UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4

IN THE MATTER OF: Carolawn Superfund Site Fort Lawn, Chester County, South Carolina

Respondents (Listed in Appendix A)

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR PAYMENT OF COSTS

U.S. EPA Region 4
CERCLA Docket No.: <u>CERCLA-04-2010-3753</u>

Proceeding under Sections 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9607 and 9622.

I. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent (hereinafter "Settlement Agreement" or "Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the parties listed in Appendix A ("Respondents"). The Settlement Agreement concerns the reimbursement of Past Response Costs and the payment of Future Response Costs incurred by the government with respect to the Carolawn Superfund Site, located at or near 5093 Morrison Road, Fort Lawn, Chester County, South Carolina ("Site"). Such costs have been, or will be, incurred in connection with Respondents' performance of a Focused Feasibility Study ("FFS") undertaken by them pursuant to EPA's March 10, 2009, modifications of its July 28, 1997, "Unilateral Administrative Order for Operation And Maintenance And Performance Standards Monitoring," U.S. EPA Docket No. 97-19-C (hereinafter collectively "Modified UAO") issued to Respondents for implementation of the September 27, 1989, Record of Decision for Operable Unit 1 ("OU1 ROD") at the Site and prospective revisions of the OU1 ROD by EPA ("OU1 ROD Revision") following Respondents' completion of the FFS.
- 2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 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 Nos. 14-14-C and 14-14-D, and further redelegated by



Regional Delegation, through the Director, Superfund Division to the Chiefs of the Superfund Remedial and Site Evaluation and Superfund Remedial and Technical Services and the Superfund Enforcement and Information Management Branch.

3. EPA and Respondents recognize that this Settlement Agreement has been negotiated in good faith, that it has been entered-into without the admission or adjudication of any issue of law or facts, and that performance by Respondents under this Settlement Agreement does 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 any determinations, factual findings, or conclusions of law reflected in the 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 either the basis or validity of the Settlement Agreement or its terms.

II. PARTIES BOUND

- 4. This Settlement Agreement applies to and is binding upon EPA and upon each of the Respondents and their estates, heirs, successors and assigns. Any change in ownership or corporate or other 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.
- 5. Respondents' obligations under this Settlement Agreement are joint and several. In the event of insolvency or failure of any one or more Respondents to make the payments required under this Settlement Agreement, the remaining Respondents shall be responsible for such payments.
- 6. Each signatory to this Settlement Agreement certifies that he or she is authorized to enter into the terms and conditions of this Settlement Agreement and to bind legally the party represented by him or her.

III. STATEMENT OF PURPOSE

7. With the Respondents' performance of the Focused Feasibility Study established under authority of EPA's Modified UAO, and in order to avoid the prospect of burdensome litigation and ultimately to achieve meaningful compromise and overall settlement, the purpose of this Settlement Agreement is to provide for EPA's reimbursement of Past Response Costs and Future Response Costs, as those terms are defined herein, by the Respondents.

IV. DEFINITIONS

- 8. Unless otherwise expressly provided herein, 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 in the appendices attached hereto, the following definitions shall apply:
 - a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601, et seq.
 - b. "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.
 - c. "Effective Date" shall be the effective date of this Settlement Agreement as provided hereinafter.
 - d. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
 - e. "Future Response Costs" shall mean all costs related to the Site including but not limited to direct and indirect costs that, commencing on the Effective Date, the United States incurs in verifying and reviewing or developing plans, reports and other matters pertaining to the enforcement, implementation, and oversight of work performed by Respondents under the Modified UAO and this Settlement Agreement including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, Agency for Toxic Substances and Disease Registry ("ATSDR") costs, as well as all costs associated with any amendment, modification, or other revision of the OU1 ROD arising from the Focused Feasibility Study that EPA may elect to produce.
 - f. "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, 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.
 - g. "Modified UAO" shall mean the "Unilateral Administrative Order for Operation And Maintenance And Performance Standards Monitoring," U.S. EPA Docket No. 97-19-C, dated July 28, 1997, as amended by EPA's March 10, 2009, modification, which is attached hereto and incorporated herein as <u>Appendix B</u>.

- h. "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.
- i. "OUI ROD Revision" or "Revision to the OUI ROD" means the decision, conclusion, or similar document wherein EPA may ultimately reflect its evaluation of the Focused Feasibility Study and shall include but not be limited to EPA's formal selection of a modification to its September 27, 1989, Record of Decision for OU1.
- j. "Past Response Costs" shall mean all costs related to the Site including, but not limited to direct and indirect costs, commencing on and including December 12, 2008, and up to but not including the Effective Date of this Settlement Agreement, that the United States incurred in verifying and reviewing or developing plans, reports and other matters pertaining to the enforcement, implementation, and oversight of work performed by Respondents under the Modified UAO and this Settlement Agreement including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, Agency for Toxic Substances and Disease Registry ("ATSDR") costs, as well as all costs associated with any amendment, modification, or other revision of the OU1 ROD arising from the Focused Feasibility Study that EPA may elect to produce.
- k. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.
 - 1. "Parties" shall mean EPA and Respondents, collectively.
- m. "RCRA" shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, et seq.
- n. "Respondents" shall mean those persons identified in Appendix A to this Settlement Agreement as of the Effective Date.
- o. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.
- p. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent for Payment of Costs, all Appendices described herein and attached hereto, as well as any amendments or modifications adopted by EPA and Respondents subsequent to the Effective Date.
- q. "Site" shall mean the Carolawn Superfund Site, located generally at 5093 Morrison Road, Fort Lawn, Chester County, South Carolina and depicted similarly on the map attached as <u>Appendix C</u>, and more particularly as any area where hazardous substances from the facility which is the subject of this Agreement have come to be located.

- r. "State" shall mean the State of South Carolina.
- s. "Scope of Work" or "SOW" shall mean the Scope of Work for development of an FFS for the Site as set forth in Appendix 5 to the Modified UAO.
- t. "*UAO*" shall mean the "Unilateral Administrative Order for Operation And Maintenance And Performance Standards Monitoring," U.S. EPA Docket No. 97-19-C dated July 28, 1997.

V. EPA'S FINDINGS OF FACT

For purposes of this Settlement Agreement, EPA finds that:

- 9. The Site, nominally located at 5093 Morrison Road, Fort Lawn, Chester County, South Carolina, was used for the storage and treatment of hazardous substances. In 1986, EPA found hazardous substances, including but not limited to volatile organic compounds ("VOCs"), in the soil and ground water at the Site.
- 10. Respondents are some of the individuals, corporations, partnerships, and/or other entities who arranged for storage or treatment of hazardous substances at the Site; such persons are known as the Carolawn Steering Committee (the "CSC").
- 11. The Site was added to the National Priorities List ("NPL") pursuant to CERCLA Section 105, 42 U.S.C. § 9605, on September 8, 1983, 71 Fed. Reg. (40658 40673 Federal Register / Vol. 48, No. 175).
- 12. The remedy selected in the OU1 ROD for the Site included the installation of a ground water interception and extraction system ("GWETS") to address ground water contamination. Pursuant to a December 2, 1991, "Partial Consent Decree for Remedial Design and Construction" (Civ. No. 00-91-2077-0), the CSC installed of the completed GWETS during the period of December 1995 through June 1996; its construction was deemed to have been completed on June 8, 1996, and the CSC voluntarily began operation of the GWETS on October 9, 1996. Pursuant to EPA's Unilateral Administrative Order for Operation And Maintenance And Performance Standards Monitoring, U.S. EPA Docket No. 97-19-C, dated July 28, 1997, issued to the CSC, the GWETS began operation, maintenance, and monitoring (OM&M) activities at the Site.
- 13. EPA and the South Carolina Department of Health and Environmental Control ("SCDHEC") have determined that a Focused Feasibility Study ("FFS") of the groundwater at the Site is necessary to further evaluate available technologies to achieve the cleanup levels for the ground water. Respondents are to perform the tasks set forth in the Scope of Work for the FFS, which is set out as Appendix 5 to the Modified UAO.

VI. EPA'S CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, EPA has determined that:

- 14. The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. §9601(9).
- 15. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. §9601(14).
- 16. The conditions described in the Findings of Fact 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).
- 17. Each Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- 18. Respondents are responsible parties under Sections 104, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622.

VII. PAYMENT OF RESPONSE COSTS

- 19. Payments of Past Response Costs and Future Response Costs
- a. Respondents shall pay EPA all Past Response Costs as well as all Future Response Costs not inconsistent with the NCP.
- b. For payment of Past Response Costs, EPA will send Respondents a demand soon after the Effective Date of this Settlement Agreement; the demand will include a SCORPIOS or other standard Regionally-prepared Report, and a DOJ-prepared cost summary if applicable.
- c. With respect to payment of Future Response Costs, EPA will send Respondents a bill on a periodic basis requiring payment; the bill will include a SCORPIOS or other standard Regionally-prepared Report, and a DOJ-prepared cost summary if applicable.
- d. Respondents shall make all payments in the amount of twenty five thousand dollars (\$25,000) or less within thirty (30) days of receipt of each bill and within sixty (60) days for amounts in excess of twenty five thousand dollars (\$25,000), unless otherwise

provided for herein. If Respondents demonstrate that additional documentation is necessary for them to adequately ascertain whether the costs are not inconsistent with the NCP, and if EPA receives a written request for such additional documentation along with an adequate description of the documentation's deficiency(ies) within fifteen days (15) of Respondents' receipt of the bill, then payment shall be due to EPA no later than thirty (30) days following Respondents' receipt of documentation package for bills ultimately amounting to twenty five thousand dollars (\$25,000) or less, and no later than sixty (60) days for bills ultimately amounting to twenty five thousand dollars (\$25,000) or more. Respondents shall make all payments required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the parties making payment and EPA Site/Spill ID number 0429.

Respondents shall send the check(s) to:

U.S. Environmental Protection Agency Superfund Payments-Region 4 Cincinnati Finance Center P.O. Box 979076 St. Louis, MO 63197-9000

- e. At the time of payment, Respondents shall send notice that payment has been made to Yvonne Jones and Paula V. Painter, U.S. EPA, Region 4, 61 Forsyth St., S.W., Atlanta, GA 30303.
- 20. If Respondents do not pay the Past Response Costs or the Future Response Costs by the due-date, Respondents shall pay Interest on the unpaid balance. Interest shall begin to accrue on the date that EPA was to have received payment and shall continue to accrue through the date of payment. If EPA receives and accepts a partial payment, Interest shall similarly 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 contemplated under the terms of this Section.
- Response Costs only based either on a showing that EPA has made an accounting error or upon a showing that EPA incurred specific costs that were a direct consequence of an action or activity that was inconsistent with the NCP. Such objection shall be made in writing prior to the later of thirty (30) days following receipt of the bill or fifteen (15) days following receipt of any additional documentation described above. Any such objection must be sent to the EPA Project Coordinator with a copy to both Paula V. Painter and the EPA site-attorney, and to be given effect must identify, with particularity, the specific cost(s) and the basis for objection. In the event of an objection, Respondents shall nevertheless pay all uncontested amounts to EPA in the manner and within the time frame described hereinabove. Simultaneously, Respondents shall establish an

escrow account and remit to that escrow account funds equivalent to the amount of the contested-cost(s). Respondents shall provide the EPA Project Coordinator a copy of the transmittal letter and check paying the uncontested cost(s), and a copy of the correspondence that establishes and funds the escrow account. Simultaneously with establishment of the escrow account, Respondents shall initiate the Dispute Resolution procedures set out in this Settlement Agreement; if EPA prevails in the dispute, Respondents shall pay the sums due (with accrued interest) to EPA in the manner described above within ten (10) days of the resolution of the dispute. 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 same manner. In conjunction with the procedures set forth in Section VIII (*Dispute Resolution*), the dispute resolution procedures set forth in this Paragraph shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse EPA for its Past Response Costs or its Future Response Costs.

