopses of the history of the Site; summary of existing data; and information on fate and transport and effects of chemicals. As such, the Respondents shall provide a strategy that includes both biased sampling and random sampling. The risk assessments require that the sampling be conducted to demonstrate that data is statistically representative of the Site. The Respondents shall also confirm that the detection limits for all laboratories are in accordance within the goals stated in the EPA's risk assessment guidance.

The FSP shall consider the use of all existing data and shall justify the need for additional data whenever existing data will meet the same objective. Existing data, if used for the RI/FS, shall meet the data quality and usability requirements based on the data quality objectives for the Site. The FSP shall be written so that a field sampling team unfamiliar with the Site would be able to gather the samples and field information required. The Respondents shall refer to EPA's guidance document entitled, "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA 1988b) which describes the RI/FS FSP format and the required content. The Respondents shall document any required changes to the Final FSP, during the implementation of the RI/FS, in a memorandum to the EPA's Remedial Project Manager and after discussions with the EPA.

b) The RI/FS Quality Assurance Project Plan (QAPP) shall describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired Data Quality Objectives (DQOs). The DQOs shall at a minimum reflect use of analytical methods for identifying contamination and remediating contamination consistent with the levels for remedial action objectives identified in the NCP. In addition, the RI/FS QAPP shall address sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications. The Respondents shall refer to the EPA's guidance documents entitled; "EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5 " (EPA 2001, EPA/240/B-01/003, March 2001, or the latest revision), and "Guidance for Quality Assurance Project Plans, EPA QA/G-5 " (EPA 2002, EPA/240/R-02/009, December 2002, or the latest revision) which describe the RI/FS QAPP format and the required content.

Subject to the provisions in Section X of the AOC, the Respondents shall prepare and submit to the EPA a final RI/FS SAP within sixty (60) calendar days after completing discussion of EPA's comments on the draft RI/FS SAP (and in no event later than ninety (90) calendar days after receipt of the EPA's comments on the draft RI/FS SAP).

28. The Respondents shall demonstrate in advance, to the EPA's satisfaction, that each analytical laboratory it may use is qualified to conduct the proposed Work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and the DQOs approved in the RI/FS QAPP for the Site by the EPA. The laboratory must have, and follow, an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods shall be used where appropriate. Any methods not consistent with CLP methods shall be approved by the EPA prior to their use. Furthermore, if a laboratory not in the CLP program is selected, a laboratory QA

program must be submitted to the EPA for review and approval. The EPA may require the Respondents to submit detailed information to demonstrate that the laboratory is qualified to conduct the Work, including information on personnel and qualifications, equipment, and material specifications.

Task 4: RI/FS Site Health and Safety Plan

29. The Respondents shall prepare and submit to the EPA an RI/FS Site Health and Safety Plan (HSP) within ninety (90) calendar days after the Scoping Phase Meeting or conference call. This RI/FS HSP shall be prepared in accordance with the Occupational Safety and Health Administration regulations and protocols and must be in place prior to any onsite activities. The EPA will review, but not approve, the RI/FS Site HSP to ensure that all necessary elements are included and that the plan provides for the protection of human health and the environment. The EPA may, at its discretion, disapprove the Site HSP and provide comments concerning those aspects of the plan which pertain to the protection of the environment and the health of persons not employed by, or under contract to, the Respondents. In addition, EPA may require a revised RI/FS Site HSP to be submitted for review in the event that the RI/FS WP is changed or amended (e.g., such as in the performance of pilot studies which may result in the airborne emissions of hazardous substances from the Site). The Respondents shall refer to the EPA's guidance document entitled, "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA 1988b) which describes the RI/FS Site HSP format and the required content.

Task 5: Community Involvement Plan

30. The development and implementation of community relations activities, including community interviews and developing a community involvement plan, are the responsibilities of EPA. Respondents must assist, as required by EPA, by providing information regarding the Site's history, participating in public meetings upon notice from EPA, or by preparing fact sheets for distribution to the general public. As appropriate and feasible, EPA will provide Respondents with the opportunity to review and provide comments on a draft community involvement plan, including the stakeholder and community mailing lists, and fact sheets prior to distribution. In addition, EPA may require that Respondents establish a community information repository, at or near the Site, to house one copy of the administrative record. The extent of Respondents' involvement in community relations activities is left to the discretion of EPA. Respondents' community relations responsibilities, if any, are specified in the community involvement plan. All community relations activities will be subject to oversight by EPA.

Task 6: Site Characterization

31. Site Characterization shall build upon and complement work completed during the 1997 RCRA Facility Investigation (RFI), the IM/RA, along with recent sampling activities during the 2013 and 2014 Site Inspection (SI) and Expanded Site Inspection (ESI) respectively. Possible data gaps currently identified include, but not limited to, buried barge/associated alkyne storage tank pump house and stained soils, contaminated soils located in an area south of water pit 1 and west of oil pit, the nature of the subsurface non aqueous phase liquid (NAPL) and issues related to the fate and transport of contaminates in the groundwater. In particular, the density of the NAPL, vertical and horizontal extent of the NAPL, vertical and horizontal extant of the contamination in the groundwater, degree of natural biodegradation, and the hydraulic properties for the shallow groundwater bearing unit. Four possible points of entries (PPEs) for contamination were identified during the 2013-2014 SI and ESI. These areas will need further site characterization.

