UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

IN THE MATTER OF:
San Jacinto River Waste Pits Superfund Site
Pasadena, Harris County, Texas

International Paper Company, Inc.
&
McGinnes Industrial Maintenance Corporation

Respondents

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION

U.S. EPA Region 6
CERCLA Docket No.

Proceeding Under Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622

9298190

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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 International Paper Company and McGinnes Industrial Maintenance Corporation ("Respondents"). This Settlement Agreement provides for the performance of a removal action by Respondents and the reimbursement of certain response costs incurred by the United States at or in connection with the "San Jacinto River Waste Pits Superfund Site" (the "Site") generally located approximately three miles northeast of Freeport, Brazoria County, Texas, at 906 Marlin Avenue.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622, as amended ("CERCLA").

3. EPA has notified the State of Texas (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

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 facts, conclusions of law, and determinations in Sections IV and V of this Settlement Agreement. 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.

III. DEFINITIONS

8. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement which 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 in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "Action Memorandum" shall mean the EPA Action Memorandum relating to the Site signed on _____, by the Regional Administrator, EPA Region 6, or his/her delegate, and all attachments thereto. The "Action Memorandum" is attached as Appendix A.

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq*.

c. "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 holiday, the period shall run until the close of business of the next working day.

d. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXXII.

e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

f. "TCEQ" shall mean the Texas Commission on Environmental Quality and any successor departments or agencies of the State.

g. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying 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 Paragraph 53 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), and Paragraph 90 (work takeover). Future Response Costs shall also include all Interim Response Costs and all Interest on those Past Response Costs Respondents have agreed to reimburse under this Settlement Agreement

that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from May 31, 2007 to the Effective Date.

h. "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.

i. "Interim Response Costs" shall mean all costs, including direct and indirect costs, a) paid by the United States in connection with the Site between May 31, 2007 and the Effective Date, or b) incurred prior to the Effective Date, but paid after that date.

j. "National Contingency Plan" or "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.

k. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXXI). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

l. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

m. "Parties" shall mean EPA and Respondents.

n. "Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through May 31, 2007, plus Interest on all such costs through such date.

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

p. "Respondents" shall mean the International Paper Company and McGinnes Industrial Maintenance Corporation and identified in Appendix B.

q. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

r. "Site" shall mean the San Jacinto River Waste Pits Superfund Site located in Pasadena, Harris County, Texas, encompassing approximately 20.6 acre tract of land bounded on the south by Interstate Highway 10, on the east by the San

Jacinto River main channel, and on the north and west by shallow water off the River's main channel and depicted generally on the map attached as Appendix C.

s. "State" shall mean the State of Texas.

t. "Statement of Work" or "SOW" shall mean the statement of work for implementation of the removal action, as set forth in Appendix D to this Settlement Agreement, and any modifications made thereto in accordance with this Settlement Agreement.

u. "Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

v. "Work" shall mean all activities Respondents are required to perform under this Settlement Agreement.

IV. FINDINGS OF FACT

9. The Site, as indicated in Attachment A, is in Harris County in the State of Texas. The Site itself has no specific street address. The Site is comprised of an area of land and an area of the San Jacinto River bottom, i.e., river sediment that is contaminated with certain hazardous materials from released waste paper mill sludge. The Site is located in an area where the Interstate Highway 10 Bridge crosses over the San Jacinto River, east of the City of Houston between two unincorporated areas known as Channelview and Highlands.

10. The Site includes an abandoned 20-acre tract of land ("Tract") consisting of three waste ponds containing hazardous substances partially submerged in the San Jacinto River as well as wherever those hazardous substances have been deposited, placed, or otherwise come to be located. Aerial photographs as early as the 1970s indicate the Tract inundated by the San Jacinto River.

11. Currently, the Tract is owned by Virgil C. McGinnes Trustee and is bounded on the south by Interstate Highway 10, on the east by the San Jacinto River main channel, and on the north and west by shallow water off the River's main channel. Virgil McGinnes is deceased, but was the officer, director, and major shareholder of McGinnes Industrial Maintenance Corporation ("MIMC") during the time hazardous substances were disposed at the Site.

12. MIMC was formed on September 3, 1965. Ten days later, MIMC acquired the assignment of an exclusive waste disposal contract to dispose of waste from the Champion Papers, Inc ("Champion") paper mill in Pasadena, Texas. MIMC removed waste materials from the Champion plant, transported the paper waste materials by MIMC barges, and unloaded the waste into ponds surrounded by levees at the Tract from

September 13, 1965 through May 6, 1966.

