

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III

IN THE MATTER OF:)

Occidental Chemical Corp.)
Superfund Site;)
Montgomery County, PA)

Occidental Chemical Corp.)

Bridgestone/Firestone, Inc.)

Respondents)

Proceeding Under Section 106)
of the Comprehensive)
Environmental Response,)
Compensation, and Liability)
Act of 1980, as amended,)
42 U.S.C. § 9606)

Docket No. III-94-26-DC

ADMINISTRATIVE ORDER
FOR REMEDIAL DESIGN AND REMEDIAL ACTION

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ADMINISTRATIVE ORDER
FOR REMEDIAL DESIGN AND REMEDIAL ACTION

Having determined the necessity for implementation of remedial response actions at the Occidental Chemical Corporation Superfund Site in Montgomery County, Pennsylvania ["Site"], the United States Environmental Protection Agency ["EPA"] hereby Orders as follows:

I. JURISDICTION

A. This Administrative Order ["Order"] is issued pursuant to the authority vested in the President of the United States by section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9606, as amended ["CERCLA"], and delegated to the Administrator of EPA by Executive Order No. 12580 [52 Fed. Reg. 2923 (January 29, 1987)], and further delegated to the Regional Administrators of EPA by EPA Delegation No. 14-14-B (September 13, 1987).

B. Prior notice of this Order has been given to the Commonwealth of Pennsylvania pursuant to section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

II. PARTIES BOUND

A. This Order applies to and is binding upon the Respondents and their successors and assigns.

B. Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter such Respondent's responsibilities under this Order.

C. In the event of any change in ownership or control of any Respondent, such Respondent shall notify EPA, in writing, no later than thirty (30) days after such change, of the nature and effective date of such change. Such Respondent shall provide a copy of this Order to its successor(s) before any change becomes irrevocable.

D. Respondents shall provide a copy of this Order to each contractor hired to perform the Work (as defined below) required by this Order and to each person representing any Respondent with respect to the Site or the Work and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Order. Respondents or their contractors shall provide written notice of the Order to all subcontractors hired to perform any portion of the Work required by this Order. Respondents shall nonetheless be responsible for ensuring that

their contractors and subcontractors perform the Work contemplated herein in accordance with this Order. Unacceptable performance by Respondents' contractors or subcontractors shall not excuse Respondents from any obligations of this Order. With regard to the activities undertaken pursuant to this Order, each contractor and subcontractor shall be deemed to be in a contractual relationship with the Respondents within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

E. In the event that any of the Respondents file for bankruptcy or is placed involuntarily in bankruptcy proceedings, such Respondent shall notify EPA within three (3) days of such filing.

F. Respondents are jointly and severally responsible for implementing all of the requirements of this Order. The success or failure by any one of the Respondents to comply with all or any part of this Order shall not in any way excuse or justify noncompliance by the other Respondent.

III. FINDINGS OF FACT

A. Site Location, History and Uses of the Occidental Site

1. The Occidental Chemical Corporation Superfund Site is located 1/2 mile southeast of the borough of Pottstown, Montgomery County, Pennsylvania. The Schuylkill River surrounds the site on three sides forming the western, southern, and eastern boundaries. The Site contains an active polyvinyl chloride manufacturing plant (the plant), located on

approximately 257 acres. The plant consists of active manufacturing, office and outdoor storage areas as well as inactive manufacturing/storage building space. Paved parking areas, roadways, and open land are also present at the Site. The Site also contains a closed seventeen acre solid waste landfill, a seven acre active industrial waste landfill, four inactive unlined earthen lagoons, two active lined lagoons, and a former Trichlorethylene ("TCE") handling area.

2. The Site was owned and operated by Jacobs Aircraft Engine Company (JAEC) prior to the Second World War. JAEC manufactured aircraft engines. The Defense Plant Corporation (DPC) purchased the Site from JAEC in 1942. JAEC continued to operate and manufacture aircraft engines for DPC until late 1944. In 1945, DPC leased the Site to Firestone Tire and Rubber ("FTR"). FTR through corporate merger(s) and/or reorganization became Bridgestone/Firestone Inc. (BFI). FTR purchased the Site in 1950. FTR manufactured tires and polyvinyl chloride (PVC) resins at the Site. In addition, during FTR's ownership of the Site, the earthen lagoons were used for the storage of PVC sludge until 1974. In 1974 the Pennsylvania Department of Environmental Resources, ("PADER"), ordered FTR to discontinue the use of these lagoons.

3. FTR sold the Site to Hooker Chemicals and Plastics Corporation (Hooker) in 1980. Hooker, who continued to manufacture PVC at the Site, later became the Occidental Chemical Corporation (OCC).

4. In 1984, while the Site was owned by OCC, a spill of TCE occurred during the transfer of TCE from a railroad tank car to a holding tank. As a result of the spill, approximately 898 tons of contaminated soil were removed and disposed of off site.