VIII. DISPUTE RESOLUTION

- 22. 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.
- 23. If Respondents object to any EPA action taken pursuant to this Settlement Agreement with respect to billings for Past Response Costs or Future Response Costs, they shall notify EPA in writing of their objection(s) within twenty (20) days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondents shall have twenty (20) 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 to be effective.
- 24. Any agreement reached by the Parties pursuant to this Section shall be confirmed 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 Superfund Division Director 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. 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.

IX. FAILURE TO COMPLY WITH AGREEMENT

25. <u>Interest on Late Payments</u>. If Respondents fail to make any payment required under Section VII (*Payment of Response Costs*) by the due date, Interest shall continue to accrue on the unpaid balance through the date of payment as set forth in Section VII (*Payment of Response Costs*).

26. Stipulated Penalty.

- a. If any amounts due to EPA under Section VII (*Payment of Response Costs*) are not paid by the required date, Respondents shall be in violation of this Agreement and shall pay EPA, as a stipulated penalty, in addition to the Interest required under Section VII (*Payment of Response Costs*) one hundred dollars (\$100) per violation per day that such payment is late.
- b. Stipulated penalties are due and payable within thirty (30) days of the date of demand for payment of the penalties by EPA unless Respondents invoke the dispute resolution procedures in accordance with Section VIII (*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 the U.S. Environmental Protection Agency, Fines & Penalties, Cincinnati Finance Center, P.O. Box 979077, St. Louis, MO 63197-9000, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number A4GG, 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 also be sent to Yvonne Jones and to Paula V. Painter at U.S. EPA, Region 4, 61 Forsyth St., S.W., Atlanta, GA 30303.
- c. Penalties shall accrue as provided in this Paragraph regardless of whether EPA has notified Respondents of the violation or made a demand for payment, but need only be paid upon demand. All penalties shall begin to accrue on the day after payment is due and shall continue to accrue through the date of payment. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.
- d. In addition to the Interest and Stipulated Penalty payments required by this Section and any other remedies or sanctions available to EPA by virtue of Respondents' failure to comply with the requirements of this Settlement Agreement, any of the Respondents who fails or refuses to comply with the requirements of this Agreement shall be subject to enforcement action pursuant to Section 122(h)(3) of CERCLA, 42 U.S.C. § 9622(h)(3). If the United States, on behalf of EPA, brings an action to enforce this Agreement, Respondents shall reimburse the United States for all costs of such action, including but not limited to costs of attorney time.

- e. The obligations of Respondents to pay amounts owed to EPA under this Settlement Agreement are joint and several. In the event of the failure of any one or more Respondents to make the payments required under this Settlement Agreement, the remaining Respondents shall be responsible for such payments.
- f. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive payment of any portion of the stipulated penalties that have accrued pursuant to this Settlement Agreement. Payment of stipulated penalties shall not excuse Respondents from payment as required by Section VII or from performance of any other requirements of this Settlement Agreement.

X. COVENANT NOT TO SUE BY EPA

27. Except as specifically provided in Section XI (Reservations of Rights by EPA), EPA covenants not to sue or take administrative action against Respondents pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), to recover Past Response Costs and Future Response Costs. This covenant shall take effect upon receipt by EPA of all amounts required by Section VII (Payment of Response Costs) and any amounts due under Section IX (Failure to Comply with Agreement). This covenant not to sue is conditioned upon the satisfactory performance by Respondents of their obligations under this Settlement Agreement. This covenant not to sue extends only to Respondents and does not extend to any other person.

XI. RESERVATIONS OF RIGHTS BY EPA

- 28. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondents with respect to all matters not expressly included within the Covenant Not to Sue by EPA in Section X (*Covenant Not To Sue By EPA*). Notwithstanding any other provision of this Settlement Agreement, EPA reserves all rights against Respondents with respect to:
 - a. liability for failure of Respondents to meet a requirement of this Settlement Agreement;
 - b. liability for costs incurred or to be incurred by the United States that are not within the definition of Past Response Costs or Future Response Costs;
 - c. liability for injunctive relief or administrative order enforcement under Section 106 of CERCLA, 42 U.S.C. § 9606;
 - d. criminal liability; and
 - e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments.

- 29. Nothing in this Settlement Agreement is intended to be nor shall it be construed as a release, covenant not to sue, or compromise of any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or in equity, which the United States may have against any person, firm, corporation or other entity not a signatory to this Settlement Agreement.
- 30. 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).

XII. COVENANT NOT TO SUE BY RESPONDENTS

- 31. 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 Past Response Costs, Future Response Costs, the Modified UAO, or this Settlement Agreement, including but not limited to:
 - a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund 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 claims arising out of the response actions at the Site, including any claim under the United States Constitution, the Constitution of the State of South Carolina, 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; and
 - c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, with respect to the Site, subject to the reservation set forth in Paragraph 32, infra.
- 32. Respondents reserve and retain all rights against agencies of the United States that either generated hazardous substances found at the Site, arranged for disposal or transport for disposal of hazardous substances at the Site, or accepted hazardous substances for transport to the Site.

XIII. CONTRIBUTION

33. 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 Past Response Costs and Future Response Costs.

- 34. 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 Past Response Costs and Future Response Costs.
- 35. 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 herein diminishes the right of the United States, pursuant to Sections 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).

XIV. INTEGRATION/APPENDICES

- 36. 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 Agreement:
 - "Appendix A" is a complete list of the Respondents;
 - "Appendix B" is the Modified UAO; and
 - "Appendix C" is a Map of the Site.

XV. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

- 37. In consideration of the communications between Respondents and EPA concerning the terms of this Settlement Agreement, Respondents agree that there is no need for a settlement conference prior to the effective date of this Settlement Agreement. Therefore, the effective date of this Settlement Agreement will be the date on which it is signed by EPA.
- 38. This Settlement Agreement may be amended by mutual agreement of EPA and Respondents. Amendments shall be in writing, shall be signed by EPA and Respondents, and shall be effective when signed by EPA. EPA Project Coordinators do not have the authority to sign amendments to the Settlement Agreement.

DATE: 1/19/2010

39. No informal advice, guidance, suggestion, or comment by the EPA Project Coordinator 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.

It is so AGREED:

U.S. Environmental Protection Agency

Anita L. Davis, Chief

Superfund Enforcement and Information Management Branch

Superfund Division

Region 4

U.S. Environmental Protection Agency

Agreed this 29th day of October, 2009.	
For Respondent Proctor Chemical (Please Print or Type)	•
Signature. Signature.	
By: Akto Nobel Surface Chemistry L (Please Print or Type)	LC on behalf of Prodo Chemica 1
Title: Vice President & Screenbury	- I I I I I I I I I I I I I I I I I I I

Agreed this day of NOYEMBER, 2009.		
For Respondent BLACK & DECKER (U.S.) INC. (Please Print or Type)		
Signature: LINDA H. BIAGIONI		
By: LINDA H. BIAGIONI (Please Print or Type)		
THE PRISINENT		

Agreed this That day of Movember, 2009.	•
For Respondent CNA Holdings, LLC f/k/a CNA Holdings, Inc. (Please Print or Type) Signature:	
By: Steven M. Sterin	
(Please Print or Type)	
Title Senior VP & CFO	

Agreed this $\sqrt{4}$	day of December, 2009.	
For Respondent	Cooper Industries, LLC as successor to McGraw Edison (Clark Equipment Co./Gravely)	
(Please Print or Type)		
Signature	· Jerone Har	
J	ERRANCE HELZ	
	(Please Print or Type)	
Title: <u> </u>	ecretary	

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Agreed this 20	day of November	2009.
For Respondent _	Cumber (and Count	y Hospital System, Inc.
Signature:	Michael Nagarah	
Ву:	Michael Magauski Nichael Wagauski (Please Print or Type)	
Title:	CEO	·

U.S. EPA Region 4 CERCLA Docket No.: CERCLA-04-2010-3753

Agreed this 9th day of November, 2009.
For Respondent Eaton Corporation and its affiliated companies
Signature: Just (.)
By: Scott E. Allbery (Please Print or Type)
Title: COUNSE)

Agreed this 9 day of November, 2009.
For Respondent Evonik Stockhausen LLC (Please Print or Type)
Signature: Signature:
By: Russell B Mait (Please Print or Type)
Title Director EHSO

Agreed this 64 day of Novembbe, 2009.

For Respondent <u>Exxample OIL CORPORATION</u>
(Please Print or Type)

Signature:

By: MILHARL W. SCHWEHR
(Please Print or Type)

Title: AGENT and ATORNEY in FACT

Agreed this	day of		_, 2009.	
For Respondent	Georgia-Pac		emicals	LLC
Signature:	1. The		D	<u></u>
Ву:	Michael Davi	s int or Type)		
Title: As		•	nsel – H	Environmental

Agreed this 2ND day of NOVEMBER, 2009.
For Respondent TNUENSYS TNC (Please Print or Type)
Signature: Jay S. Eula
By: JAY S EHLE
(Please Print or Type) Title: PRESIDENT

Agreed this 3rd day of November, 2009.	
For Respondent Kerl Group	
(Please Print of Type)	
Signature:	
By: Tefrey D. 7	Zamen
(Please Print or Type)	/
Title: EVP	

Agreed this 30 Hday of October, 2009.
For Respondent Revion Holdings LLC (Please Print of Type)
Signature: Steet Jan
By: Steven Fasman (Please Print or Type)
Title: Attorney-in-fact + Senior V.P. of prient CO. Mac Andrews & Forbes
CO. Mac Andrews & tookes

Agreed this May day of November, 2009.

For Respondent Rothn May Hans complaint

(Please Print or Type)

Signature: Member / Tokkery

(Please Print or Type)

Title: Remediation Ploster Maybeen

U.S. EPA Region 4 CERCLA Docket No.: CERCLA-04-2010-3753

Agreed this 5th day of November, 2009.	
For Respondent SC Cylon LC (Please Print or Type) Signature: By: May G D EN Hart (Please Print or Type)	identified as Great Lakes Monufacturing, Rospondent
Title: UP HR North August	

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A oreed this	(I) day	of Minury	$\gamma n \rho \rho \rho$, 2009.
Agiccu uns	uay	UI DI UVCI	PUL.	_, 2007.

For Respondent <u>Technographics, Inc. (a/k/a Technographics Decotone)</u>, a defunct corporation (Please Print or Type)

Chartis Specialty Insurance Company, formerly known as American International Specialty Lines Insurance Company ("AISLIC"), as indemnitor only of Technographics, Inc. (a/k/a Technographics Decotone) ("Technographics"), a defunct corporation, under Policy No. CCC2678490, hereby executes and agrees to the terms of this Consent Order ("Order") solely on behalf of its above named insured, Technographics, and its respective predecessors, successors and assigns. Solely on behalf of its above named insured, AISLIC has caused this instrument to be executed by a person duly authorized to sign on AISLIC's behalf. AISLIC, the insurer/indemnitor of Technographics under Policy No. CCC2678490, executes this agreement solely for the policy period which expires August 14, 2014, and strictly limited to the available policy proceeds, to facilitate its entry into the agreement, and expressly denies that it has any independent liability for the activities of its insured related to the Carolawn Superfund Site in Fort Lawn, South Carolina (the "Site). AISLIC expressly denies, and reserves its rights to contest an assertion by any party, that it has any independent liability for any matters relating to the Site under any federal, state or local law.

Signature:	
By: Joseph Mattiassi	
(Please Print or Type)	

Agreed this 5th day of 700., 2009.	
For Respondent The Charlotte Observer Publishing	C_{0}
Signature: (Please Print or Type)	
By: Ann Caulkins	
(Please Print or Type)	

In the Matter of the Administrative Settlement Agreement and Order on Consent for Payment of
Costs; Carolawn Superfund Site; Fort Lawn, Chester County, South Carolina
Agreed this 3rd day of November, 2009.
For Respondent United Technologies Corporation, on behalf of Immont Corporation (Please Print or Type)
Signature: W.F. Leikin
By: William F. Leikin
(Please Print or Type)
Title: Assistant General Counsel
Title: Assistant General Counsel

Agreed this 28 day of October, 2009.
For Respondent Vishay Measurements Group (Please Print or Type)
Eignature: Len. Clas
By: Donald M. Clark (Please Print or Type)
Title: VP, EHS

U.S. EPA Region 4 CERCLA Docket No.: CERCLA-04-2010-3753

In the Matter of the Administrative Settlement Agreement and Order on Consent for Payment of Costs: Carolawn Superfund Site: Fort Lawn, Chester County, South Carolina

Agreed this 7 day of December, 2009.