• PPE 1 is a zone located on the eastern portion of the SBA property along the man-made structure between the dry dock and Mermentau River.
• PPE 2, located directly north of the partially buried barge is a zone where the overland flow meets the barge slip, is also located on the eastern portion of the property and a probable entry point from Source No. 1.
• PPE 3 is a segment along where the partially buried barge and former water pit 3, have been reported to have discharged into the adjacent wetlands along a perennial drainage ditch which runs on the property from the northwest, through the wetlands and drains to the Mermentau River. Surface run-off from Sources No. 3, & 4 eventually flow into a segment of PPE-3, the depressed area of the drainage ditch that flows through the wetland that drains to the Mermentau.
• PPE 4 is a zone located along the eastern edge of former water pit 3 (Source No. 6). A hydraulic excavator was used to break a wide gap in the earthen berm separating Water Pit 3 from the Mermentau River bottomland directly east of the water pit. Upon removal of the segment of the earthen berm, water from the Mermentau River flowed into the former water pit 3.

As part of the Remedial Investigation (RI), the Respondents shall perform the activities described in this Task, including the preparation of an RI Report (Task 9, Remedial Investigation Report). The overall objective of the Site's characterization will be to describe areas of the Site that may pose a threat to human health or the environment. This will be accomplished by first determining the Site's physiography, geology, and hydrology. Surface and subsurface pathways of migration shall be defined by the Respondents. The Respondents shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents. The Respondents shall also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport will then be determined and projected.

32. The Respondents shall implement the Final RI/FS WP, and SAP during this phase of the RI/FS. Field data will be collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondents shall notify the EPA at least fifteen (15) calendar days in advance of the field work regarding the planned dates for field activities, including, but not limited to, ecological field surveys, field layout of the sampling grid, installation of wells, initiating sampling (air, surface water, ground water, sediments, soils, and biota, if applicable), installation and calibration of equipment, aquifer tests, and initiation of analysis and other field investigation activities (including geophysical surveys and borehole geophysics). The Respondents shall not proceed with field activities without prior EPA approval. The Respondents shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during the Site's characterization meets the specific QA/QC requirements and the DQOs established for the investigation of the Site as specified in the Final RI/FS SAP. Activities are often iterative, and to satisfy the objectives of the RI/FS it may be necessary for the Respondents to supplement the Work specified in the Final RI/FS WP.

33. The Respondents shall perform the following activities as part of Task 6 (Site Characterization):

a) Field Investigation - The field investigation shall include the gathering of data to define the Site's physical and biological characteristics, sources of contamination, and the nature and

extent of contamination at or from the Site. These activities shall be performed by the Respondents in accordance with the Final RI/FS WP and SAP. At a minimum, this field investigation shall address the following:

i) Implementation and Documentation of Field Support Activities - The Respondents shall initiate field support activities following the Final RI/FS WP and SAP approved by the EPA. Field support activities may include obtaining access to the Site; scheduling; and procurement of equipment, office space, laboratory services, and/or contractors. The Respondents shall notify the EPA at least fifteen (15) calendar days prior to initiating field support activities so that the EPA may adequately schedule oversight activities. The Respondents shall also notify the EPA in writing upon completion of field support activities.

ii) Investigation and Definition of Site Physical and Biological Characteristics - The Respondents shall collect data on the physical and biological characteristics of the Site and its surrounding areas including the physiography, geology, hydrology, and specific physical characteristics identified in the Final RI/FS WP. This information shall be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human and ecological receptor populations (including risks to endangered or threatened species). In defining the Site's physical characteristics, the Respondents shall also obtain sufficient engineering data for the projection of contaminant fate and transport, and development and screening of remedial action alternatives, including information to assess treatment technologies.

iii) Definition of Sources of Contamination - The Respondents shall locate each source of contamination. For each location, the areal extent and depth of contamination will be determined by sampling at incremental depths per the approved Sampling and Analysis Plan. The physical characteristics and chemical constituents and their concentrations will be determined for all known and discovered sources of contamination. The Respondents shall conduct sufficient sampling to define the boundaries of the contaminant sources to the level established in the Final RI/FS QAPP and DQOs. Defining the source of contamination shall include analyzing the potential for contaminant release (e.g., long-term leaching from soil), contaminant mobility and persistence, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

iv) Description of the Nature and Extent of Contamination - The Respondents shall gather information to describe the nature and extent of contamination, at or from the Site, as a final step during the field investigation. To describe the nature and extent of contamination, the Respondents shall utilize the information on the Site's physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondents shall then implement an iterative monitoring program and any study program identified in the Final RI/FS WP or SAP such that by using analytical techniques sufficient to detect and quantify the

concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondents shall gather data for calculations of contaminant fate and transport. This process shall be continued until the area and depth of contamination are known to the level of contamination established in the Final RI/FS QAPP and DQOs. The EPA will use the information on the nature and extent of contamination to determine the level of risk presented by the Site and to help determine aspects of the appropriate remedial action alternatives to be evaluated.

b) Data Analyses - The Respondents shall analyze the data collected and develop or refine the Conceptual Site Model by presenting and analyzing data on source characteristics, the nature and extent of contamination, the transport pathways and fate of the contaminants present at the Site, and the effects on human health and the environment:

i) Evaluation of Site Characteristics: The Respondents shall analyze and evaluate the data to describe the Site's physical and biological characteristics, contaminant source characteristics (as necessary to identify principal threat or low threat wastes, and estimate waste volumes for risk assessment evaluation and remedial alternatives evaluation purposes), nature and extent of contamination, and contaminant fate and transport. Results of the Site's physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation will include the actual releases from the sources, and horizontal and vertical spread of contamination as well as the mobility and persistence of the contaminants. Where modeling is appropriate, such models shall be identified by the Respondents to the EPA in a Technical Memorandum prior to their use. If EPA disapproves of or requires revisions to the technical memorandum, in whole or in part, subject to the provisions in Section X of the AOC, Respondents shall amend and submit to EPA a revised technical memorandum on modeling which is responsive to directions and EPA's comments within sixty (60) calendar days after completing discussion of the EPA's comments on the draft technical memorandum (and in no event later than ninety (90) calendar days after receipt of the EPA's comments on the draft memorandum).