5. OCC currently owns the Site and continues to manufacture PVC there.

B. Response Actions and Investigations Performed at the Site

1. From approximately 1942 through 1985, JAEC and eventually the Respondents operated a seventeen acre solid waste landfill at the Site. In 1973, the Pennsylvania Department of Environmental Resources (PADER) issued a permit to FTR, the owner and operator during that period, allowing FTR to continue to operate the landfill. In 1977, FTR applied for a permit to expand the landfill. PADER required that FTR conduct an additional technical task when the permit was revised. PADER directed FTR to have the plant production wells operate continuously, thereby acting as a contingent leachate collection system. In 1979, FTR detected TCE in the groundwater within the bedrock aquifer. By utilizing the leachate collection system, the process wells would continuously pump the bedrock ground water to the surface for use in the plant's production process. The leachate collection system is still in operation today and continues to control the direction of the ground water at the Site. The leachate collection system directs the flow towards the center of the Site which acts to contain the contaminant plumes, therefore preventing a release of contaminants to the

adjacent river or groundwater. In 1985, the landfill was closed and capped by OCC with an impermeable synthetic liner system in accordance with a Closure Plan approved by PADER. OCC also installed a monitoring well network to comply with PADER's quarterly ground water monitoring requirements for the closed landfill.

2. Four earthen lagoons are currently present on the Site. These lagoons were used for the storage of PVC sludge until 1974 when PADER ordered FTR to discontinue their use. The earthen lagoons were never formally decommissioned. However, EPA has no knowledge of any additional disposal of material into the earthen lagoons since FTR discontinued their use in 1980.

3. From the late 1940's until 1987, TCE was used in the manufacturing process at the Site by the Site operators, including FTR and OCC. From 1979 through 1983, FTR and later OCC, sampled and analyzed process water wells at various times to determine if there was TCE contamination which had migrated from the TCE Handling area soils into the ground water. The resulting analysis revealed the presence of TCE in these wells at concentrations which exceeded the maximum allowed (5 ppb TCE) by the Safe Drinking Water Act¹, 42 U.S.C. §§ 300f to j-26. The highest concentrations of TCE were detected in the soils of the TCE handling area of the Site. The concentrations ranged from 10 to 295 ppb. In early 1984, approximately 898 tons of soil

¹ Also known as the Public Health Service Act (42 U.S.C. §§ 300f to j-26). References to Maximum Concentration Levels can be found at PHSA § 300g-1 (the National Drinking Water Regulations).

contaminated with TCE were removed and disposed of off site. The removal of the contaminated soil reduced the migration of TCE from the soil to the ground water.

4. On June 24, 1988, pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA proposed to place the Occidental Chemical Corporation Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B (53 Fed. Reg. 23987). The Occidental Chemical Corporation Site was placed on the NPL on September 29, 1989.

5. The Remedial Investigation/Feasibility Study (RI/FS) for the Site was conducted between 1990-1993. The data obtained from the RI/FS has been used to evaluate various chemical migration routes and risks to human health and the environment at the Site. The primary focus of the RI/FS was to determine the extent and fate of chemicals at the Site, particularly TCE in the bedrock aquifer. The RI also examined the following: Site characterization sampling of the alluvial soils and groundwater; Schuylkill River surface water and sediment; surface water and sediment from the sediment pond and drainage swale; soil and sediment from the earthen and lined lagoons; as well as background soil samples. The ecological investigation included wetlands delineation, plant community delineation, wildlife and habitat surveys, and a receptor evaluation.

6. The following hazardous substances were detected during the RI:

- a. On-site Ground Water

Five volatile organic compounds (VOCs) were identified as the chemicals of concern in the ground water at the Site. Trichloroethylene (TCE), trans-1,2-dichloroethene (trans-1,2,-DCE), ethylbenzene, vinyl chloride, and styrene exceed the EPA maximum contaminant levels (MCLs) for those compounds in drinking water.

b. Earthen Lagoons

The RI demonstrated that the four earthen lagoons contained volatile and semi-volatile organic compounds. The chemicals are present as a result of past PVC manufacturing processes at the Site conducted by FTR. Volatile organic compounds detected in the earthen lagoons include trichloroethylene, trans-1,2-dichloroethene, vinyl chloride monomer, 1,2-dichloroethane, styrene, and ethylbenzene. Two semi-volatile organic compounds found in the earthen lagoons were Benzoic acid and bis(2-ethylhexyl) phthalate. These chemicals are associated with the manufacture of PVC.

c. Release of Hazardous Substances at the Site and Resultant Endangerment

1. The following substances, reported in the RI/FS Report, were found on and in the vicinity of the Site and are "hazardous substances" within the meaning of Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), because they are listed at 40 C.F.R. § 302.4. Carcinogens are classified by the EPA according to the following weight-of-evidence categories: a Class A Human Carcinogen means there is sufficient evidence from epidemiological studies to

support a causal association between exposure and cancer; a Class B1 Probable Human Carcinogen means there is limited evidence of carcinogenicity of humans from epidemiological studies; and a Class B2 Possible Human Carcinogen means there is limited evidence of carcinogenicity in animals. Listed below are hazardous substances for which the toxicity has been previously described.