For Respondent Wilsonart International (Please Print or Type)

Signature: May Maxwell (Please Print or Type)

Title: May ger of Environmental Affairs

APPENDIX "A"

List of Respondents to the Above-Entitled Administrative Settlement Agreement and Order on Consent:

Akzo Nobel Surface Chemistry LLC on behalf of Proctor Chemical

Black & Decker (U.S.) Inc.

CNA Holdings, LLC f/k/a CNA Holdings, Inc. f/k/a Hoechst Celanese Corp.

Cooper Industries, LLC as successor to McGraw Edison (Clark Equipment Co./Gravely)

Cumberland County Hospital System, Inc. d/b/a Cape Fear Valley Health System

Eaton Corporation and its affiliated companies

Evonik Stockhausen LLC

ExxonMobil Oil Corporation

General Electric Company

Georgia-Pacific Chemicals LLC

Invensys, Inc. for Fasco Industries

Kerr Group LLC

Revlon Holdings LLC, formerly known as Revlon, Inc.

Rohm and Haas Company

SGL Carbon, LLC (f/k/a Great Lakes Carbon Corporation) (a/k/a Great Lakes Manufacturing)

Technographics, Inc. (a/k/a Technographics Decotone), a defunct corporation

The Charlotte Observer Publishing Co.

United Technologies Corporation, on behalf of Inmont Corporation

Vishay Measurements Group

Wilsonart International

Lawn, Chester County, South Carolina				
Caption for 1991 Partial CD for RD/RA	Signatories to 2009 AOC for Costs			
Aeroquip Corporation	Eaton Corporation and its affiliated companies			
Black & Decker Inc.	Black & Decker (U.S.) Inc.			
Burlington Industries, Inc.	Not Applicable - Bankrupt			
Clarke Floor Equipment Company	Cooper Industries, LLC as successor to McGraw Edison (Clark Equipment Co./Gravely)			
Cone Mills Corporation	Not Applicable - Bankrupt			
Cumberland County Hospital System, Inc.	Cumberland County Hospital System, Inc. d/b/a Cape Fear Valley Health System			
Dart Industries, Inc.	Wilsonart International			
Eaton Corporation	Eaton Corporation and its affiliated companies			
Fasco Industries, Inc.	Invensys, Inc. for Fasco Industries			
General Electric Company	General Electric Company			
Georgia-Pacific Corporation	Georgia-Pacific Chemicals LLC			
Great Lakes Carbon Corporation	SGL Carbon, LLC (f/k/a Great Lakes Carbon Corporation) (a/k/a Great Lakes Manufacturing)			
Hoechst Celanese Corporation	CNA Holdings, LLC f/k/a CNA Holdings, Inc. f/k/a Hoechst Celanese Corp.			
Inmont Corporation	United Technologies Corporation, on behalf of Inmont Corporation			
Kerr Glass Manufacturing Corporation	Kerr Group LLC			
The Knight Publishing Company	The Charlotte Observer Publishing Co.			
Measurements Group, Inc.	Vishay Measurements Group			
Mobil Oil Corporation	ExxonMobil Oil Corporation			
National Health Laboratories, Inc.	Revlon Holdings LLC, formerly known as Revlon, Inc.			
National Starch & Chemical Corporation	Akzo Nobel Surface Chemistry LLC on behalf of Proctor Chemical			
Printworld, a Division of Technographics Inc.	Technographics, Inc. (a/k/a Technographics Decotone), a defunct corporation			
Rohm & Haas Company	Rohm and Haas Company			
Stockhausen, Inc.	Evonik Stockhausen LLC			
X-Craft, Inc.	Not Applicable - Bankrupt			

APPENDIX "B"

THE MODIFIED UAO

IN RE: the above-entitled matter



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

MAR 1 0 2009

Ms. Amelia S. Magee King & Spalding, LLP 1180 Peachtree Street, NE Atlanta, Georgia 30309

SUBJECT:

Modification of <u>Unilateral Administrative Order For Operation and Maintenance And Performance Standards Monitoring</u> (U.S. EPA Docket No. 97-19-C) Carolawn Superfund Site, Chester County, Fort Lawn, South Carolina

Dear Ms. Magee:

The purpose of this letter is to modify the <u>Unilateral Administrative Order For Operation and Maintenance And Performance Standards Monitoring</u> (U.S. EPA Docket No. 97-19-C), dated July 17, 1997 (UAO) to provide for the performance of the Focused Feasibility Study (FFS) for the Carolawn Site (the Site).

The U. S. Environmental Protection Agency (the EPA) has determined that it is necessary for a FFS to be performed at the Site, which is considered an "additional response action" pursuant to Paragraph A of Section XI (Additional Response Actions) of the UAO. Therefore, pursuant to Section XXXII (Modification) of the UAO, EPA modifies Section VIII (Work To Be Performed) of the UAO to add Paragraph A.1., as follows:

A.1. Appendix 5 to this Order is the SOW which sets forth the major tasks that must be completed by Respondents to implement the FFS at the Site. The SOW is incorporated into this Order by reference as if fully set forth herein and is therefore both a requirement and an enforceable part of this Order.

Further, EPA modifies Paragraph U of Section III (Definitions) of the UAO as follows:

U. "Work" shall mean all activities Respondents are required to perform under this Order, including the Focused Feasibility Study, Operation and Maintenance, Performance Monitoring, and any schedules or plans required to be submitted pursuant thereto.

It is my understanding that Yvonne Jones of my office has discussed the UAO modification with you, and that your clients are willing to perform the FFS. EPA looks forward to continuing our cooperative working relationship as we complete this phase of the remedial action.

Sincerely,

Franklin E. Hill, Director Superfund Division

Enclosure

cc:

Ms. Yvonne Jones (w/enclosures)

Ms. Teresa Mann, EPA (w/enclosures)

Mr. Charles Williams, SCDHEC (w/enclosures)

APPENDIX 5 SCOPE OF WORK FOR THE FOCUSED FEASIBLIYY STUDY AT THE CAROLAWN SITE

INTRODUCTION

The purpose of this Statement of Work (SOW) is to set forth the requirement for conducting a Focused Feasibility Study (FFS) to develop and evaluate potential Remedial Action Alternatives to the 1989 Record of Decision (ROD) to eliminate, reduce, or control risks to human health and the environment. This FFS shall supplement as necessary the 1989 Feasibility Study (1989 FS) previously approved by the United States Environmental Protection Agency (EPA). This SOW is designed to provide the framework for conducting the FFS activities at the Carolawn Superfund Site (the Site).

The Respondents shall conduct the FFS and produce a FFS Report to supplement the 1989 FS as necessary that is in accordance with this Scope of Work, the <u>Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA</u>, (Interim Final) (U.S. EPA Office of Emergency and Remedial Response, October 1988) (the "RI/FS Guidance"), the <u>National Oil and Hazardous Substances Pollution Contingency Plan</u> (March 8, 1990) and other guidances used by EPA in conducting an FFS (the primary guidances are listed in Attachment A), as well as any additional requirements in the Unilateral Administrative Order (UAO) dated July 28, 1997, and the modifications made thereto (UAO). The RI/FS Guidance describes the report format and the required report content for a full Feasibility Study, therefore the FFS Report will be a condensed version thereof designed to supplement the 1989 FS as necessary. Pertinent RI/FS Guidance section numbers are denoted in parenthesis throughout this Scope of Work. The Respondents shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the FFS, except as otherwise specified in the UAO.

At the completion of the FFS, EPA shall be responsible for the selection of any changes to the current 1989 ROD to be implemented for the Site. EPA will document this selection of a change in the remedy to meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements of other laws or regulations, and will address the statutory preference for on-site treatment which permanently and significantly reduces the volume, toxicity, or mobility of the hazardous substances, pollutants, and contaminants as a principal element. The FFS Report, as adopted by EPA, with the remainder of the Administrative Record, including the original 1989 FS and the original 1989 ROD, will form the basis for the selection of any alternate remedy to be implemented for the Site and will provide the information necessary to support the development of any change to the current 1989 ROD.

As specified in Section §104(a)(1) of CERCLA, as amended by SARA, EPA must provide oversight of the Respondents' activities throughout the FFS. The Respondents shall support EPA's initiation and conduct of activities related to the implementation of oversight activities. However, the primary responsibility for conducting an adequate FFS to enable and support the potential selection of an alternate remedy shall lie with the Respondents. EPA review and

approval of deliverables is a tool to assist this process and to satisfy, in part, EPA's responsibility to provide effective protection of public health, welfare, and the environment. EPA approval of a task or deliverable shall not be a guarantee as to the ultimate adequacy of such task or deliverable. A summary of the major deliverables that Respondents shall submit for the FFS is attached (Attachment B). In addition, a general schedule of FFS activities is also attached (Attachment C).

TASK 1 - DEVELOPMENT AND SCREENING OF REMEDIAL ACTION ALTERNATIVES (RI/FS Guidance, Chapter 4)

The development and screening of Remedial Action Alternatives is performed to select an appropriate range of waste management options to be evaluated. This range of options shall include, at a minimum, alternatives in which treatment is used to reduce the toxicity, mobility, or volume of the waste, but varying in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; alternatives that involve containment and treatment components; alternatives that involve containment with little or no treatment; and a no-action alternative, to the extent those options are necessary to supplement the 1989 FS. The following activities shall be performed by the Respondents as a function of the development and screening of Remedial Action Alternatives.

a. Development and Screening of Remedial Action Alternatives (4.2)

The Respondents shall begin to develop and evaluate a range of appropriate waste management options that, at a minimum, ensure protection of human health and the environment and comply with all ARARs, as necessary to supplement the 1989 FS.

Develop General Response Actions (4.2.2)

The Respondents shall develop general response actions for ground water defining containment, treatment, excavation, pumping, or other actions, singly or in combination, to satisfy the remedial action objectives.

Identify Areas and Volumes of Media (4.2.3)

The Respondents shall identify areas and volumes of contaminated ground water to which general response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. The chemical and physical characterization of the Site and the Baseline Risk Assessment (BRA) and remediation goals shall also be taken into account.

Identify, Screen, and Document Remedial Technologies (4.2.4; 4.2.5)

The Respondents shall identify and evaluate technologies applicable to each general response action to eliminate those that cannot be implemented at the Site. General response actions shall be refined to specify remedial technology types. Technology process options for each of the technology types shall be identified either concurrent with

the identification of technology types or following the screening of the considered technology types. Process options shall be evaluated on the basis of effectiveness, implementability, and cost factors to select and retain one or, if necessary, more representative processes for each technology type. The technology types and process options shall be summarized for inclusion in the technical memorandum submitted at the conclusion of Task 1. The reason for eliminating technologies must be specified, if not already done so in the 1989 FS.

Assemble and Document Alternatives (4.2.6)

The Respondents shall assemble selected representative technologies into alternatives for the affected medium or operable unit. Together, all of the alternatives shall represent a range of treatment and containment combinations that shall address either the Site or the operable unit as a whole. A summary of the assembled alternatives and their related action-specific ARARs shall be prepared by the Respondents for inclusion in the technical memorandum submitted at the conclusion of Task 1.

Based on completed evaluations of the current 1989 ROD remedy (ground water extraction and treatment), the pilot testing of enhanced in situ biodegradation (EISB) at the Site, subsequent remedial action evaluations, and agencies discussions (as documented in the 2004 Remediation System Evaluation Report and Action Plan, the EISB Progress reports annually completed during 2005 – 2008, the 2008 Remedial Evaluation Report, and agency memoranda), the following alternatives will, at a minimum, be assembled:

- 1. ground water extraction and treatment (current remedy)
- 2. source area ground water extraction and treatment
- 3. source area ground water extraction with enhanced permeability
- 4. in situ treatment via injections (chemical or biological)
- 5. in situ treatment (chemical/biological) with enhanced permeability and/or extraction for increased distribution
- 6. in situ thermal remediation
- 7. monitored natural attenuation (stand-alone and in combination with #1 6 above)

The reasons for eliminating any of the above-listed alternatives during the preliminary screening process must be specified in the technical memorandum submitted at the conclusion of Task 1.