All data and programming, including any proprietary programs, shall be made available to the EPA together with a sensitivity analysis. The RI data shall be presented in a format to facilitate the Respondent's preparation of the Baseline Human Health and Ecological Risk Assessments (Task 7, Risk Assessments). All data shall be archived in a database in such a format that would be accessible to investigators as needed.

The Respondents shall agree to discuss with EPA and then collect additional data for any data gaps identified by the EPA that are needed to complete the risk assessments. Also, this evaluation shall provide any information relevant to the Site's characteristics necessary for evaluation of the need for remedial action in the risk assessments and for the development and evaluation of remedial alternatives. Analyses of data collected for the Site's characterization shall meet the DQOs developed in the Final RI/FS QAPP and stated in the Final RI/FS SAP (or revised during the RI).

c) Data Management Procedures – The Respondents shall consistently document the quality and validity of field and laboratory data compiled during the RI as follows:

i) Documentation of Field Activities - Information gathered during the Site's characterization shall be consistently documented and adequately recorded by the Respondents in well maintained field logs and laboratory reports. The method(s) of documentation shall be specified in the Final RI/FS WP and/or the SAP. Field logs shall be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports shall document sample custody, analytical responsibility and results, adherence to prescribed protocols, nonconformity events, corrective measures, and data deficiencies.

ii) Sample Management and Tracking - The Respondents shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the risk assessments and the development and evaluation of remedial alternatives. Analytical results developed under the Final RI/FS WP shall not be included in any characterization reports of the Site unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondents shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

34. Reuse Assessment - If EPA, in its sole discretion, determines that a Reuse Assessment is necessary, Respondents will perform the Reuse Assessment in accordance with the SOW, RI/FS Work Plan and applicable guidance (EPA 2001c). The Reuse Assessment should provide sufficient information to develop realistic assumptions of the reasonably anticipated future land use for the Site.

Task 7: Risk Assessments

35. The Respondents shall perform a Baseline Human Health Risk Assessment, Screening Level Ecological Risk Assessment, and a Baseline Ecological Risk Assessment (if necessary) for the Site, which will be a part of the RI Report. The Respondents will prepare one section of the Final RI/FS WP (Task 2) which discusses the risk assessment process and outlines the steps necessary for coordinating with the EPA at key decision points within the process. Submittal of deliverables, meetings and/or conference calls, and presentations to the EPA will be reflected in the project schedule in the Final RI/FS WP to demonstrate the progress made on the risk assessments. The DQOs listed within the Final RI/FS QAPP will include DQOs specific to risk assessment needs, and critical samples needed for the risk assessments will be identified within the Final RI/FS SAP. The Respondents shall develop an initial Conceptual Site Model which may be revised as new information is obtained. These risk assessments shall consist of both Human Health and Ecological Risk Assessments as follows:

a) Baseline Human Health Risk Assessment: The Respondents shall perform a Baseline Human Health Risk Assessment (BHHRA) to evaluate and assess the risk to human health posed by the contaminants present at the Site. The Respondents shall refer to the appropriate EPA guidance documents (EPA 1989b, 1991a, 1991b, 1991c, 1992a, and 2001b) in conducting the BHHRA. The Respondents shall address the following in the BHHRA:

i) Hazard Identification (sources) - The Respondents shall review available information on the hazardous substances present at the Site and identify the major contaminants of concern.

ii) Dose-Response Assessment - The Respondents, with concurrence from the EPA, shall select contaminants of concern based on their intrinsic toxicological properties and distribution in the environment.

iii) Conceptual Exposure/Pathway Analysis - The Respondents shall identify and analyze critical exposure pathways (e.g., drinking water). The proximity of contaminants to exposure pathways and their potential to migrate into critical exposure pathways shall be assessed.

iv) Characterization of Site and Potential Receptors - The Respondents shall identify and characterize human populations in the exposure pathways.

v) Exposure Assessment - During the exposure assessment, the Respondents shall identify the magnitude of actual or potential human exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, the Respondents shall develop reasonable maximum estimates of exposure for both current land use conditions and potential future land use conditions at the Site.

vi) Risk Characterization - During risk characterization, the Respondents shall compare chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or near the Site are affecting or could potentially affect human health.

vii) Identification of Limitations/Uncertainties - The Respondents shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the BHHRA.

viii) Conceptual Site Model - Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, the Respondents shall develop a Conceptual Site Model for the Site.