13. According to Champion's business records, Champion's Pasadena paper mill produced pulp and paper using chlorine as a bleaching agent. These processes used various forms of chlorine, including liquid chloride, aluminum chloride, and sodium chlorate. The pulp bleaching process forms polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans as a by-product and those by-products are found in the paper mill sludge generated from this process.

14. The waste paper sludge was placed in three ponds on the Tract. Waste pond 1 is located on the western portion of the Tract totaling 132,386 square feet. Waste pond 2 and waste pond 3 are on the eastern portion of the Tract totaling 46,182 square feet and 188,641 square feet respectively.

15. On December 27, 1965, the Harris County Health Department ("HCHD") observed liquid waste being pumped out of one of the ponds at the Tract directly into the San Jacinto River. On December 28, 1965, the HCHD sent a letter to MIMC and Champion ordering them to stop discharging "black liquor" from the waste ponds into the San Jacinto River. In addition, the HCHD demanded that the levees surrounding the wastes ponds be repaired.

16. A December 30, 1965 internal Champion memo confirmed that water seepage was occurring along the waste ponds' levees and that two sections of the levee around the western waste pond as well as the levees along the east side of the eastern waste ponds needed reinforcement.

17. In May 1966, the Texas Department of Health ("TDH") investigated Champion Paper's waste disposal practices. The TDH noted seepage on the western waste pond and deteriorating levees on the eastern waste ponds. In addition, the TDH noted that storm events had the potential to cover the disposal area with water and wash out the levees.

18. On July 29, 1966, the Texas Water Pollution Control Board ("TWPCB") granted MIMC permission to release a combination of stabilized waste water and rain water from the waste ponds into the San Jacinto River. The TWPCB noted that the waste ponds would no longer be used for the storage of waste material.

19. Currently, the Tract is inactive and approximately half of the Tract's surface area, including the abandoned waste disposal ponds, is now submerged below the adjacent San Jacinto River's water surface.

20. The primary hazardous substances documented at the Site are polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans. Dioxin concentrations as high as 41,300 parts per trillion have been found in soil and sediment samples collected from the Tract's disposal pond areas and from river sediments near the Tract. Sediments contaminated with high levels of dioxin have been found in the San Jacinto River both upstream and downstream from the Tract due to tidal influences.

21. The City of Houston conducted a toxicity study of the Houston Ship Channel including the San Jacinto River published in July 1995. Samples of sediment and fish and crab samples were collected in August 1993 and May 1994 for the study. Sediment samples collected northeast of the Tract indicated extremely high dioxin and furan levels. These dioxin and dibenzofuran levels were the highest values recorded in the entire Houston Ship Channel. In addition, fish and crab samples collected northeast of the Tract and 1 mile downstream from the Tract also indicated extremely high levels of dioxin and dibenzofuran.

22. In January 2004, The Texas Commission on Environmental Quality ("TCEQ") published a study of the Total Maximum Daily Loads ("TMDLs") for Dioxins in the Houston Ship Channel. Samples of sediment and fish tissue were collected in the summer of 2002, fall 2002, and spring 2003. The data collected indicated the continued presence of dioxin contamination in the San Jacinto River surrounding the Tract. In addition, the fish and shellfish tissue samples collected indicated that the health-based standard was exceeded in 97% of fish samples and in 95% of the crab samples. Additional samples in the San Jacinto River surrounding the Tract were collected in the spring of 2004 and confirmed the high dioxin concentrations.

23. On April 14, 2005, the Texas Parks & Wildlife Department ("TPWD") referred the area consisting of the Tract to the U.S. EPA for evaluation under the Hazardous Ranking System as a potential Superfund site. The TPWD submitted a 1982 topographic map and aerial photographs of the Tract indicating much of the land area has been submerged due to subsidence. In addition, the TPWD cited the Houston Ship Channel Toxicity Study and the TMDLs for Dioxins in the San Jacinto River as indication that there was a risk that needed to be addressed at the Tract due to the unusually high dioxin readings collected northeast of the Tract as well as downstream from the Tract.