Refine Alternatives

The Respondents shall refine the Remedial Action Alternatives to identify contaminant volumes to be addressed by the proposed process and sizing of critical unit operations as necessary. Sufficient information shall be presented for an adequate comparison of alternatives. Additionally, action-specific ARARs shall be updated as the Remedial Action Alternatives are refined.

Conduct and Document Screening Evaluation of Each Alternative (4.3)

The Respondents may perform a final screening process based on short and long term aspects of effectiveness, implementability, and relative cost. Note that the evaluation of effectiveness involves evaluating the long-term and short-term risks - among other factors - associated with a remedial alternative. Generally, this screening process is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis.

As appropriate, the screening shall preserve the range of treatment and containment alternatives that was initially developed above in accordance with Section 4.2.6 of the guidance. The range of remaining alternatives shall include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondents shall prepare a technical memorandum summarizing the results and reasoning employed in screening, arraying alternatives that remain after screening, and identifying the action-specific ARARs for the alternatives that remain after screening.

b. <u>Alternatives Development and Screening Deliverables</u> (4.5)

The Respondents shall prepare a technical memorandum summarizing the work performed and the results of each task above, including an alternatives array summary. This alternatives array shall be modified by the Respondents when conducting Task 2 if required by EPA's comments to assure identification of a complete and appropriate range of viable alternatives to be considered in the detailed analysis, as necessary to supplement the 1989 FS. This deliverable shall document the methods, rationale, and results of the alternatives screening process.

TASK 2 - DETAILED ANALYSIS OF REMEDIAL ACTION ALTERNATIVES (RL'FS Guidance, Chapter 6)

The detailed analysis shall be conducted by the Respondents to provide EPA with the information needed to allow for the selection of an alternate remedy for the Site, if determined appropriate by EPA.

a. Detailed Analysis of Alternatives (6.2)

The Respondents shall conduct a detailed analysis of remaining alternatives. This analysis shall consist of an assessment of each option against a set of nine evaluation criteria and a comparative review of all options using the same nine evaluation criteria as a basis for comparison.

Apply Nine Criteria and Document Analysis (6.2.1 - 6.2.4)

The Respondents shall apply nine evaluation criteria to the assembled Remedial Action Alternatives to ensure that the selected Remedial Action Alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of,

ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) cost; (8) State acceptance; and (9) community acceptance. Criteria 8 and 9 are considered after the RI/FS Report has been released to the general public. For each alternative, the Respondents shall provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment. Since the Respondents do not have direct input on criteria (8) State acceptance and (9) community acceptance, these two criteria will be addressed by EPA after completion of the Draft FFS Report.

Compare Alternatives Against Each Other and Document the Comparison of Alternatives (6.2.5; 6.2.6)

The Respondents shall perform a comparative analysis among the Remedial Action Alternatives. That is, each alternative shall be compared against the others using the nine evaluation criteria as a basis of comparison. No alternative shall be identified by Respondents as the preferred alternative in the FFS. Identification and selection of the preferred alternative is conducted by EPA.

b. Detailed Analysis Deliverables (6.5)

The Respondents shall prepare a Draft FFS Report as necessary to supplement the 1989 FS for EPA review and comment. This report, as ultimately adopted or amended by EPA, together with the 1989 FS and the 1989 ROD, provides a basis for remedy selection by EPA and documents the development and analysis of Remedial Action Alternatives. The Respondents shall refer to the RI/FS Guidance for an outline of the report format and the required report content for a full Feasibility Study, and shall prepare a FFS Report as a condensed version thereof designed as necessary to supplement the 1989 FS. The Respondents shall prepare a Final FFS Report which satisfactorily addresses EPA's comments.

ATTACHMENT A GUIDANCE DOCUMENTS AND REFERENCES FOR THE FFS AT THE CAROLAWN SITE

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the Focused Feasibility Study process:

- 1. "A Guide to Developing and Documenting Cost Estimates During the Feasibility Study, "U.S. EPA and U.S. Army Corps of Engineers, EPA 540-R-00-002, July, 2000.
- "A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other remedy Selection Decision Documents" (July 1999) EPA 540/R-98/031, OSWER 9200.1-23P
- 3. "CERCLA Compliance with Other Laws Manual," Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (Draft), OSWER Directive No. 9234.1-01 and -02.
- 4. "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final" U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.
- 5. "Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies," U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.
- 6. "Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites," U.S. EPA, Office of Emergency and Remedial Response, (Draft), OSWER Directive No. 9283.1-2.
- 7. "Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements," U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.
- 8. "Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies," U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.
- 9. The National Oil and Hazardous Substances Pollution Contingency Plan, March 8, 1990.

ATTACHMENT B SUMMARY OF THE MAJOR DELIVERABLES FOR THE FFS AT THE CAROLAWN SITE

TASK

DELIVERABLE

EPA RESPONSE

TASK 1 DEVELOPMENT AND SCREENING OF REMEDIAL ACTION ALTERNATIVES

Technical Memorandum on Remedial Technologies, Alternatives, and Screening (6)

Review and Comment

TASK 2 DETAILED ANALYSIS OF REMEDIAL ACTION ALTERNATIVES

- Focused Feasibility Study (FFS) Report (7)

Review and Approve

Note: The number in parenthesis indicates the number of copies to be submitted by Respondents. One copy shall be unbound, the remainder shall be bound. Also, refer to the UAO for additional reporting requirements and further instructions on submittal and dispositions of deliverables.

ATTACHMENT C GENERAL SCHEDULE FOR THE FOCUSED FEASIBILITY STUDY ACTIVITIES AT THE CAROLAWN SITE

<u>ACTIVITY</u>	SCHEDULE DATE (DAYS)
Effective Date of the modified UAO	Α
Draft Technical Memorandum on Remedial Technologies, Alternatives, and Screening Submitted	A + 60
EPA Review	
EPA Provides Final Comments to Draft Technical Memorandum	В
Draft FFS Report Submitted	B + 60
EPA Review	
EPA Conditionally Approves the FFS	C
Final FFS Report Submitted	C + 30



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
100 ALABAMA STREET, S.W.
ATLANTA, GEORGIA 30303-3104

nn 2 3 1967

4WD

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Chet Tisdale, Esq. King & Spaulding 191 Peachtree Street Atlanta, Georgia 30303-1763

SUBJ: Issuance of Unilateral Administrative Order for Operation and Maintenance (O&M) and Performance Standards Monitoring at the Carolawn Superfund Site, Chester County, Fort Lawn, South Carolina

Dear Mr. Tisdale:

The purpose of this letter is to transmit the enclosed Unilateral Administrative Order (Order) to the members of the Carolawn Generators Steering Committee (Respondents) regarding the Carolawn Superfund Site (the Site). This Order is issued pursuant to the authority of the United States Environmental Protection Agency (EPA) under Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, (CERCLA), 42 U.S.C. §9606(a), as amended.

As you have been previously notified, EPA has information indicating that the Respondents are potentially responsible parties under Section 107 of CERCLA, 42 U.S.C. §9607, with respect to the Site.

The enclosed Order directs the Respondents to perform the O&M and Performance Standards Monitoring of the groundwater treatment system that was constructed by the Respondents, pursuant to the 1991 Partial Consent Decree, and in accordance with the Record of Decision (ROD) dated September 27, 1989. The ROD and SOW are incorporated by reference in the Order and are attached thereto.

Please review the Order carefully, paying particular attention to Sections XXX, XXIX, and XXVIII, of the Order which address the obligations of the Respondents to give notice of their intent to comply, the effective date of the Order and the right of the Respondents to request a conference to discuss the terms of the Order.

10302091



Failure to provide notice to EPA, as set forth in Section XXX of the Order, constitutes a violation of the Order.

If you have any technical questions relating to the enclosed Order, please contact the Remedial Project Manager for the Site, Mr. Al Cherry at (404) 562-8828. If you have any legal questions concerning this Order, please contact Ms. Marlene J. Tucker, Assistant Regional Counsel, at (404) 562-9536.

1 11.

Richard Green T Acting Director

Waste Management Division

Enclosure

19521

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region 4

In The Matter Of: Carolawn Superfund Site,

AEROQUIP CORPORATION; BLACK & DECKER INC.;) Proceeding Under BURLINGTON INDUSTRIES, INC.; CLARKE FLOOR EQUIPMENT COMPANY; CONE MILLS CORPORATION; CUMBERLAND COUNTY HOSPITAL SYSTEM, INC.; DART INDUSTRIES, INC.; EATON CORPORATION; FASCO INDUSTRIES, INC.; GENERAL ELECTRIC) Liability Act of COMPANY; GEORGIA-PACIFIC CORPORATION; GREAT LAKES CARBON CORPORATION; HOECHST CELANESE CORPORATION; INMONT CORPORATION;) Amendments and KERR GLASS MANUFACTURING CORPORATION; THE KNIGHT PUBLISHING COMPANY; MEASUREMENTS GROUP, INC.; MOBIL OIL CORPORATION; NATIONAL HEALTH LABORATORIES, INC.; NATIONAL STARCH & CHEMICAL CORPORATION; PRINTWORLD, A DIVISION OF TECHNOGRAPHICS INC.; ROHM & HAAS COMPANY; STOCKHAUSEN, INC.; AND X-CRAFT, INC.

) Section 106(a) of) the Comprehensive) Environmental) Response,) Compensation, and) 1980, as amended by) the Superfund) Reathorization Act) of 1986, 42 U.S.C.) Section 9606(a)

> U.S. EPA Docket No. 97-19-C

UNILATERAL ADMINISTRATIVE ORDER FOR OPERATION AND MAINTENANCE AND PERFORMANCE STANDARDS MONITORING

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region 4

In The Matter Of: Carolawn Superfund Site,

AEROQUIP CORPORATION; BLACK & DECKER INC.;) Proceeding Under BURLINGTON INDUSTRIES, INC.; CLARKE FLOOR EQUIPMENT COMPANY; CONE MILLS CORPORATION; CUMBERLAND COUNTY HOSPITAL SYSTEM, INC.; DART INDUSTRIES, INC.; EATON CORPORATION; FASCO INDUSTRIES, INC.; GENERAL ELECTRIC) Liability Act of COMPANY; GEORGIA-PACIFIC CORPORATION; GREAT LAKES CARBON CORPORATION; HOECHST CELANESE CORPORATION; INMONT CORPORATION;) Amendments and KERR GLASS MANUFACTURING CORPORATION; THE KNIGHT PUBLISHING COMPANY; MEASUREMENTS GROUP, INC.; MOBIL OIL CORPORATION; NATIONAL HEALTH LABORATORIES, INC.; NATIONAL STARCH & CHEMICAL CORPORATION: PRINTWORLD, A DIVISION OF TECHNOGRAPHICS INC.; ROHM & HAAS COMPANY; STOCKHAUSEN, INC.; AND X-CRAFT, INC.

) Section 106(a) of) the Comprehensive) Environmental Response,) Compensation, and) 1980, as amended by) the Superfund Reathorization Act of 1986, 42 U.S.C. Section 9606(a)

> U.S. EPA Docket No. 97-19-C

UNILATERAL ADMINISTRATIVE ORDER FOR OPERATION AND MAINTENANCE AND PERFORMANCE STANDARDS MONITORING

I. <u>INTRODUCTION AND JURISDICTION</u>

This Unilateral Administrative Order For Operation and Maintenance and Performance Monitoring (the "Order") directs Respondents to perform Operation and Maintenance, and Performance Standards Monitoring for the Carolawn Superfund Site remedy described in the Record of Decision, dated September 27, 1989, for the Carolawn Superfund Site, Operable Unit Number One. Order is issued to Respondents by the United States Environmental Protection Agency ("EPA") under the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9606(a). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580 (52 Fed. Reg. 2926, January 29, 1987), and was further delegated to EPA Regional Administrators on September 13, 1987, by EPA Delegation No. 14-14-B and redelegated to the Director, Waste Management Division on January 5, 1989, by Regional Delegation No. 8-14-A.