The Respondents shall prepare and submit to the EPA for review and approval, according to the schedule specified in the Final RI/FS Work Plan, a Draft BHHRA. Subject to the provisions in Section X of the AOC, the Respondents shall submit a Final BHHRA within sixty (60) calendar days after completing discussion of the EPA's comments on the Draft BHHRA (an in no event later than ninety (90) calendar days after receipt of the EPA's approval of the Draft BHHRA.

b) Baseline Ecological Risk Assessment: The Respondents shall perform the Baseline Ecological Risk Assessment (BERA) concurrently with the BHHRA. The BERA shall conform to current EPA guidance (EPA 1992a, EPA 1992b, EPA 1993, EPA 1997, and EPA 2001b). The scoping of all phases of the BERA shall follow the general approach provided in the EPA's guidance (EPA 1997) and shall include discussions between the Respondents and the EPA's risk assessors and risk managers. The BERA shall conform to the general outline provided in the EPA's guidance (EPA 1997).

The eight steps in the Baseline Ecological Risk Assessment (BERA) process include:
Step 1 - Screening-Level Problem Formulation and Ecological Effects Evaluation,
Step 2 - Screening-Level Preliminary Exposure Estimate and Risk Calculation,
Step 3 - Baseline Risk Assessment Problem Formulation,
Step 4 - Study Design and Data Quality Objectives,
Step 5 - Field Verification and Sampling Design,
Step 6 - Site Investigation and Analysis of Exposure and Effects,
Step 7 - Risk Characterization, and
Step 8 - Risk Management.

The Respondents shall interact closely with the EPA's Remedial Project Manager and risk assessment staff assigned to the Site to ensure that draft deliverables are acceptable and major rework is avoided on subsequent submittals. The scope of the BERA will be determined via a phased approach as outlined in the EPA's guidance documents and documented in the following deliverables:

i) Step 1, Screening Level Problem Formulation and Ecological Effects Evaluation - The "Screening Level Problem Formulation and Ecological Effects Evaluation" step is part of the initial ecological risk screening assessment. For this initial step, it is likely that site-specific information for determining the nature and extent of contamination and for characterizing ecological receptors at the Site is limited. This step includes all the functions of problem formulation (Steps 3 and 4) and ecological effects analysis, but on a screening level. The results of this step will be used in conjunction with exposure estimates during the preliminary risk calculation in Step 2 (Screening-Level Preliminary Exposure Estimate and Risk Calculation).

For the screening level problem formulation, the Respondents shall develop a Conceptual Site Model that addresses these five issues: 1) environmental setting and contaminants known or suspected to exist at the Site, 2) contaminant fate and transport mechanisms that might exist at the Site, 3) the mechanisms of ecotoxicity associated with contaminants and likely categories of receptors that could be affected, 4) the complete exposure pathways that might exist at the Site, and 5) selection of endpoints to screen for ecological risk.

The next step in the initial ecological risk screening assessment will be the preliminary ecological effects evaluation and the establishment of contaminant exposure levels that

represent conservative thresholds for adverse ecological effects. Screening ecotoxicity values shall represent a no-observed-adverse-effect-level for long-term exposures to a contaminant. Ecological effects of most concern are those that can impact populations (or higher levels of biological organizations), and/or individual receptors for state and federally listed threatened/endangered or rare species; and include adverse effects on development, reproduction, and survivorship. For some of the data reported in the literature, conversions may be necessary to allow the data to be used for measures of exposure other than those reported. The Respondents shall consult with the EPA's Remedial Project Manager and risk assessors concerning any extrapolations used in developing screening ecotoxicity values.

ii) Step 2, Screening-Level Exposure Estimate and Risk Calculation - The "Screening-Level Exposure Estimate and Risk Calculation" comprises the second step in the ecological risk screening assessment for the Site. Risk is estimated by comparing maximum documented exposure concentrations with the ecotoxicity screening values from Step 1. At the conclusion of Step 2, the Respondents shall decide, with concurrence from the EPA, that either the screening-level ecological risk assessment is adequate to determine that ecological threats are negligible or the process should continue to a more detailed ecological risk assessment (Steps 3 through 7). If the process continues, the screening-level assessment serves to identify exposure pathways and preliminary contaminants of concern for the BERA by eliminating those contaminants and exposure pathways that pose negligible risks.

To estimate exposures for the screening-level ecological risk calculation, on-site contaminant levels and general information on the types of biological receptors that might be exposed should be known from Step 1. Only complete exposure pathways should be evaluated and the highest measured or estimated on-site contaminant concentration for each environmental medium should be used to estimate exposures, thereby ensuring that potential ecological threats are not missed.

The Respondents will estimate a quantitative screening-level risk using the exposure estimates developed according to Step 2 and the screening ecotoxicity values developed according to Step 1. For the screening-level risk calculation, the hazard quotient approach, which compares point estimates of screening ecotoxicity values and exposure values, is adequate to estimate risk.

At the end of Step 2, the Respondents shall decide, with concurrence from the EPA, whether the information available is adequate to support a risk management decision. The three possible decisions at this point will be: 1) There is adequate information to conclude that ecological risks are negligible and therefore no need for remediation on the basis of ecological risk; 2) The information is not adequate to make a decision at this point, and the ecological risk assessment process will continue to Step 3; or 3) The information indicates a potential for adverse ecological effects, and a more thorough assessment is warranted. The Respondents shall document the decision and the basis for it in a Draft Screening Level Ecological Risk Assessment (SLERA) Report and submit it

to the EPA for review and approval according to the project schedule in the Final RI/FS WP. The Respondents shall submit a Final SLERA within thirty (30) days after completing discussion of the EPA's comments on the Draft SLERA Report (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft SLERA Report).

iii) Step 3, Baseline Risk Assessment Problem Formulation - The "Baseline Risk Assessment Problem Formulation" step of the BERA will refine the screening-level problem formulation and expands on the ecological issues that are of concern at the Site. In the screening-level assessment, conservative assumptions are used where site-specific information is lacking. In Step 3, the results of the screening assessment and additional site-specific information are used to determine the scope and goals of the BERA. Steps 3 through 7 will be required only if the screening-level assessment, in Steps 1 and 2, indicated a need for further ecological risk evaluation.