24. In July 2005, seven samples were collected from the Tract for the Hazard Ranking System Documentation Record (HRS Report). Each sample was found to contain a combination of the following chemicals, also known as, dioxin congeners:

- 2,3,7,8-Tetrachlorodibenzo-p-dioxin
- 1,2,3,7,8-Pentachlorodibenzodioxin
- 1,2,3,4,7,8-Hexachlorodibenzodioxin
- 1,2,3,6,7,8-Hexachlorodibenzodioxin
- 1,2,3,7,8,9-Hexachlorodibenzodioxin
- 1,2,3,4,6,7,8-Heptachlorodibenzodioxin
- 2,3,7,8-Tetrachlorodibenzofuran
- 1,2,3,7,8-Pentachlorodibenzofuran
- 2,3,4,7,8-Pentachlorodibenzofuran
- 1,2,3,4,7,8-Hexachlorodibenzofuran
- 1,2,3,6,7,8-Hexachlorodibenzofuran
- 2,3,4,6,7,8-Hexachlorodibenzofuran
- 1,2,3,7,8,9-Hexachlorodibenzofuran
- 1,2,3,4,6,7,8-Heptachlorodibenzofuran

- 1,2,3,4,7,8,9-Heptachlorodibenzofuran

From these seven samples, the highest concentration of each dioxin congener (from any of samples) is listed below:

- 2,3,7,8-Tetrachlorodibenzo-p-dioxin = 18,500 parts per trillion (SE-08)
- 1,2,3,7,8-Pentachlorodibenzodioxin = 363 parts per trillion (SE-09)
- 1,2,3,4,7,8-Hexachlorodibenzodioxin = 4.83 parts per trillion (SE-09)
- 1,2,3,6,7,8-Hexachlorodibenzodioxin = 27.9 parts per trillion (SE-09)
- 1,2,3,7,8,9-Hexachlorodibenzodioxin = 10.2 parts per trillion (SE-09)
- 1,2,3,4,6,7,8-Heptachlorodibenzodioxin = 658 parts per trillion (SE-09)
- 2,3,7,8-Tetrachlorodibenzofuran = 41,300 parts per trillion (SE-08)
- 1,2,3,7,8-Pentachlorodibenzofuran = 3,770 parts per trillion (SE-10)
- 2,3,4,7,8-Pentachlorodibenzofuran = 2,330 parts per trillion (SE-10)
- 1,2,3,4,7,8-Hexachlorodibenzofuran = 8,660 parts per trillion (SE-10)
- 1,2,3,6,7,8-Hexachlorodibenzofuran = 2,290 parts per trillion (SE-10)
- 2,3,4,6,7,8-Hexachlorodibenzofuran = 349 parts per trillion (SE-10)
- 1,2,3,7,8,9-Hexachlorodibenzofuran = 656 parts per trillion (SE-10)
- 1,2,3,4,6,7,8-Heptachlorodibenzofuran = 2,360 parts per trillion (SE-10)
- 1,2,3,4,7,8,9-Heptachlorodibenzofuran = 878 parts per trillion (SE-10)

25. Contaminants can be documented entering the San Jacinto River by direct observation. A large portion of the ponds are continually inundated by the San Jacinto River and contaminated sediment within the source area are in direct contact with the river water as documented in the December 1987, December 1989, February 1992, April 1998, June 1999, May 2002, February 2003, and April 2005 aerial photographs of the Tract. There is no containment to prevent the migration of hazardous substances from the waste ponds.

26. Chemical analysis confirms that dioxin and dibenzofuran contaminants are entering the San Jacinto River. Chemical analysis documented the presence of numerous dioxin congeners in the source sediments. In addition, sediment samples collected within the surface waste ponds indicate that concentrations of hazardous substances are present at levels significantly greater than upstream and downstream background levels and in concentrations greater than the corresponding by Contract-Required Quantitation Levels.

27. Routes of exposure include, but are not limited to: Human direct dermal contact with contaminated sediment or water; human ingestion of contaminated sediment or water; human inhalation of contaminated sediment or water; human direct dermal contact with contaminated ecological receptors; human ingestion of contaminated ecological receptors; and ecological bioaccumulation of contaminants at every trophic level of the food web.

28. Both human and ecological health is threatened by releases of hazardous substances from the Tract. Humans trespass on and around the site to capture ecological receptors for sport and subsistence. Ecological receptors include, but are not limited to: Fish, birds, mammals, amphibians, reptiles, macro-invertebrates, micro-invertebrates, and plants.