II. PARTIES BOUND

- A. This Order applies to and shall be binding upon Respondents, their directors, officers, employees, agents, successors, and assigns. Respondents are jointly and severally responsible for carrying out all activities required by this Order. No change in the ownership, corporate status, or other control of any Respondent shall alter the Respondent's responsibilities under this Order.
- B. Respondents shall provide a copy of this Order to any prospective owners or successors before a controlling interest in Respondents' property rights, stock, or assets are transferred. Respondents shall provide a copy of this Order to all contractors, sub-contractors, laboratories, and consultants retained to perform any Work under this Order within five (5) days after the effective date of this Order, or on the date such services are retained, whichever date occurs later. Respondents

shall also provide a copy of this Order to each person representing any Respondent with respect to the Site or the Work and shall condition all contracts and subcontracts entered into hereunder upon performance of the Work in conformity with the terms of this Order. Notwithstanding the terms of any contract, Respondents are responsible for ensuring that their contractors and subcontractors and agents perform the Work contemplated herein in accordance with this Order.

- C. With regard to the activities undertaken pursuant to this Order, each contractor and subcontractor and agent shall be deemed to be related by contract to the Respondents within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).
- D. Each Respondent that now or hereafter owns property at the Site shall, within fifteen (15) days after the effective date of this Order or within fifteen (15) days after acquiring title to such property, shall record a copy or copies of this Order in the appropriate office where land ownership and transfer records are filed or recorded, and shall ensure that the recording of this Order is indexed to the titles of each and every property at the Site owned by any Respondent so as to provide notice to third parties of the issuance and terms of this Order with respect to those properties. Respondents shall, within fifteen (15) days after the effective date of this Order or within fifteen (15) days after acquiring title to such property, send notice of such recording and indexing to EPA.
- E. Not later than sixty (60) days prior to any transfer of any real property interest in any property included within the Site,

Respondents shall submit a true and correct copy of the transfer document(s) to EPA, and shall identify the transferee by name, principal business address and effective date of the transfer.

III. DEFINITIONS

Unless noted to the contrary, the terms of this Order shall have the meaning assigned to those terms pursuant to CERCLA or any regulation promulgated under CERCLA. Whenever the terms listed below are used in this Order and Appendices attached hereto, the following definitions shall apply:

- A. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. § 9601 et seq.
- B. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or federal holiday. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the end of the next working day.
- C. "EPA" shall mean the United States Environmental Protection Agency.
- D. "Hazardous Substance" shall mean any substance meeting the definition provided in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- E. "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, including any amendments thereto.

- F. "Operable Unit Number One or OU1" shall mean the areal extent of all groundwater contamination emanating and migrating from and beneath the Site, as depicted in the Map attached as Appendix 4
- G. "Operable Unit Number Two or OU2" shall mean the soil contamination of the portion of the Site located immediately around the fenced area and the land located north and west of the fenced area, as depicted in the Map attached as Appendix 4.
- H. "Operation and Maintenance" or "O&M" shall mean all operation and maintenance activities required by the ROD, the Scope of Work, and the Final Operation and Maintenance Plan developed by Respondents and approved by EPA pursuant to this Order, including any additional activities required by Sections X (EPA Periodic Review), XI (Additional Response Actions), XII (Endangerment and Emergency Response), and XIII (EPA Review of Submissions).
- I. "Paragraph" shall mean a portion of this Order identified by a capital letter.
- J. "Parties" shall mean the United States of America and Respondents.
- K. "Performance Monitoring" or shall mean all performance monitoring activities required by the ROD, the Scope of Work, and the Performance Standards Verification (PSV) Plan developed by Respondents and approved by EPA, including any additional activities required by Sections X (EPA Periodic Review), XI (Additional Response Actions), XII (Endangerment and Emergency Response), and XIII (EPA Review of Submissions), to ensure the effectiveness of the implemented remedy and to confirm over time that all Performance Standards are met.

- L. "Performance Standards" shall mean those cleanup levels, treatment standards, standards of control, and other substantive requirements, criteria or limitations, identified in the ROD and the Scope of Work, and, except for cleanup levels and treatment standards, those identified by EPA during the Remedial Design that the Remedial Action and all other Work required by this Order must attain and maintain.
- M. "Pollutant or Contaminant" shall mean any substance defined in Section 101(33) of CERCLA, 42 U.S.C. § 9601(33).
- N. "Record of Decision" or "ROD" shall mean the EPA Record of Decision for Operable Unit No. One at the Site which was signed on September 27, 1989, by the Regional Administrator, EPA Region 4, including all attachments thereto. The ROD is attached hereto as Appendix 2 and is incorporated herein by reference.
- O. "Respondents" shall mean Aeroquip Corporation; Black & Decker Inc.;) Burlington Industries, Inc.; Clarke Floor Equipment Company; Cone Mills Corporation; Cumberland County Hospital System, Inc.; Dart Industries, Inc.; Eaton Corporation; FASCO Industries, Inc.; General Electric Company; Georgia-Pacific Corporation; Great Lakes Carbon Corporation; Hoechst Celanese Corporation; Inmont Corporation; Kerr Glass Manufacturing Corporation; The Knight Publishing Company; Measurements Group; Inc.; Mobil Oil Corporation; National Health Laboratories, Inc.; National Starch & Chemical Corporation; Printworld, A Division of Technographics Inc.; Rohm & Haas Company; Stockhausen, Inc.; and X-Craft, Inc.
- P. "Section" shall mean a portion of this Order identified by a

roman numeral.

- Q. "Site" shall mean the Carolawn Superfund Site, encompassing approximately 60 acres, located in Fort Lawn, Chester County, South Carolina approximately one-half mile south of South Carolina Highway 9, just east of the Fishing Creek at geographic coordinates latitude 35 41'10" north and longitude 80 56'35" west. Notwithstanding the Site boundaries depicted on Appendix 3, the Site includes all areas to which hazardous substances released at this parcel have migrated and all areas in close proximity to the contamination that are necessary for implementation of the Work.
- R. "State" shall mean the State of South Carolina.
- S. "Statement of Work" or "SOW" shall mean the statement of work for the implementation of the O&M and PSVM at the Site. The SOW is attached hereto as Appendix 1 and is incorporated herein by reference.
- T. "United States" shall mean the United States of America, including the Department of Justice and EPA.
- U. "Work" shall mean all activities Respondents are required to perform under this Order, including Operation and Maintenance, Performance Monitoring, and any schedules or plans required to be submitted pursuant thereto.

IV. FINDINGS OF FACT

A. The Site is located in Fort Lawn, Chester County, South Carolina and was used for hazardous waste storage and disposal activities from 1970, until it was abandoned in 1980. Between 1970 and 1974, the entire Site was owned by Southeastern

Pollution Control Company (SEPCo) and was used as a storage facility for a solvent recovery facility located in Clover, South Carolina. Between 1978 and 1980, the Carolawn Company conducted waste storage and disposal operations within a portion of the sixty-acre Site that was enclosed by a chain linked fence. When the Site was subsequently abandoned in 1980, by the Carolawn Company, the fenced area contained a diked area for storage of tanks and drums, two incinerators, two storage trailers, 14 storage tanks, and over 400 drums containing liquid and solid wastes. Over 600 drums and 11 tanks were also located outside the fenced area to the north.

- B. From December 1981 through February 1982, EPA initiated a removal action which included the removal of drums, waste and contaminated soils. In addition, since the continued sampling of local residential wells showed persistent high levels of Trichloroethane (TCE), all nearby residences were provided with an alternative water source.
- C. On August 31, 1983, the United States, on behalf of EPA, filed a complaint under Sections 104 and 107 of CERCLA, 42 U.S.C. § § 9604 and 9607, to recover response costs incurred in conducting the removal action (Civil Action No. 83-216-0).
- D. In May 1985, pursuant to an Administrative Order on Consent (AOC), the Respondents removed 17 storage tanks off-site and disposed of the waste contents at a incinerator; treated the water from decontamination activities and sent it to the local publicly owned treatment works (POTW); and excavated and disposed of contaminated soils.

- E. Pursuant to a Partial Consent Decree signed in August 1985, Respondents agreed to perform the Remedial Investigation and Feasibility Study (RI/FS) at the Site. Phase I of the RI/FS was conducted at the Site between September 1985 and May 1987, and Phase II of the RI/FS was conducted between the fall of 1987 and September 1989. Phase I and Phase II of the RI/FS confirmed the presence of volatile organic compounds (VOCs), and lead in the groundwater exceeding the Primary Drinking Water Maximum Contaminant Levels ("MCLs"). On September 27, 1989, EPA issued a Record of Decision (ROD), after consultation with the State of South Carolina, selecting the remedial action to be implemented at the Site.
- F. On December 4, 1991, pursuant to a Partial Consent Decree for Remedial Design and Construction, the Respondents agreed to design and construct a groundwater interception and extraction system at the Site in accordance with the ROD.
- G. The Respondents are all former generator companies which sent wastes, including but not limited to waste solvents, used oil, paint sludge, waste perchloroethene, acetone, toluene and other mixed chemical waste to the Site. The Respondents are all former customers of the Carolawn Company, Inc., a past owner and operator of the Site from 1978 until about 1980.
- H. Respondents, by contract, agreement, or otherwise arranged for the disposal or treatment at the Site of, or arranged with a transporter for transport for disposal or treatment of hazardous substances owned or possessed by Respondents. Hazardous substances of the same kind as those owned or possessed by

Respondents are and/or were present at the Site.

- I. On September 8, 1983, (48 Fed. Reg. 40,658), pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B.
- J. In response to a release or substantial threat of release of hazardous substances at or from the Site, the Respondents commenced on August 30, 1985, a Remedial Investigation and Feasibility Study ("RI/FS") for OU1 of the Site pursuant to CERCLA and the National Contingency Plan, 40 C.F.R. § 300.430.
- K. The Remedial Investigation ("RI") Report and Feasibility Study ("FS") Report were completed in September 1989.
- L. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA published notice of the completion of the FS and of the proposed plan for remedial action in August 1989, in a major local newspaper of general circulation and provided opportunity for public comment on the proposed remedial action.
- M. The decision by EPA on the remedial action to be implemented at the Site is embodied in a Record of Decision ("ROD"), executed on September 27, 1989, on which the State had a reasonable opportunity to review and comment and has given its concurrence. The ROD includes the proposed plan as well as a responsiveness summary to the public comments. The ROD is supported by an administrative record that contains the documents and information upon which EPA based the selection of the response action. The administrative record is available for public review at EPA's regional office in Atlanta, Georgia and at the Lancaster County

Public Library located at 313 South White Street, Lancaster, South Carolina and the Chester County Library located at 100 Center Street, Chester County, South Carolina.

- N. Hazardous Substances found in the groundwater include volatile organic compounds (1,1-dichloroethane,
- 1,2-dichloroethylene, trichoroethylene, 1,1,1 trichloroethane, xylene and acetone) which were found in excess of Primary drinking Water Standard MCLs, and is attributed to the operations that took place within the discrete fenced area. (see 40 C.F.R. § 302.4). In addition, a number of metals including lead and chromium were detected in the ground water in excess of the Primary Drinking Water Standard MCLs. The sediment samples collected during the RI/FS indicated the presence of acetone and elevated levels of lead and arsenic. Several metals were detected in surficial soil samples including lead, chromium and However, based on the extensive removal action barium. conducted within the discrete fenced area by EPA in 1981, and the limited Remedial Investigation conducted outside the fenced area in 1994 (OU2), EPA has concluded that all future sources of contamination at the Site have been eliminated.
- O. The primary present exposure pathway is via the Fishing Creek which borders the Site to the east and is a tributary of the Catawba River. The analytical groundwater data indicates that contamination is entering Fishing Creek via discharge of the groundwater to the creek. Since contaminants emanating from the Site are entering the creek with the discharging groundwater, exposure via the Fishing Creek can occur through the consumption

of fish from the creek and other activities including swimming. One future exposure pathway to contaminated groundwater is through one domestic water supply well drawing from the bedrock aquifer in the immediate vicinity of the Site. (The other residences adjacent to the Site who had private potable wells were connected to the public water supply system in 1985). well is located upgradient of the Site and no contamination was found in the well. However, there are contaminants present in the groundwater downgradient and beyond the property lines of the Site at concentration levels that exceed drinking water Further, since this land downgradient of the Site is privately owned, there is a possibility that in the future a private water supply well could be installed downgradient of the Site in the contaminated aquifer. Therefore, potential future exposure pathways to contaminated groundwater exist and include consumption, inhalation and dermal absorption.