Problem formulation at Step 3 will include the following activities: a) refining preliminary contaminants of ecological concern; b) further characterizing ecological effects of contaminants; c) reviewing and refining information on contaminant fate and transport, complete exposure pathways, and ecosystems potentially at risk; d) selecting assessment endpoints; and e) developing a CSM with working hypotheses or questions that the Site investigation will address.

At the conclusion of Step 3, the Respondents shall submit a Draft BERA Problem Formulation (PF) Report to the EPA for review and approval according to the project schedule in the Final RI/FS Work Plan. The Respondents shall submit a Final BERA PF Report within sixty (60) days after completing discussion of the EPA's comments on the Draft BERA PF Report (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft BERA PF Report). This report shall discuss the assessment endpoints, exposure pathways, risk questions, and the CSM integrating these components. The products of Step 3 will be used to select measurement endpoints and to develop the BERA Work Plan (WP) and Sampling and Analysis (SAP) for the Site in Step 4.

iv) Step 4, Study Design and Data Quality Objective Process - The "Study Design and Data Quality Objective Process" step of the BERA will establish the measurement endpoints which complete the CSM in Step 3. The CSM will then be used to develop the study design and DQOs. The deliverables of Step 4 will be the BERA WP and SAP, which describe the details of the Site's investigation as well as the data analysis methods and DQOs. The Draft BERA WP shall describe the assessment endpoints, exposure pathways, questions and testable hypotheses, measurement endpoints and their relation to assessment endpoints, and uncertainties and assumptions. The Draft BERA SAP shall describe data needs; scientifically valid and sufficient study design and data analysis procedures; study methodology and protocols, including sampling techniques; data reduction and interpretation techniques, including statistical analyses; and quality assurance procedures and quality control techniques. The Respondents shall submit to

the EPA for review and approval a Draft BERA WP and SAP according to the schedule specified in the Final RI/FS Work Plan. The Respondents shall submit a Final BERA WP and SAP within sixty (60) days after completing discussion of the EPA's comments on the Draft BERA WP and SAP (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft BERA WP and SAP).

v) Step 5, Field Verification of Sampling Design - The "Field Verification of Sampling Design" step of the BERA process will ensure that the DQOs for the Site can be met. This step verifies that the selected assessment endpoints, testable hypotheses, exposure pathway model, measurement endpoints, and study design from Steps 3 and 4 are appropriate and implementable at the Site. Step 6 of the BERA process cannot begin until the Final BERA WP and SAP are approved by the EPA.

vi) Step 6, Site Investigation and Analysis Phase - The "Site Investigation and Analysis Phase" of the BERA process shall follow the Final BERA WP and SAP developed in Step 4 and verified in Step 5. The Step 6 results are then used to characterize ecological risks in Step 7.

The Final BERA WP for the Site investigation will be based on the CSM and will specify the assessment endpoints, risk questions, and testable hypotheses. During the Site investigation, the Respondents shall adhere to the DQOs and to any requirements for co-located sampling. The analysis phase of the BERA process will consist of the technical evaluation of data on existing and potential exposures and ecological effects at the Site. This analysis will be based on the information collected during Steps 1 through 5 and will include additional assumptions or models to interpret the data in the context of the CSM. Changing field conditions and new information on the nature and extent of contamination may require a change to the Final BERA SAP.

vii) Step 7 - Risk Characterization - The "Risk Characterization" step is considered the final phase of the BERA process and will include two major components: risk estimation and risk description. Risk estimation will consist of integrating the exposure profiles with the exposure-effects information and summarizing the associated uncertainties. The risk description will provide information important for interpreting the risk results and will identify a threshold for adverse effects on the assessment endpoints. At the end of Step 7, the Respondents shall submit a Draft BERA Report to EPA for review and approval according to the project schedule in the Final RI/FS WP. The Respondents shall submit a Final BERA Report within sixty (60) days after completing discussion of the EPA's comments on the Draft BERA Report (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft BERA Report).

viii) Step 8 - Risk Management - "Risk Management" at the Site will be the responsibility of the EPA's Remedial Project Manager and risk assessor(s), who must balance risk reductions associated with cleanup of contaminants with potential impacts of the remedial actions themselves. In Step 7, a threshold for effects on the assessment endpoint as a range between contamination levels identified as posing no ecological risk

and the lowest contamination levels identified as likely to produce adverse ecological effects will be identified. In Step 8, the EPA's Remedial Project Manager and risk assessor(s) will evaluate several factors in deciding whether or not to clean up to within that range. This risk management decision will be finalized by the EPA in the Record of Decision for the Site.

Task 8: Treatability Studies

36. Treatability testing, if necessary, shall be performed by the Respondents to assist in the detailed analysis of alternatives. In addition, if applicable, testing results and operating conditions shall be used in the detailed design of the selected remedial technology. The following activities shall be performed by the Respondents:

a) Determination of Candidate Technologies and of the Need for Testing - The Respondents shall identify candidate technologies for a treatability studies program.