Ecological health is also threatened by bioaccumulation of hazardous substances released from the north tract/source area at every trophic level of the food chain.

29. Dioxins from natural and anthropogenic (man-made) sources have been widely distributed throughout the environment. Almost every living creature has been exposed to dioxins. Studies have shown that exposure to dioxins at high enough doses may cause a number of adverse health effects.

30. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) is considered the most toxic of the dioxins and dibenzofurans. Non-2,3,7,8-TCDD dioxins and dibenzofurans are usually expressed as a fraction of the toxicity attributed to 2,3,7,8-TCDD. In addition, chlorinated dibenzo-p-dioxins (CDDs) are generally found together with other structurally related chlorinated chemicals, such as chlorinated dibenzofurans and polychlorinated biphenyls.

31. The most common health effect in people exposed to large amounts of dioxins, in particular 2,3,7,8-TCDD, is chloracne. Chloracne cases have typically been the result of accidents or significant contamination events. Chloracne is a severe skin disease with acne-like lesions that occur mainly on the face and upper body. Other skin effects noted in people exposed to high doses of 2,3,7,8-TCDD include skin rashes, discoloration, and excessive body hair. Changes in blood and urine that may indicate liver damage also are seen in people. Exposure to high concentrations of CDDs may induce long-term alterations in glucose metabolism and subtle changes in hormone levels.

32. In certain animal species, 2,3,7,8-TCDD is especially harmful and can cause death after a single exposure. Exposure to lower levels can cause a variety of effects in animals, such as weight loss, liver damage, and disruption of the endocrine system. In many species of animals, 2,3,7,8-TCDD weakens the immune system and causes a decrease in the system's ability to fight bacteria and viruses. In other animal studies, exposure to 2,3,7,8-TCDD has caused reproductive damage and birth defects. Some animal species exposed to CDDs during pregnancy had miscarriages and the offspring of animals exposed to 2,3,7,8-TCDD during pregnancy often had severe birth defects including skeletal deformities, kidney defects, and weakened immune responses.

33. Several studies suggest that exposure to 2,3,7,8-TCDD increases the risk of several types of cancer in people. Animal studies have also shown an increased risk of cancer from exposure to 2,3,7,8-TCDD.

34. The U.S. Department of Health and Human Services has determined that 2,3,7,8-TCDD may reasonably be anticipated to cause cancer and the World Health Organization has determined that 2,3,7,8-TCDD is a human carcinogen.

35. The Site was proposed for listing on the National Priorities List ("NPL") on September 19, 2007 (72 FR 53509), and was placed on the NPL effective March 19, 2008 (73 FR 14719).

36. The EPA has incurred response costs at or in connection with the Site. As of

May 31, 2009, EPA had incurred and paid past response costs at this Site of $378,863.61.

37. Respondent International Paper Company, Inc. is a corporation incorporated in the state of New York. International Paper Company is the successor to Champion Papers, Inc. who arranged for disposal or treatment of hazardous substances, which were owned or possessed by said company, at the Site.

38. Respondent McGinnes Industrial Maintenance Corporation is a corporation incorporated in the state of Texas. McGinnes Industrial Maintenance Corporation operated the waste disposal facility at the Site. In addition, McGinnes Industrial Maintenance Corporation accepted hazardous substances for transport and selected the Site.

39. On July 17, 2009, EPA sent a Special Notice Letter to the Respondents offering them an opportunity to negotiate and enter into an Administrative Order on Consent ("AOC") covering the performance of an RI/FS of the Site. However, EPA never received a Good Faith Offer in which to begin negotiations of an RI/FS for the Site.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

40. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

    a. The San Jacinto River Waste Pits Superfund Site constitutes a "facility" within the meaning of Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

    b. The contamination found at the Site, as identified in the Findings of Fact above, includes [a] "hazardous substance(s)" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

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

    d. 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. Each of the Respondents is a "person" within the meaning of Section 101(21) of CERCLA, 42 U.S.C. § 9601(21). Respondent International Paper Company is the successor to Champion Papers, Inc., who arranged for disposal or treatment of materials containing hazardous substances, which were owned or possessed by said company, which came to be disposed at the Site and is thus a responsible party within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3). Respondent McGinnes Industrial Maintenance Corporation operated the waste disposal facility at the time of disposal of hazardous substances at which such hazardous substances were disposed of at the Site, and is accordingly a responsible party within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2). Respondent McGinnes Industrial Maintenance Corporation accepted hazardous substances for transport to the facility selected by

Respondents, within the meaning of Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4).