- P. The exposure to contaminated surface soil at the Site was eliminated by virtue of the removal actions taken at the Site. In addition, the risk posed by the inhalation of vapors and suspended contaminated particulates in air have a very low probability. Although the contaminants of concern for the Site are volatile organics, the removal of the contaminated soils and subsequent backfilling with clean fill in 1982, eliminated this pathway.
- Q. The Site is located in the eastern Charlotte Belt of the Piedmont Physiographic Province of South Carolina. This belt is characterized by granitoid gneiss with strong compositional

layering. The groundwater in the bedrock is associated with the joints and fractures which promote the migration of contaminants at the Site.

- R. Within a two-mile radius of the Site, there are approximately thirty permanent, single family residences; most of which are located along South Carolina Highway 9. There are four residences located within 300 yards of the fence area, with a fifth residence located approximately 1,000 yards to the west of the Site. One of these dwellings is located between the Site and the Fishing Creek. As discussed above in Paragraph O, the waters of the Fishing Creek is used for swimming and fishing. Fishing Creek flows southwards past the Site and empties into the Catawba River, eight miles south of the Site, where approximately 2,500 people receive their water supply from the Catawba River. The analytical data indicates that the hazardous substances identified above, in Paragraph N, are entering Fishing Creek via discharge of groundwater into the creek.
- S. The assessed lifetime cancer risk associated with exposures to the hazardous substances found in the groundwater identified above, has been determined to exceed the range of risks that EPA considers to be protective of public health.
- T. The major components of the remedy, as described in the ROD and SOW include: groundwater interception and extraction, on-site treatment of the contaminated groundwater, and the discharge of treated groundwater into Fishing Creek pursuant to a National Pollution Discharge Elimination System (NPDES) permit.

 The groundwater treatment system consists of five wells installed

at the Site and downgradient of the Site to more effectively capture the contaminated groundwater. The groundwater treatment system consists of two treatment processes that may be operated separately or in a series. These processes are Air Stripping/Clarification and Bag Filter/Granular Activated Carbon (GAC). The air stripping process will be utilized as the primary treatment and the GAC unit will work as the secondary treatment.

U. In addition, the ROD provides for the implementation of appropriate institutional controls (deed restrictions). Further, upon the condemnation of the adjacent contaminated private, potable wells by the County of Chester, these wells will be plugged in accordance with South Carolina Department of Health and Environmental Control regulations.

V. O&M shall be conducted in accordance with the SOW until:

1) the remedial action objectives are acheived, consistent with the ROD, UAO and SOW, or 2) the reduction of contaminants in groundwater levels off asymptotically at concentrations above the Remedial Action Objectives. The objectives of the remedial action are: 1) to prevent, or control, the continued off-site migration of the contaminated groundwater plume; 2) to eliminate or minimize the threat posed to human health and the environment from current and potential migration of hazardous substances; 3) to reduce concentrations of hazardous substances, pollutants and contaminants in groundwater as set forth in the SOW; 4) to reduce the mobility, toxicity and/or volume of hazardous substances at the Site.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

- A. The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- B. Respondents are "persons" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- C. Each of the Respondents is a "liable party" as defined in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).
- D. The contaminants found at the Site are "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- E. These hazardous substances have been released from the Site into the soil, groundwater, surface water and air at and/or from the Site.
- F. The past disposal and migration of hazardous substances at and/or from the Site are a "release" as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- G. The potential for future migration of hazardous substances at and/or from the Site poses a threat of a "release" as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- H. The release of one or more hazardous substances from the Site may present an imminent and substantial endangerment to the public health or welfare or the environment.
- I. The actions required by this Order are necessary to protect the public health, welfare, and the environment.

VI. NOTICE TO THE STATE

A. Prior to issuing this Order, EPA notified the State of South Carolina, Department of Health and Environmental Control (SCDHEC) that EPA would be issuing this Order.

VII. ORDER

Based on the foregoing, Respondents are hereby ordered, jointly and severally, to comply with this Order, including but not limited to all Appendices to this Order, all documents incorporated by reference into or to be developed pursuant to this Order, and all schedules and deadlines in this Order, attached to this Order, incorporated by reference into this Order, or to be developed pursuant to this Order.

VIII. WORK TO BE PERFORMED

- A. Appendix 2 to this Order is the SOW which sets forth the major tasks that must be completed by Respondents to implement the Work at the Site. The SOW is incorporated into this Order by reference as if fully set forth herein and is therefore both a requirement and an enforceable part of this Order.
- B. Respondents shall cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, Respondents shall participate in the preparation of such information for distribution to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site.
- C. All aspects of the Work to be performed by Respondents pursuant to this Order shall be under the direction and supervision of a qualified contractor ("Supervising Contractor") who shall be a qualified professional engineer or geologist with expertise in hazardous waste cleanups, the selection of which shall be subject to disapproval by EPA. The major tasks that Respondents must complete and the deliverables associated with

each task to support the Work are described in the SOW. EPA approval of a task or deliverable shall not be construed as a guarantee of the ultimate adequacy of such a task or deliverable.

- D. Operation and Maintenance and Performance Monitoring The Operation and Maintenance Plan shall be developed and submitted to EPA for review and approval in accordance with the SOW.

 Respondents shall also develop and submit the PSV Plan to EPA for review and approval in accordance with the SOW. Upon approval by EPA, Respondents shall implement the Operation and Maintenance Plan and the PSV Plan.
- E. <u>Performance Standards</u> The Work performed by Respondents pursuant to this Order shall, at a minimum, achieve the Performance Standards.
- F. Warranties Notwithstanding any action by EPA, Respondents remain fully responsible for achievement of the Performance Standards. Nothing in this Order, or EPA's approval of any submission, shall be deemed to constitute a warranty or representation of any kind by EPA that full performance of the Remedial Action will achieve the Performance Standards.

 Respondents' compliance with such approved documents does not foreclose EPA from seeking additional work to achieve the applicable Performance Standards.
- G. Notification of Off-Site Waste Shipment All materials removed from the Site shall be disposed of or treated at a facility approved by the EPA Project Coordinator and in accordance with Section 121(d)(3) of CERCLA, 42 U.S.C.

 9621(d)(3), with the U.S. EPA "Off-Site Policy," 40 CFR § 300.440

(50 Fed. Reg. 49200, September 22, 1993), and with all other applicable Federal, State and local requirements. Respondents shall, prior to any off-Site shipment of hazardous substances from the Site to an off-Site waste management facility, provide written notification to the appropriate state environmental official in the receiving state and to the EPA Project Coordinator, of such shipment of hazardous substances. However, the notification of shipments shall not apply to any off-Site shipments when the total volume of all shipments from the Site to the State will not exceed ten (10) cubic yards.

- 1. The notification shall be in writing, and shall include the following information, where available: (a) the name and location of the facility to which the hazardous substances are to be shipped; (b) the type and quantity of the hazardous substances to be shipped; (c) the expected schedule for the shipment of the hazardous substances; and (d) the method of transportation.

 Respondents shall notify the receiving state of major changes in the shipment plan, such as a decision to ship the hazardous substances to another facility within the same state, or to a facility in another state.
- 2. The contents of this provision shall not be considered to be approval of the off-Site shipment of materials from the Site where the ROD requires treatment and/or storage on-Site.

IX. CERTIFICATION OF COMPLETION

A. Within thirty (30) days after Respondents conclude that all phases of the Work including Performance Standards, have been attained, Respondents shall submit to EPA a written report,

certifying that the Work has been completed in full satisfaction of the requirements of this Order. EPA may specify additional activities as may be necessary to complete the Work as described in the SOW, or EPA may, based upon present knowledge and Respondents' certification to EPA, issue written notification to Respondents that the Work has been completed. EPA's notification shall not limit EPA's right to perform periodic reviews pursuant to Section 121(c) of CERCLA, 42 U.S.C. § 9621(c), or to take or require any action that in the judgement of EPA is appropriate at the Site, in accordance with 42 U.S.C. §§ 9604, 9606 or 9607.

X. EPA PERIODIC REVIEW

Under Section 121(c) of CERCLA, 42 U.S.C. §9621(c), and any applicable regulations, EPA may review the Site to assure that the Work performed pursuant to this Order adequately protects human health and the environment. Respondents shall conduct the requisite studies, investigations, or other response actions as determined necessary by EPA in order to permit EPA to conduct the review under Section 121(c) of CERCLA. As a result of any review performed under this paragraph, Respondents may be required to perform additional response actions or to modify the Work previously performed.

XI. ADDITIONAL RESPONSE ACTIONS

A. EPA may determine that, in addition to the Work identified in this Order and attachments to this Order, additional response actions may be necessary to meet the Performance Standards or to protect human health and the environment. If EPA determines that additional response actions are necessary, EPA will notify

Respondents and may require Respondents to submit a work plan for such additional response actions. EPA may also require Respondents to modify any plan, design, or other deliverable required by this Order, including any approved modifications. Respondents shall notify EPA of their intent to perform such additional response actions within seven (7) days after receipt of EPA's request for additional response actions.

Unless otherwise stated by EPA, not later than thirty (30) days after receiving EPA's notice that additional response actions are required pursuant to this Section, Respondents shall submit a work plan for the additional response actions ("Additional Response Action Plan") to EPA for review and The plan shall conform to the applicable requirements of Sections VIII (Work to be Performed), XIV (Quality Assurance Sampling and Data Analysis), and XV (Compliance with Applicable Laws) as appropriate. Upon approval by EPA, the Additional Response Action Plan shall be incorporated into this Order as a requirement of this Order and shall be an enforceable part of this Order as if fully set forth herein. Upon approval of the Additional Response Action Plan pursuant to the procedures set forth in Section XII (EPA Review of Submissions), Respondents shall implement the Additional Response Action Plan according to the standards, specifications, and schedule in the approved Additional Response Action Plan.

XII. ENDANGERMENT AND EMERGENCY RESPONSE

A. In the event of any action or occurrence after the effective date of this Order which causes or threatens a release of a

hazardous substance or which may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such release or endangerment, and shall immediately notify EPA's Project Coordinator, or, if the Project Coordinator is unavailable, EPA's alternative Project Coordinator. If neither of these persons is available, Respondents shall notify the EPA Region IV Hotline at (404) 562-8700. Respondents shall take such action in consultation with EPA Project Coordinator and in accordance with all applicable provisions of this Order, including, but not limited to, the Health and Safety/Contingency Plans developed pursuant to the SOW. In the event that Respondents fail to take appropriate response action as required by this Section, and EPA takes that action instead, EPA reserves the right to pursue reimbursement of all EPA costs attributable to the response action that are not inconsistent with the NCP. Nothing in the preceding paragraph shall be deemed to limit any authority of the United States to take, direct, or order any appropriate action necessary to protect human health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the Site.

XIII. EPA REVIEW OF SUBMISSIONS

A. Upon receipt of any plan, report, or other item which is required to be submitted for approval pursuant to this Order, EPA shall, in writing, either: (1) approve the submission; or (2) disapprove the submission, notifying Respondents of deficiencies.

If such submission is disapproved, EPA shall either: (1) notify Respondents that EPA will assume the responsibility for modifying the submission to correct the deficiencies, including, if necessary, the underlying Work; or (2) direct Respondents to modify the submission and, if necessary, the underlying Work, to correct the deficiencies.