The listing of candidate technologies will cover the range of technologies required for alternatives analysis. The specific data requirements for the testing program will be determined and refined during the characterization of the Site and the development and screening of remedial alternatives. The Respondents shall perform the following activities:

i) Conduct of Literature Survey and Determination of the Need for Treatability Testing - The Respondents shall conduct a literature survey to gather information on performance, relative costs, applicability, removal efficiencies, operation and maintenance requirements, and implementability of candidate technologies. If practical technologies have not been sufficiently demonstrated, or cannot be adequately evaluated for this Site on the basis of available information, treatability testing may need to be conducted. Where it is determined by the EPA that treatability testing is required, and unless the Respondents can demonstrate to the EPA's satisfaction that they are not needed, the Respondents shall be required to submit a Treatability Study Work Plan to the EPA outlining the steps and data necessary to evaluate and initiate the treatability testing program.

ii) Evaluation of Treatability Studies - Once a decision has been made to perform treatability studies, the Respondents and the EPA will decide on the type of treatability testing to use (e.g., bench versus pilot, etc.). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing shall be made as early in the process as possible to minimize potential delays of the Feasibility Study (Task 10). If the EPA determines that treatability studies are necessary, the Respondents shall submit a Draft Treatability Study Work Plan (TSWP), Sampling and Analysis Plan (SAP), and Health and Safety Plan within ninety (90) calendar days after the determination that treatability studies are necessary. Subject to the provisions in Section X of the AOC, the Respondents shall submit a Final TSWP, SAP, and HSP within sixty (60) days after completing discussion of the EPA's comments on the Draft TSWP (and in no event later than ninety (90) calendar days after receipt of the EPA's comments on the Draft TSWP. The EPA will not approve the TS HSP but may provide comments to the Respondents.

The Respondents shall submit a Draft Treatability Study (TS) Report to the EPA for review and approval according to the project schedule in the Final Treatability Study Work Plan. Subject to the provisions in Section X of the AOC, the Respondents shall submit a Final TS Report within sixty (60) calendar days after completing discussion of the EPA's comments on the Draft TS Report (and in no event later than ninety (90) calendar days after receipt of the EPA's comments of the Draft TS Report. This report shall evaluate the technology's effectiveness and implementability in relation to the Preliminary Remediation Goals established for the Site. Actual results must be compared with predicted results to justify effectiveness and implementability discussions.

Task 9: Remedial Investigation Report

37. The Respondents shall prepare and submit a Remedial Investigation (RI) Report. The Respondents shall refer to the EPA's guidance document entitled, "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA 1988b), including Table 3-13 (Suggested RI Report Format), for the RI Report format and the required content. The Respondents shall discuss the RI Report format and the required content with the EPA's Remedial Project Manager early in the RI/FS process. The information shall include a summary of the results of the field activities to characterize the Site, classification of ground water beneath the Site, nature and extent of contamination for all media, and appropriate site-specific discussions for fate and transport of contaminants. The Respondents shall incorporate the results of Task 7 (Risk Assessments) into the RI Report, as appropriate.

The Respondents shall submit a Draft RI Report to the EPA for review and approval according to the project schedule in the Final RI/FS Work Plan. Subject to the provisions in Section X of the AOC, the Respondents shall submit a final RI Report within sixty (60) calendar days after completing discussion of the EPA's comments on the Draft RI Report (and in no event later than ninety (90) calendar days after receipt of the EPA's comments on the Draft RI Report).

Task 10: Feasibility Study

38. The Respondents shall perform a Feasibility Study (FS) as specified in this SOW. The FS shall include, but not be limited to, the development and screening of alternatives for remedial action, a detailed analysis of alternatives for remedial action, and submittal of Draft and Final FS Reports as follows:

a) Development and Screening of Alternatives for Remedial Action - The Respondents shall develop an appropriate range of remedial alternatives that will be evaluated through development and screening.

b) Detailed Analyses of Alternatives for Remedial Action - The Respondents shall conduct a detailed analysis of remedial alternatives for the candidate remedies identified during the screening process described in this Task. This detailed analysis shall follow the EPA's guidance document entitled, "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA 1988b) and other appropriate guidance documents.

The major components of the Detailed Analysis of Alternatives for Remedial Action shall consist of an analysis of each option against a set of evaluation criteria and a separate discussion for the comparative analysis of all options with respect to each other in a manner consistent with the NCP. The Respondents shall not consider state and community acceptance during the Detailed Analysis of Alternatives. The EPA will perform the analysis of these two criteria. At the conclusion of the Detailed Analysis of Alternatives and within the time frame specified in the project schedule in the Final RI/FS WP, the Respondents shall provide the EPA with a Draft FS Report as outlined below.

Draft Feasibility Study Report - The Respondents shall submit to the EPA, for review and approval, a Draft FS Report which documents the activities conducted during the Development and Screening of Alternatives and the Detailed Analyses of Alternatives, as described above, according to the project schedule in the Final RI/FS WP. The Respondents shall refer to the EPA's guidance document entitled, "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA 1988b), specifically Table 6-5 (Suggested FS Report Format) for FS Report content and format.

c) Final Feasibility Study Report – The Draft FS Report shall provide the basis for the Proposed Plan developed by the EPA under CERCLA and shall document the development and analysis of remedial alternatives. The Draft FS Report may be subject to change following comments received during the public comment period on the EPA's Proposed Plan. The EPA will forward any comments pertinent to content of the Draft FS Report to the Respondents. Subject to the provisions in Section X of the AOC, the Respondents shall submit a Final FS Report within sixty (60) calendar days after completing discussion of the EPA's comments (and any public comments provided by EPA) on the Draft FS Report (and in no event later than ninety (90) calendar days after the receipt of comments from EPA on the Draft FS Report).