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

f. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

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

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

41. Respondents shall retain one or more contractors to perform the Work and shall notify EPA of the name(s) and qualifications of such contractor(s) within 30 days of the Effective Date. Respondents shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 30 days prior to commencement of such Work. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondents. If EPA disapproves of a selected contractor, Respondents shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within 5 days of EPA's disapproval. The proposed contractor must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), 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/B0-1/002), or equivalent documentation as required by EPA. Any decision not to require submission of the contractor's QMP should be documented in a memorandum from the OSC and Regional QA personnel to the Site file.

42. Within 21 days after the Effective Date, Respondents shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondents required by this Settlement Agreement and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. 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 5 days following EPA's disapproval. Receipt by Respondents' Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by all Respondents.

43. EPA has designated _____ of the Emergency and Enforcement Response Branch, Region 6, as its On-Scene Coordinator ("OSC"). Except as otherwise provided in this Settlement Agreement, Respondents shall direct all submissions required by this Settlement Agreement to the OSC at 1445 Ross Avenue, Dallas, Texas 75202.

44. EPA and Respondents shall have the right, subject to Paragraph 42, to change their respective designated OSC or Project Coordinator. Respondents shall notify EPA 5 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

45. Respondents shall perform, at a minimum, all actions necessary to implement the Action Memorandum. The actions to be implemented generally include, but are not limited to, the following:

Stabilize the Site so that the potential for ongoing release of dioxin-contaminated material from the Site's three waste ponds are addressed immediately. This potential release of dioxins and dibenzo furans requires site stabilization action to prevent further potential impacts to areas outside of the former waste pond boundaries. The potential for ongoing release of dioxin and dibenzo furan contaminated material from the three Site waste ponds will be addressed by construction of a confined disposal facility to contain all three Site waste ponds.

46. Work Plan and Implementation.

a. Within 14 days after the Effective Date, Respondents shall submit to EPA for approval a draft Work Plan for performing the removal action generally described in Paragraph 45 above. The draft Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement Agreement. EPA shall require preparation of a Quality Assurance Project Plan ("QAPP") as part of the Work Plan. The QAPP should be prepared in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001), and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998).

b. EPA may approve, disapprove, require revisions to, or modify the draft Work Plan in whole or in part. If EPA requires revisions, Respondents shall submit a revised draft Work Plan within 14 days of receipt of EPA's notification of the required revisions. Respondents shall implement the Work Plan as approved in

writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.

c. Respondents shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondents shall not commence implementation of the Work Plan developed hereunder until receiving written EPA approval pursuant to Paragraph 46(b).

47. Health and Safety Plan. Within 14 days after the Effective Date, Respondents shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-Site work under this Settlement Agreement. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. Respondents shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the removal action.

48. Quality Assurance and Sampling.

a. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondents shall follow, as appropriate, "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC and sampling. Respondents shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001)," or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the Quality System requirements.

b. Upon request by EPA, Respondents shall have such a laboratory analyze samples submitted by EPA for QA monitoring. Respondents shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

c. Upon request by EPA, Respondents shall allow EPA or its authorized representatives to take split and/or duplicate samples. Respondents shall notify EPA not less than 14 days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Respondents to take split or duplicate samples of any samples it takes as part of its oversight of Respondents' implementation of the Work.

49. Post-Removal Site Control. In accordance with the Work Plan schedule, or as otherwise directed by EPA, Respondents shall submit a proposal for post-removal site control consistent with Section 300.415(*l*) of the NCP and OSWER Directive No. 9360.2-02. Upon EPA approval, Respondents shall implement such controls and shall provide EPA with documentation of all post-removal site control arrangements.

50. Reporting.

a. Respondents shall submit a written progress report to EPA concerning actions undertaken pursuant to this Settlement Agreement every 14th day after the date of receipt of EPA's approval of the Work Plan until termination of this Settlement Agreement, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. Respondents shall submit 5 copies of all plans, reports or other submissions required by this Settlement Agreement, the Statement of Work, or any approved work plan. Upon request by EPA, Respondents shall submit such documents in electronic form.

c. Respondents who own or control property at the Site shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice to the transferee that the property is subject to this Settlement Agreement and written notice to EPA and the State of the proposed conveyance, including the name and address of the transferee. Respondents who own or control property at the Site also agree to require that their successors comply with the immediately proceeding sentence and Sections IX (Site Access) and X (Access to Information).