- B. In the event of approval or modification by EPA, Respondents shall proceed to take any action required by the plan, report, or other item, as approved or modified.
- C. Upon receipt of a written notice of disapproval and directive for modification, Respondents shall, within thirty (30) days or such other time as specified by EPA in its notice of disapproval or request for modification, correct the deficiencies and resubmit the plan, report, or other item for approval.

 Notwithstanding the notice of disapproval, Respondents shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission.
- D. If, upon resubmission, the plan, report, or item is not approved, Respondent shall be deemed to be in violation of this Order.
- E. The provisions of this Order shall govern all proceedings regarding the Work performed pursuant to this Order. In the event of any inconsistency between this Order and any required deliverable submitted by Respondents, the inconsistency will be resolved in favor of this Order.

XIV. PROGRESS REPORTS

- A. In addition to the deliverables set forth in this Order, Respondents shall submit written monthly progress reports to EPA with respect to actions and activities undertaken pursuant to this Order. The progress reports shall be submitted on or before the 5th day of each month beginning thirty (30) days following the effective date of this Order. Respondents' obligation to submit progress reports continues until EPA gives Respondents written notice that Respondents have demonstrated, to EPA's satisfaction, that all of the terms of this Order, including any additional tasks which EPA has determined to be necessary, have been completed. In addition, EPA may request periodic briefings by Respondents to discuss the progress of the Work.
- B. At a minimum, these progress reports shall: (1) describe the actions which have been taken to comply with this Order during the prior month; (2) include all results of sampling and tests and all other data received by Respondents and not previously submitted to EPA; (3) include all plans, reports, deliverables, and procedures completed under the work plans during the previous month; (4) describe all work planned for the next month with schedules relating such work to the overall project schedule for RA completion; and (5) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to mitigate or address any actual or anticipated problems or delays.
- C. Upon the occurrence of any event during performance of the Work or additional response actions which, pursuant to Section

103 of CERCLA, 42 U.S.C. § 9603, requires reporting to the National Response Center, Respondents shall promptly orally notify the EPA Project Coordinator, or in the event of the unavailability of the EPA Project Coordinator, the EPA Region 4 Hotline at (404) 562-8700, in addition to the reporting required by Section 103 of CERCLA, 42 U.S.C. § 9603. Within ten (10) days of the onset of such an event, Respondents shall furnish to the EPA a written report setting forth the events which occurred and the measures taken, and to be taken, in response thereto. Within thirty (30) days of the conclusion of such an event, Respondents shall submit a report setting forth all actions taken.

D. Respondents shall submit each year, within thirty (30) days of the anniversary of the effective date of this Order, a summary report to EPA setting forth the status of the Work which shall at a minimum include a statement of tasks accomplished in the preceding year, a statement of tasks remaining to be accomplished, and provide a schedule for implementation of the remaining Work.

XV. QUALITY ASSURANCE SAMPLING AND DATA ANALYSIS

A. Respondents shall use the quality assurance, quality control, and chain of custody procedures in accordance with EPA's "Interim Guidelines and Specifications For Preparing Quality Assurance Project Plan" (QAMS-005/80) and the "EPA Region 4, Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual" (U.S. EPA Region 4, Environmental Services Division, May 1996), and subsequent amendments to such guidelines, while conducting all sample collection and analysis

activities required herein by any plan. Respondents shall assure that EPA personnel or authorized representatives are allowed access to any laboratory utilized by Respondents in implementing this Order.

- B. Respondents shall make available to EPA the results of all sampling and/or tests or other data generated by Respondents with respect to the implementation of this Order, and shall submit these results in monthly progress reports as described in Section XIV (Progress Reports) of this Order.
- C. At the request of EPA, Respondents shall allow split or duplicate samples to be taken by EPA, and/or their authorized representatives, of any samples collected by Respondents pursuant to the implementation of this Order. Respondents shall notify EPA not less than fourteen (14) days in advance of any sample collection activity. In addition, EPA shall have the right to take any additional samples that EPA deems necessary.
- D. Respondents shall ensure that the laboratory(ies) utilized by Respondents for analyses participates in an EPA quality assurance/quality control program equivalent to that which is followed by EPA and which is consistent with EPA document QAMS-005/80. In addition, EPA may require Respondents to submit data packages equivalent to those generated in the EPA Contract Laboratory Program (CLP) and may require laboratory analysis by Respondents of performance samples (blank and/or spike samples) in sufficient number to determine the capabilities of the laboratory.
- E. Notwithstanding any provision of this Order, the United

States hereby retains all of its information gathering, inspection and enforcement authorities and rights under CERCLA, the Solid Waste Disposal Act (SWDA), 42 U.S.C. §§ 6901 et seq., and any other applicable statutes or regulations.

XVI. COMPLIANCE WITH APPLICABLE LAWS

- A. All actions by Respondents pursuant to this Order shall be performed in accordance with the requirements of all applicable or relevant and appropriate laws, as required by CERCLA and the NCP. The United States has determined that the activities contemplated by this Order are consistent with the NCP.
- B. Except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and the NCP, no permit shall be required for any portion of the Work conducted entirely on the Site. Where any portion of the Work requires a federal or state permit or approval under CERCLA and the NCP, Respondents shall submit on a timely basis applications and take all other actions necessary to obtain all such permits or approvals.
- C. This Order is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.
- D. Respondents shall include, in all contracts or subcontracts entered into for Work required under this Order, provisions stating that such contractors or subcontractors, including their agents and employees, shall perform all activities required by such contracts or subcontracts in compliance with all applicable laws and regulations. Respondents shall provide a certification to the United States that such provision has been included in its contracts and subcontracts, within fifteen (15) days of final

execution of contracts for Operation and Maintenance, and Performance Monitoring work.

XVII. PROJECT COORDINATOR

A. All communications, whether written or oral, from Respondents to EPA shall be directed to EPA's Project Coordinator or Alternate Project Coordinator who shall be a Remedial Project Manager (RPM) or On-Scene Coordinator (OSC). EPA's Project Coordinator is:

Al Cherry Remedial Project Manager U.S. EPA Agency, Region 4 61 Forsyth St., S.W. Atlanta, Georgia 30303 (404) 562-8828

EPA's Alternate Project Coordinator is:

Jan Rogers, Chief South Carolina Section S.C. Site Management Section U.S. EPA, Region 4 61 Forsyth St, S.W. Atlanta, Georgia 30303 (404) 562-8793

- C. EPA has the unreviewable right to change its Project
 Coordinator or Alternate Project Coordinator. If EPA changes its
 Project Coordinator or Alternate Project Coordinator, EPA will
 inform Respondents in writing of the name, address, and telephone
 number of the new Project Coordinator or Alternate Project
 Coordinator.
- D. EPA's Project Coordinator and Alternative Project
 Coordinator shall have the authority lawfully vested in a RPM and
 OSC by the National Contingency Plan, 40 C.F.R. Part 300. In
 addition, EPA's Project Coordinator or Alternative Project
 Coordinator shall have authority, consistent with the National

Contingency Plan, to halt any work required by this Order and to take any necessary response action.

E. The absence of the EPA Project Coordinator from the Site shall not be cause for stoppage or delay of Work.

XVIII. SITE ACCESS

A. At all reasonable times from the effective date of this Order EPA and its authorized representatives and contractors shall have the authority to enter and freely move about all property at the Site and off-Site areas to which access is required to implement this Order, including areas subject to or affected by the cleanup or where documents required to be prepared or maintained by this Order are located, to the extent access to the property is controlled by or available to Respondents. Access shall be allowed for the purposes of conducting any activity authorized by or related to this Order, including but not limited to: 1) inspecting conditions, activities, the results of activities, records, operating logs, and contracts related to the Site or Respondents and its representatives or contractor pursuant to this Order; 2) reviewing the progress of Respondents in carrying out the terms of this Order; 3) conducting tests or inspections as EPA or its authorized representatives or contractors deem necessary to verify data or information submitted to EPA, take samples or investigate contamination at or near the Site; 4) assess the need for planning and implementing additional remedial or response activities at or near the Site; or 5) using a camera, sound recording device or other documentary-type equipment.

XIX. ACCESS TO SITE NOT OWNED BY RESPONDENTS

- If the Site, or the off-Site area that is to be used for access, or other property subject to or affected by the cleanup or where documents required to be prepared or maintained by this Order are located, is controlled or owned in whole or in part by parties other than Respondents, Respondents will obtain, or use their best efforts to obtain, access agreements from such parties within thirty (30) days of the effective date of this Order. Such agreements shall provide access for EPA, its contractors and oversight officials, the State and its contractors, and Respondents or Respondents' authorized representatives and contractors, and such agreements shall specify that Respondents are not EPA's representative with respect to liability associated with Site activities. Copies of such agreements shall be provided to EPA prior to Respondents' initiation of field Respondents' best efforts shall include providing activities. reasonable compensation to any off-Site property owner.
- B. If access agreements are not obtained within the time referenced above, Respondents shall immediately notify EPA in writing of its failure to obtain access. EPA may use its legal authorities to obtain access for Respondents, may perform those tasks or activities requiring access with EPA contractors, or may terminate the Order if Respondents cannot obtain access agreements. If EPA performs those tasks or activities requiring access with EPA contractors and does not terminate the Order, Respondents shall perform all other activities not requiring such access, and shall be liable to EPA for reimbursement of all

costs, including attorney fees, incurred in performing such activities. Respondents shall integrate the results of any such tasks undertaken by EPA into their reports and deliverables. EPA reserves the right to seek cost recovery for all costs and attorney fees incurred by the United States to obtain access for Respondents.

C. Notwithstanding any provision of this Order, the United States retains all of its access authorities and rights under CERCLA and any other applicable statutes or regulations.

XXI. ACCESS TO INFORMATION AND DATA/DOCUMENT AVAILABILITY

- A. Respondents shall provide to EPA and its authorized presentatives, upon request, access to inspect and/or copy all do ments and information in its possession and/or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Order, including all files, records, documents, photographs, sampling and analysis records, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information relating to remedial activities and other Work required under the Order.
- B. Respondents may assert a claim of business confidentiality covering part or all of the information submitted to EPA pursuant to the terms of this Order under 40 C.F.R. § 2.203, to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). This claim shall be asserted in the manner described by 40 C.F.R. § 2.203(b) and shall be substantiated by Respondents at the time the assertion is made.

Information determined to be confidential by EPA will be given the protection specified in 40 C.F.R. Part 2. If no claim of confidentiality accompanies specific documents or information when they are submitted to EPA, or if EPA has notified the Respondents that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA and 40 C.F.R. § 2.203(b), the public may be given access to such documents or information by EPA or the State without further notice to Respondents.

- C. Respondents shall not assert confidentiality claims with respect to any data related to Site conditions, sampling, or monitoring.
- D. Respondents shall maintain, for the period during which this Order is in effect, an index of documents that Respondents claim contain privileged information or confidential business information. The index shall contain, for each document, the date, author, addressee, and subject of the document. Upon written request from EPA, Respondents shall submit a copy of the index to EPA.

XXII. RECORD PRESERVATION

A. Respondents shall provide to EPA, upon request, copies of all documents and information within, or which come within, their possession and/or control or the control of their contractors or agents relating to activities at the Site or to the implementation of this Order, 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, 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. Until EPA provides written notification that the Work has been completed pursuant to Section IX (Certification of Completion), Respondents shall preserve and retain, and shall instruct its contractors and agents to preserve and retain, all documents, records, and information of whatever kind, nature, or description relating to the performance of the Work.
- C. All records and documents in Respondents' possession at any time prior to termination of this Order, that relate in any way to the Site shall be preserved and retained by Respondent for a minimum of ten (10) years after EPA provides written notification, pursuant to Section IX (Certification of Completion) of this Order, that the Work has been completed. Respondents shall acquire and retain copies of all documents that relate to the Site and that are in the possession of theirs employees, agents, accountants, contractors, or attorneys. After this ten (10)-year period, Respondents shall notify EPA at least ninety (90) days before the documents are scheduled to be destroyed and, upon request of EPA, shall deliver said records or documents to EPA at no cost.
- D. EPA has the discretion to request that all records and documents be retained for a longer period of time by Respondent.
- E. Within 15 days after the effective date of this Order,

Respondents shall submit a written certification to EPA's Project Coordinator that they have not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information relating to their potential liability with regard to the Site since notification of potential liability by the United States or the State or the filing of suit against it regarding the Site. Respondents shall not dispose of any such documents without prior approval by EPA. Respondents shall, upon EPA's request and at no cost to EPA, deliver the documents or copies of the documents to EPA.