APPENDIX A
SCHEDULE OF DELIVERABLES/MEETINGS
STATEMENT OF WORK
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
SBA SHIPYARD SUPERFUND SITE

DELIVERABLE	DUE DATE (CALENDAR DAYS)
1. Scoping Phase Meeting	Meeting or conference call to be scheduled within thirty (30) days after the effective date of the AOC.
2. Draft and Final RI/FS Work Plan (WP)	Draft due within ninety (90) days after the Scoping Phase Meeting or conference call. Final due within thirty (30) days after completing discussion of the EPA's comments on the Draft RI/FS Work Plan (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft RI/FS Work Plan)
3. Draft and Final RI/FS Sampling and Analysis Plan (SAP)	Draft due within ninety (90) days after the Scoping Phase Meeting or conference call. Final due within thirty (30) days after completing discussion of the EPA's comments on the Draft RI/FS SAP (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft RI/FS Work SAP)
4. RI/FS Site Health and Safety Plan	Plan due within ninety (90) days after the Scoping Phase Meeting or conference call.
5. Draft and Final Technical Memorandum on Modeling of Site Characteristics	Draft due when Respondents propose that modeling is appropriate. Final due within sixty (60) days after completing discussion of the EPA's comments on the draft memorandum (and in no event later than ninety (90) days after receipt of the EPA's comments on the draft memorandum).
6. Draft and Final Baseline Human Health Risk Assessment (BHHRA)	Draft due as specified in the Final RI/FS WP. Final due within sixty (60) days after completing discussion of the EPA's comments on the Draft BHHRA (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft BHHRA).
7. Draft and Final Screening Level Ecological Risk Assessment (SLERA) Report	Draft due as specified in the Final RI/FS WP. Final due within sixty (60) days after completing discussion of the EPA's comments on the Draft SLERA Report (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft SLERA Report).
8. Draft and Final Baseline Ecological Risk Assessment (BERA) Problem Formulation (PF) Report	Draft due as specified in the Final RI/FS WP. Final due within sixty (60) days after completing discussion of the EPA's comments on the Draft BERA PF Report (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft BERA PF Report).

APPENDIX A (CONTD.)
SCHEDULE OF DELIVERABLES/MEETINGS
STATEMENT OF WORK
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
SBA SHIPYARD SUPERFUND SITE

DELIVERABLES/MEETINGS	DUE DATES (CALENDAR DAYS)
9. Draft and Final Baseline Ecological Risk Assessment (BERA) Work Plan (WP) and Sampling and Analysis Plan (SAP)	Draft due as specified in the Final RI/FS WP. Final due within sixty (60) days after completing discussion of the EPA's comments on the Draft BERA WP and SAP (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft BERA WP and SAP).
10. Draft and Final Baseline Ecological Risk Assessment (BERA) Report	Draft due as specified in the Final RI/FS WP. Final due within sixty (60) days after completing discussion of the EPA's comments on the Draft BERA Report (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft BERA Report).
11. Draft and Final Treatability Study (TS) Work Plan (WP), Sampling and Analysis Plan (SAP), and Health and Safety Plan	Draft due within ninety (90) calendar days after the determination that treatability studies are necessary. Final due within sixty (60) days after completing discussion of the EPA's comments on the Draft TSWP (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft TSWP).
12. Draft and Final Treatability Study (TS) Report	Draft due as specified in the Final RI/FS WP. Final due within sixty (60) days after completing discussion of the EPA's comments on the Draft TS Report (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft TS Report).
13. Draft and Final Remedial Investigation (RI) Report	Draft due as specified in the Final RI/FS WP. Final due within sixty (60) days after completing discussion of the EPA's comments on the Draft RI Report (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft RI Report).
14. Draft and Final Feasibility Study (FS) Report	Draft due as specified in the Final RI/FS WP. Final due within sixty (60) days after completing discussion of the EPA's comments on the Draft FS Report (and in no event later than ninety (90) days after receipt of the EPA's comments on the Draft FS Report).

APPENDIX B
GUIDANCE DOCUMENTS
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
SBA SHIPYARD PROPOSED SUPERFUND SITE

The following list comprises some of the guidance documents that are applicable to the Remedial Investigation and Feasibility Study process. The Respondents should consult with EPA's Remedial Project Manager for additional guidance and to ensure that the following guidance documents have not been superseded by more recent guidance:

U.S. Environmental Protection Agency (EPA) 1987a. "Data Quality Objectives for Remedial Response Activities." Office of Emergency and Remedial Response and Office of Waste Programs Enforcement. EPA/540/G-87/003. OSWER Directive No. 9335.0-7b. March 1987.

EPA 1987b. "Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements." Office of Emergency and Remedial Response. OSWER Directive No. 9234.0-05. July 9, 1987.

EPA 1988a. "CERCLA Compliance with Other Laws Manual." Office of Emergency and Remedial Response. OSWER Directive No. 9234.1-01. August 1988.