51. Final Report. Within 14 days after completion of all Work required by this Settlement Agreement, Respondents shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports" and the "Superfund Removal Procedures: Removal Response Reporting – POLREPS and OSC Reports" (OSWER Directive No. 9360.3-03, June 1, 1994). The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement, a listing

of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (*e.g.*, manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

52. Off-Site Shipments.

a. Respondents shall, prior to any off-Site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the On-Scene Coordinator. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

i. Respondents shall include in the written notification the following information: 1) the name and location of the facility to which the Waste Material is to be shipped; 2) the type and quantity of the Waste Material to be shipped; 3) the expected schedule for the shipment of the Waste Material; and 4) the method of transportation. Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

ii. The identity of the receiving facility and state will be determined by Respondents following the award of the contract for the removal action. Respondents shall provide the information required by Paragraph 46(a) and 46(b) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondents shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

IX. SITE ACCESS

53. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by any of the Respondents, such Respondents shall, commencing on the Effective Date, provide EPA, and its 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.

54. 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 14 days after the Effective Date, or as otherwise specified in writing by the OSC. 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" includes the payment of reasonable sums of money in consideration of access. Respondents shall describe in writing their efforts to obtain access. EPA may then 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. 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 XV (Payment of Response Costs).

55. Notwithstanding any provision of this Settlement Agreement, EPA and the State retains 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.

X. ACCESS TO INFORMATION

56. Respondents shall provide to EPA and the State, upon request, copies of all documents and information 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.

57. Respondents may assert business confidentiality claims covering part or all of the documents or information 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). Documents or information 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 documents or information when they are submitted to EPA and the State, or if EPA has notified Respondents that the documents or information 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 documents or information without further notice to Respondents.

58. Respondents may assert that certain documents, records and other information 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 documents, they shall provide EPA and the State with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondents. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

59. 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 documents or information evidencing conditions at or around the Site.

XI. RECORD RETENTION

60. Until 10 years after Respondents' receipt of EPA's notification pursuant to Section XXIX (Notice of Completion of Work), each Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which 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 Respondents' receipt of EPA's notification pursuant to Section XXIX (Notice of Completion of Work), Respondents shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

61. At the conclusion of this document retention period, Respondents shall notify EPA and the State at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA or the State, Respondents shall deliver any such records or documents to EPA or the State. Respondents may assert that certain documents, records and other information 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 or the State with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted by Respondents. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

62. 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, documents or other information (other than identical copies)

relating to its potential liability regarding the Site since notification of potential liability by EPA or the State or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information 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.

XII. COMPLIANCE WITH OTHER LAWS

63. Respondents shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable state and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-Site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondents shall identify ARARs in the Work Plan subject to EPA approval.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

64. In the event of any action or occurrence during performance of the Work which 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 OSC or, in the event of his/her unavailability, the Regional Duty Officer, Emergency Planning and Response Branch, EPA Region 6, 214-665-3166, and the EPA Regional Emergency 24-hour telephone number, 1-866-372-7745, 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 XV (Payment of Response Costs).

65. In addition, in the event of any release of a hazardous substance from the Site, Respondents shall immediately notify the OSC at 1-866-372-7745 and the National Response Center at (800) 424-8802. Respondents shall submit a written report to EPA within 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.*

XIV. AUTHORITY OF ON-SCENE COORDINATOR

66. The OSC shall be responsible for overseeing Respondents' implementation of this Settlement Agreement. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

XV. PAYMENT OF RESPONSE COSTS

67. Payment for Past Response Costs.

a. Within 30 days after the Effective Date, Respondents shall pay to EPA $378,863.61 for Past Response Costs. Payment shall be made to EPA by Electronic Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondents by EPA Region 6, and shall be accompanied by a statement identifying the name and address of the parties making payment, the Site name, the EPA Region and Site/Spill ID Number 06ZQ, and the EPA docket number for this action.

b. At the time of payment, Respondents shall send notice that such payment has been made by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

c. The total amount to be paid by Respondents pursuant to Paragraph 67(a) shall be deposited by EPA in the San Jacinto River Waste Pits Superfund Special Account within the EPA Hazardous Substance Superfund 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.