XXIII. <u>DELAY IN PERFORMANCE</u>

- A. Any delay in performance of this Order that, in EPA's judgment, is not properly justified by Respondents under the terms of this paragraph shall be considered a violation of this Order. No delay in performance of this Order shall affect Respondents' obligations to fully perform all obligations under the terms and conditions of this Order.
- B. Respondents shall notify EPA of any delay or anticipated delay in achieving compliance with any requirement of this Order. Such notification shall be made by telephone to EPA's Project Coordinator or Alternate Project Coordinator within 48 hours after Respondents first knew or should have known that an event might cause a delay. Respondents shall adopt all reasonable measures to avoid or minimize any such delay. Within five (5) business days after notifying EPA by telephone, Respondent shall provide written notification fully describing the nature of the delay, the reasons the delay is beyond the control of the

Respondents, any defenses under Section 106(b)(1), 42 U.S.C. § 9606(b)(1), available to Respondents for failing to comply with any relevant requirements of this Order, the measures planned and taken to minimize the delay, and a schedule for implementing the measures that will be taken to mitigate the effect of the delay. Financial inability to perform the Work, increased costs or expenses associated with implementation of the activities required by this Order, or failure to attain the Performance Standards shall not be considered circumstances beyond the control of Respondents.

XXIV. ASSURANCE OF ABILITY TO COMPLETE WORK AND INSURANCE

Respondents shall demonstrate their ability to complete the Work required by this Order and to pay all claims that arise from the performance of the Work by obtaining, and presenting to EPA within thirty (30) days of the effective date of this Order, one of the following: (1) a performance bond; (2) a letter or letters of credit; (3) a guarantee by a third party; or (4) internal financial information to allow EPA to determine that Respondents have sufficient assets available to perform the Work. Respondents shall demonstrate financial assurance in an amount no less than the estimated cost for the O&M and PSM of the remedy contained in the Record of Decision for the Site. If Respondents seek to demonstrate ability to complete the Work by means of internal financial information, or by guarantee of a third party, it shall re-submit such information annually, on the anniversary of the effective date of this Order. If EPA determines that such internal financial information is inadequate, Respondents shall,

within thirty (30) days after receipt of written notice of EPA's determination, obtain and present to EPA for approval one of the other three forms of financial assurance listed above.

Respondents' lack of ability to demonstrate financial ability to complete any aspect of the Work shall not excuse compliance with this Order or any term thereof.

No later than ten (10) days prior to commencing any Work at the Site pursuant to this Order, Respondents shall secure, and shall maintain until the fifth anniversary of EPA's written notification, pursuant to Section IX (Certification of Completion) of this Order, that the Work has been completed, comprehensive general liability insurance with a combined single limit of at least five (5) million dollars naming the United States as an additional insured. No later than fifteen (15) days after the effective date of this Order, Respondents shall secure, and shall maintain until the fifth anniversary of EPA written notification, pursuant to Section IX (Certification of Completion), that the Work has been completed, automobile liability insurance with limits of \$500,000 naming the United States as an additional insured. In addition, Respondents shall submit to EPA a certification that their contractors and subcontractors have adequate insurance coverage or have indemnification for liabilities for injuries or damages to persons or property which may result from the activities to be conducted by or on behalf of Respondents pursuant to this Order. Respondents shall ensure that such insurance or indemnification is maintained for the duration of the Work required by this

Order. Prior to commencement of the Work under this Order, Respondent shall provide to EPA certificates of such insurance and copies of the insurance policies. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to matters so insured by that contractor or subcontractor, Respondents need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

C. For the duration of this Order, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of workers' compensation insurance for all persons performing work on behalf of Respondents in furtherance of this Order.

XXV. REIMBURSEMENT OF RESPONSE COSTS

A. EPA reserves the right to demand that Respondents reimburse EPA for all response costs incurred by the United States including those costs incurred in overseeing Respondents' implementation of the requirements of this Order or in performing any response action which Respondents fail to perform pursuant to this Order. EPA may submit to Respondents, on a periodic basis, an accounting of all response costs incurred by the United States with respect to this Order. Response costs may include, but are not limited to, costs incurred by the United States in overseeing Respondents' implementation of the requirements of this Order and in performing activities as part of the O&M and community

relations, including any costs incurred while obtaining access for Respondents. Costs shall include all direct and indirect costs, including, but not limited to, time and travel costs of EPA personnel and associated indirect costs, contractor costs, cooperative agreement costs, compliance monitoring, inspection of O&M activities, Site visits, discussions regarding disputes that may arise as a result of this Order, review and approval or disapproval of reports, and costs of performing any Work which Respondents failed to perform pursuant to this Order. EPA's certified Agency Financial Management System summary data (SPUR Reports), or such other data summary as certified by EPA, shall serve as the basis for payment demands.

- B. EPA's demand for payment shall request that Respondents, within thirty (30) days of receipt of each EPA accounting, remit a certified or cashier's check for the amount of those costs. Interest shall accrue from the latter of the date that payment of a specified amount is demanded in writing, or the date of the expenditure. The interest rate is the rate established by the Department of the Treasury pursuant to 31 U.S.C. § 3717 and 4 C.F.R. § 102.13.
- C. Checks shall be made payable to "EPA Hazardous Substances Superfund" and shall include the name of the Site, the Site, identification number, the account number and the title of this Order. Checks shall be forwarded to:

EPA-REGION 4
Attn: Superfund Accounting
P.O. Box 100142
Atlanta, GA 30384

D. Respondents shall send copies of each check and transmittal letter to EPA's Project Coordinator.

XXVI. UNITED STATES NOT LIABLE

The United States, by issuance of this Order, assumes no liability for any injuries or damages to persons or property resulting from acts or omissions by Respondents, or their directors, officers, employees, agents, representatives, successors, assigns, contractors, or consultants in carrying out any action or activity pursuant to this Order. Neither EPA nor the United States may be deemed to be a party to any contract entered into by Respondents or their directors, officers, employees, agents, successors, assigns, contractors, or consultants in carrying out any action or activity pursuant to this Order.

XXVII. ENFORCEMENT AND RESERVATIONS

- A. EPA reserves the right to bring an action against Respondents under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any past or future response costs incurred by the United States related to the Site and not previously reimbursed by Respondent(s). This reservation shall include but not be limited to past costs, indirect costs, the cost of oversight, costs for compiling the cost documentation to support an oversight cost demand, as well as accrual of interest as provided in Section 107(a) of CERCLA.
- B. Notwithstanding any other provision of this Order, at any time during the response action, EPA may perform its own studies, complete the response action (or any portion of the response

action) as provided in CERCLA and the NCP, and seek reimbursement from Respondents for its costs, or seek any other appropriate relief.

- C. Nothing herein shall preclude EPA from continuing any existing enforcement actions and/or taking any additional enforcement actions, including modification of this Order or issuance of additional orders, and/or additional remedial or removal actions as EPA may deem necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA, 42 U.S.C. § 9606(a), et seq. or any other applicable law, or from seeking judicial enforcement of this Order. Respondents shall be liable under CERCLA Section 107(a), 42 U.S.C. § 9607(a), for the costs of any such additional actions.
- D. Notwithstanding any provision of this Order, the United States hereby retains all of its information gathering, inspection and enforcement authorities and rights under CERCLA, SWDA, and any other applicable statutes and regulations.
- E. Respondents shall be subject to civil penalties under Section 106(b) of CERCLA, 42 U.S.C. § 9606(b), of not more than \$25,000 for each day in which a violation of this Order occurs or such failure to comply continues. Failure to comply with this Order, or any portion hereof, without sufficient cause, may result in liability under Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), for punitive damages in an amount at least equal to, and not more than three times the amount of any costs incurred by the Fund (as defined in CERCLA) as a result of such failure to

take proper action.

F. Nothing in this Order shall constitute or be construed as a release from any claim, cause of action, or demand in law or equity against any person, firm, partnership, subsidiary or corporation for any liability it may have arising out of or relating in any way to the Site.

XXVIII. ADMINISTRATIVE RECORD

Upon request by EPA, Respondents must submit to EPA all documents related to the selection of the response action for possible inclusion in the administrative record file.

XXIX. EFFECTIVE DATE AND COMPUTATION OF TIME

This Order shall be effective on 15 days after this Order is signed by the Director of the Waste Management Division, EPA Region IV. All times for performance of ordered activities shall be calculated from this effective date. When computing any period of time under this Order, if the last day would fall on a Saturday, Sunday, or legal holiday, the period shall run until the next working day.

XXX. OPPORTUNITY TO CONFER

A. Respondents may, within five (5) days after this Order is signed by the Director of the Waste Management Division, EPA Region IV, make a written or oral request for a conference with EPA Region 4 to discuss this Order. If requested, the conference shall occur at 61 Forsyth St, S.W., Atlanta, GA 30303. All telephone communications regarding a conference should be directed to Marlene J. Tucker at (404) 562-9536, or to Al Cherry at (404) 562-8828. The written request for a conference may be

delivered to EPA by some means of personal delivery other than certified mail.

B. The purpose and scope of the conference shall be limited to issues involving the implementation of the response actions required by this Order and the extent to which Respondent(s) intend to comply with this Order. This conference is not an evidentiary hearing, and does not constitute a proceeding to challenge this Order. It does not give Respondents a right to seek review of this Order, or to seek resolution of potential liability, and no official stenographic record of the conference will be made. At any conference held pursuant to Respondents' request, Respondents may appear in person or be represented by an attorney or other representatives.

XXXI. NOTICE OF INTENT TO COMPLY

Respondents shall provide, not later than five (5) days after the effective date of this Order, written or verbal notice to EPA stating unequivocally whether they will comply with the terms of this Order. Any verbal notice must be confirmed in writing within two (2) days of the giving of such verbal notice. A written notice of intent (or written confirmation, as the case may be) may be delivered to EPA by some means of personal delivery other than certified mail. If Respondents do not provide notice within five (5) days as specified above, or if Respondents provide notice which does not state unequivocally that Respondent will comply with the terms of this Order, then Respondent shall be deemed to have failed and refused to comply with this Order and to have violated this Order. The written

notice or written confirmation required by this paragraph shall set forth, using facts that exist on or prior to the effective date of this Order, any "sufficient cause" defenses asserted by Respondents under Sections 106(b) and 107(c)(3) of CERCLA. The absence of a response by EPA to the notice required by this paragraph shall not be deemed to be an acceptance of Respondents' assertions.

XXXII. MODIFICATION

No material modifications shall be made to this Order without written notification to and written approval of EPA. The notification required by this Section shall set forth the nature of and reasons for the requested modification. No oral modification of this Order shall be effective. Modifications that do not materially alter the requirements of this Order, such as minor schedule changes, may be made upon the written approval of EPA. Nothing in this paragraph shall be deemed to alter EPA's authority to supervise and modify this Order.

so Ordered, this 21th day of July, 1997.

Ьv.

Richaffd Green

Acting Director, Waste Management Division

Regi**p**n 4

U.S./Environmental Protection Agency

APPENDICES

Appendix 1 Record of Decision

Appendix 2 Scope of Work

Appendix 3 Site Map A

Appendix 4 Site Map B

In the Matter of the Administrative Settlement Agreement and Order on Consent for Payment of Costs; Carolawn Superfund Site; Fort Lawn, Chester County, South Carolina

APPENDIX "C"

MAP OF THE SITE

IN RE: the above-entitled matter