EPA 1988b. "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA." Office of Emergency and Remedial Response. EPA/540/G-89/004. OSWER Directive No. 9355.3-01. October 1988.

EPA 1989a. "CERCLA Compliance with Other Laws Manual: Part II. Clean Air Act and Other Environmental Statutes and State Requirements." Office of Emergency and Remedial Response. OSWER Directive No. 9234.1-02. August 1989.

EPA 1989b. "Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A)." Office of Emergency and Remedial Response. EPA/540/1-89/002. OSWER Directive No. 9285.7-01A. December 1989.

EPA 1991a. "Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors." Office of Emergency and Remedial Response. OSWER Directive No. 9235.6-03. March 1991.

EPA 1991b. "Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part B), Development of Risk-Based Preliminary Remediating Goals." Office of Emergency and Remedial Response. OSWER Directive No. 9285.7-01B. December 1991.

EPA 1991c. "Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part C), Risk Evaluation of Remedial Alternatives." Office of Emergency and Remedial Response. OSWER Directive No. 9285.7-01C. 1991.

EPA 1992a. "Guidance for Data Useability in Risk Assessment." Office of Emergency and Remedial

Response. OSWER Directive No. 9285.7-09A. April 1992 (and Memorandum from Henry L. Longest dated June 2, 1992).

EPA 1992b. "Supplemental Guidance to RAGS: Calculating the Concentration Term." Office of Emergency and Remedial Response. OSWER Directive No. 9285.7-081. May 1992.

EPA 1997. "Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments." Office of Emergency and Remedial Response. EPA/540-R-97-006. June 5, 1997.

EPA 2000. "Guidance for the Data Quality Objectives Process." EPA QA/G-4, EPA/600/R-96/055. August 2000.

EPA 2001a. "EPA Requirements for Quality Assurance Project Plans." Office of Environmental Information. EPA QA/R-5. EPA/240/B-01/003. March 2001.

EPA 2001b. "Risk Assessment Guidance for Superfund, Volume 1 - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments). Final. Publication 9285.7-47. December 2001.

EPA 2001c. "Reuse Assessments: A Tool to Implement The Superfund Land Use Directive." OSWER 9355.7-06P", June 2001 available at

EPA 2002. "EPA Guidance for Quality Assurance Project Plans." EPA QA/G-5. EPA/240/R-02/009. December 2002.

EPA 2009a. "U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response Principles for Greener Cleanups" August 2009 available at http://www.epa.gov/oswer/greenercleanups/pdfs/oswer_greencleanup_principles.pdf

EPA 2009b. "EPA Region 6 Clean and Green Policy" September 2009 available at http://www.cluin.org/greenremediation/docs/R6GRPolicy.pdf

APPENDIX C
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
SBA SHIPYARDS SUPERFUND SITE

A preliminary list of probable Applicable or Relevant and Appropriate Requirements (ARARs) will be generated by the Respondents during the Remedial Investigation and Feasibility Study process. This list will be compiled according to established EPA guidance, research of existing regulations, and collection of site-specific information and data. Three types of ARARs will be identified:

1) Chemical-Specific ARARs: These ARARs are usually health- or risk-based numerical values or methodologies used to determine acceptable concentrations of chemicals that may be found in or discharged to the environment (e.g., maximum contaminant levels that establish safe levels in drinking water).

2) Location-Specific ARARs: These ARARs restrict actions or contaminant concentrations in certain environmentally sensitive areas. Examples of areas regulated under various Federal laws include floodplains, wetlands, and locations where endangered species or historically significant cultural resources are present.

3) Action-Specific ARARs: These ARARs are usually technology- or activity-based requirements or limitations on actions or conditions involving specific substances.

Chemical- and location-specific ARARs are identified early in the process, generally during the site investigation, while action-specific ARARs are usually identified during the Feasibility Study in the detailed analysis of alternatives.

APPENDIX C: LIST OF RESPONDENTS
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
SBA SHIPYARD SUPERFUND SITE
JENNINGS, LOUISANA

RESPONDENTS OF SBA SHIPYARD SUPERFUND SITE

- ACBL Oldco, LLC, a Delaware limited liability company, as successor in interest to National Marine, Inc.
- American Commercial Barge Line LLC, a Delaware limited liability company
- Ashland LLC (f/k/a Ashland Inc., into which Ashland Oil, Inc. f/k/a Ashland Oil and Refining Company was merged), a Kentucky limited liability company, and on behalf of its former subsidiaries and divisions, including Ashland Petroleum Company and Ashland Oil Company
- Canal Barge Company, Inc., a Louisiana corporation
- Cenac Towing Co., LLC, a Louisiana limited liability company, as successor by merger with Cenac Towing Co., Inc.
- Hornbeck Offshore Transportation, LLC, a Delaware limited liability company, as successor in interest to LEEVAC Marine, Inc.
- Martin Energy Services LLC, an Alabama limited liability company, as successor-by-merger to L&L Oil and Gas Services, L.L.C.
- Martin Operating Partnership L.P., a Delaware limited partnership, as successor to Martin Gas Marine, Inc.
- Talen's Marine & Fuel, LLC, a Louisiana limited liability company, as successor-by-conversion to Talen's Marine & Fuel, Inc.
- Phillips 66 Company, a Delaware corporation, as successor in interest to certain liabilities of ConocoPhillips Company (as successor in interest to Conoco Inc. and Continental Oil Company)