68. Payments for Future Response Costs.

a. Respondents shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondents a bill requiring payment that includes a SCORPIUS report, which includes direct and indirect costs incurred by EPA and its contractors. Also. Respondents shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 70 of this Settlement Agreement.

b. Respondents shall make all payments required by this Paragraph by Electronic Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondents by EPA Region 6, and shall be accompanied by a statement identifying the name and address of the party(ies) making payment, the Site name,

the EPA Region and Site/Spill ID Number 06ZQ, and the EPA docket number for this action.

c. At the time of payment, Respondents shall send notice that payment has been made to by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

d. The total amount to be paid by Respondents pursuant to Paragraph 67(a) shall be deposited by EPA in the San Jacinto River Waste Pits Superfund Site Special Account within the EPA Hazardous Substance Superfund 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.

69. In the event that the payment for Past Response Costs is not made within 30 days of the Effective Date, or the payments for Future Response Costs are not made within 30 days of Respondents' receipt of a bill, Respondents shall pay Interest on the unpaid balance. The Interest on Past Response Costs shall begin to accrue on the Effective Date and shall continue to accrue until the date of payment. The Interest on Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. 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, payment of stipulated penalties pursuant to Section XVIII.

70. Respondents may contest payment of any Future Response Costs billed under Paragraph 68 if they determine that EPA has made a mathematical error, or if they believe 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 30 days of receipt of the bill and must be sent to the OSC. 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 30-day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 68. Simultaneously, Respondents shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Texas and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to the EPA OSC 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 XVI (Dispute Resolution). If EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondents shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 68. 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 EPA in the manner described in Paragraph 68. 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 XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse EPA for its Future Response Costs.

XVI. DISPUTE RESOLUTION

71. 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.

72. 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 14 days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondents shall have 14 days from EPA's receipt of Respondents' written objection(s) to resolve the dispute through formal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA.

73. Any agreement reached by the parties pursuant to this Section shall be in writing and shall, upon signature by both 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 on the dispute to Respondents. 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. 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.

XVII. FORCE MAJEURE

74. 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, a *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, increased cost of performance, or a failure to attain performance standards/action levels set forth in the Action Memorandum.

75. 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 5 days of when Respondents first knew that the event might cause a delay. Within 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.

76. 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. STIPULATED PENALTIES

77. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 78 and 79 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (*Force Majeure*). "Compliance" by Respondents shall include completion of the activities under this Settlement Agreement or any 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.

78. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 78(b):

Penalty Per Violation Per Day	Period of Noncompliance
$1,000	1st through 14th day
$5,000	15th through 30th day
$10,000	31st day and beyond

b. Compliance Milestones

[List of violations or compliance milestones, including due dates for payments]

79. Stipulated Penalty Amounts - Reports. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports or other written documents:

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$1,000	15th through 30th day
$2,000	31st day and beyond

80. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 90 of Section XX, Respondents shall be liable for a stipulated penalty in the amount of $50,000.

81. 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: 1) with respect to a deficient submission under Section VIII (Work to be Performed), 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 2) with respect to a decision by the EPA Management Official at the branch chief level or higher, under Paragraph 73 of Section XVI (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.

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

83. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the dispute resolution procedures under Section XVI (Dispute Resolution). All payments to EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to EPA Cincinnati Finance Office, 26 Martin Luther King Drive, Cincinnati, OH 45268, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number 06WQ, the EPA Docket Number, and the name and address of the parties making payment. Copies of check(s) paid pursuant to this

Section, and any accompanying transmittal letter(s), shall be sent to EPA as provided in Paragraph 43.

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

85. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision.

86. 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 69. 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 Sections 106(b) and 122(*l*) of CERCLA, 42 U.S.C. §§ 9606(b) and 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 106(b) or 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 Section, except in the case of a willful violation of this Settlement Agreement in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX, Paragraph 90. 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.

XIX. COVENANT NOT TO SUE BY EPA

87. 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, Past Response Costs, and Future Response Costs. This covenant not to sue shall take effect upon receipt by EPA of the Past Response Costs due under Section XV of this Settlement Agreement and any Interest or Stipulated Penalties due for failure to pay Past Response Costs as required by Sections XV and XVIII of this Settlement Agreement. This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV. This covenant not to sue extends only to Respondents and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY EPA

88. 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.

89. 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. claims based on a failure by Respondents to meet a requirement of this Settlement Agreement;

b. liability for costs not included within the definitions of Past Response Costs or 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.

90. Work Takeover. 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 which 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 XVI (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondents shall pay pursuant to Section XV (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.

XXI. COVENANT NOT TO SUE BY RESPONDENTS

91. 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, Past Response Costs, Future Response Costs, or this Settlement Agreement, including, but not limited to:

    a. any direct or indirect claim for reimbursement from the 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 response actions at or in connection with the Site, 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, as amended, or at common law; or

    c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work, Past Response Costs, or Future Response Costs.

92. 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).

93. 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 in any way affected the basis for listing the Site.

XXII. OTHER CLAIMS

94. 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. The United States or EPA shall not be deemed a party to any contract entered into by Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

95. Except as expressly provided in 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.

96. 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. CONTRIBUTION

97. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), 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), for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work, Past Response Costs, and Future Response Costs.

b. The Parties 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, Past Response Costs, and Future Response Costs.

c. Nothing in this Settlement Agreement precludes the United States or Respondents from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. 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).

XXIV. INDEMNIFICATION

98. 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, or subcontractors, 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.

99. 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.

100. 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, including, but not limited to, claims on account of construction delays. 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, including, but not limited to, claims on account of construction delays.

XXV. INSURANCE

101. At least 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, comprehensive general liability insurance and automobile insurance with limits of $2 million dollars, combined single limit, naming EPA as an additional insured. Within the same time 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

102. Within 30 days of the Effective Date, Respondents shall establish and maintain financial security for the benefit of EPA in the amount of $2 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;

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).

103. 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 30 days of 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 96, above. In addition, if at any time EPA notifies Respondents that the anticipated cost of completing the Work has increased, then, within 30 days of 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.

104. If Respondents seek to ensure completion of the Work through a guarantee pursuant to Subparagraph 102(e) or 102(f) of this Settlement Agreement, Respondents shall (i) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (ii) 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 $2 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.

105. 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 102 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.

106. 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.

XXVII. MODIFICATIONS

107. The OSC may make modifications to any plan or schedule or Statement of Work in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the parties.

108. If Respondents seek permission to deviate from any approved work plan or schedule or Statement of Work, Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondents may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 46.

109. No informal advice, guidance, suggestion, or comment by the OSC 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.

XXVIII. ADDITIONAL REMOVAL ACTION

110. If EPA determines that additional removal actions not included in an approved plan are necessary to protect public health, welfare, or the environment, EPA will notify Respondents of that determination. Unless otherwise stated by EPA, within 30 days of receipt of notice from EPA that additional removal actions are necessary to protect public health, welfare, or the environment, Respondents shall submit for approval by EPA a Work Plan for the additional removal actions. The plan shall conform to the applicable requirements of Section VIII (Work to Be Performed) of this Settlement Agreement. Upon EPA's approval of the plan pursuant to Section VIII, Respondents shall implement the plan for additional removal actions in accordance with the provisions and schedule contained therein. This Section does not alter or diminish the OSC's authority to make oral modifications to any plan or schedule pursuant to Section XXVII (Modifications).

XXIX. NOTICE OF COMPLETION OF WORK

111. When EPA determines, after EPA's review of the Final Report, 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 post-removal site controls, payment of Future Response Costs, or record retention, EPA will provide written notice to Respondents. If EPA determines that any such 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 Work Plan if appropriate in order to correct such deficiencies. Respondents shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXX. INTEGRATION/APPENDICES

112. This Settlement Agreement and its appendices 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:

a. Appendix A is the Action Memorandum;

b. Appendix B is the List of Respondents;

c. Appendix C is the Site Map;

d. Appendix D is the Statement of Work.

XXXI. EFFECTIVE DATE

113. This Settlement Agreement shall be effective 7 days after the Settlement Agreement is signed by the Regional Administrator or his/her delegatee.

The undersigned representatives of Respondents certifyies that they are fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the parties they represents to this document.

Agreed this ___ day of _____, 2009.

For Respondent _____

By

Title _____

For Respondent _____

By

Title _____

It is so ORDERED and Agreed this _____ day of _____, 2009.

BY: _____ DATE:_____
Dr. Alfredo Armendariz
Regional Administrator (or designee)
Region 6
U.S. Environmental Protection Agency

EFFECTIVE DATE: _____