a. **1,2-Dichloroethane.** 1,2-dichloroethane (1,2-DCA) is a Class B2 carcinogen. It is a chlorinated hydrocarbon organic solvent which exists as a colorless, flammable liquid with a characteristic chloroform-like odor. Vapors produce irritation of the respiratory tract and conjunctiva, corneal clouding, equilibrium disturbances, narcosis and abdominal cramps.

b. **Trichloroethene (TCE).** TCE is a Class B2 carcinogen. TCE also effects bone marrow, the central nervous system, the liver and the kidneys in animals and humans. Non-cancer effects include narcosis, enlargement of the liver and the kidneys with accompanying enzyme changes, depressed hemoglobin synthesis, and immunosuppression. Under certain conditions, TCE degrades to 1,2-dichloroethene and vinyl chloride.

c. **Vinyl Chloride.** Vinyl chloride has been classified as a known human carcinogen (Class A). It is a colorless, flammable gas. Vinyl chloride is a local skin and eye irritant and may cause frostbite upon evaporation.

Acute vinyl chloride exposure in humans can result in central nervous system depression, lightheadedness, nausea, and dulling of visual and auditory responses. Death can result from severe acute vinyl chloride exposure.

d. **Ethylbenzene.** Ethylbenzene is an aromatic hydrocarbon organic solvent which exists as a clear colorless, highly flammable liquid with a pungent odor. Ethylbenzene is not classifiable (Class D) with respect to human carcinogenicity due to lack of animal carcinogenesis bioassays and human data. Acute exposure to ethylbenzene has been reported to produce irritation of the eyes, throat, and skin, headache, dizziness, and fatigue in humans.

e. **Styrene.** Styrene is an aromatic hydrocarbon organic solvent which exists as a colorless, refractive, oily liquid. Styrene exposure has been shown to result in irritation, itching and lacrimation of the eyes as well as narcosis. Styrene is classified as a probable human carcinogen (Class B2).

2. This Site presents a potential public health concern due to the risk to human health resulting from possible exposure to hazardous substances at concentrations that may result in adverse health effects. Human exposure to contaminants from the Site can result from ingestion, inhalation, and direct dermal contact with contaminated bedrock ground water and/or the earthen lagoon soils. For the purposes of evaluating human exposure to the bedrock aquifer, adults and child residents were considered

to be potential human receptors. It was assumed that the bedrock aquifer ground water is the sole source of water for residential use.

3. Worker exposure under a current use scenario and residential exposure under the future use scenario were evaluated for the earthen lagoons.

D. The Record of Decision

1. 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 on/or about April 20, 1993, and provided opportunity for public comment on the proposed remedial action.

2. The decision by EPA on the remedial action to be implemented at the Occidental Chemical Corporation Superfund Site is embodied in a final Record of Decision ("ROD"), executed on June 30, 1993, on which the Commonwealth had a reasonable opportunity to review and comment. The Record of Decision is attached to this Order as Attachment A and is incorporated by reference. The Record of Decision is supported by an administrative record that contains the documents and information upon which EPA based the selection of the response action.

3. Sampling conducted during the RI confirmed the presence of ground water contamination beneath the Site. VOCs, including trichloroethylene, trans-1,2-dichloroethene, vinyl chloride, styrene, and ethylbenzene are the principal chemicals in the bedrock ground water. The ground water beneath the Site is

currently being pumped for use in OCC's manufacturing process at the Site. The pumping of ground water from the bedrock beneath the Site has prevented the migration of contamination to areas surrounding the Site. Consequently, the ground water does not pose a present risk to residents downgradient of the Site or to the Schuylkill River as long as the pumping of the ground water from the bedrock continues. However, the concentrations of the five principal chemicals, discussed in § IIIC. above exceed the contaminant levels allowable under the Safe Drinking Water Act. In addition, if a future onsite resident should attempt to utilize the groundwater as a possible potable water supply, that use would represent an unacceptable future cancer risk and an unacceptable noncancer health effect risk.

4. The RI also demonstrated that an unacceptable noncancer health effect risk would result if a future resident were to come in contact with the earthen lagoon soils.

E. Description of Respondents

1. From 1945 to 1980, Firestone Tire and Rubber (FTR), owned and/or operated the Site. Respondent Bridgestone/Firestone, Inc. (BFI), an Ohio corporation, is a successor corporation to FTR. FTR used TCE at the Site from 1945 until 1980 in the manufacture of Polyvinyl Chloride (PVC). TCE was added to the plant process water used in PVC reactors. Spills occurred during FTR's ownership which have contributed to the ground water contamination at the Site.

2. Respondent Occidental Chemical Corporation (OCC), a New

York corporation, has owned and/or operated the Site since 1980. OCC has manufactured polyvinyl chloride at the facility throughout its association with the Site. From 1980 through 1987, OCC used TCE in the manufacturing of polyvinyl chloride. Spills have occurred during OCC's ownership which have contributed to the ground water contamination at the Site.

IV. CONCLUSIONS OF LAW AND DETERMINATIONS

A. The Occidental Chemical Corporation Site is a "facility" as defined in section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

B. "Hazardous substances," including those listed in Paragraph III of this Order, as that term is defined in section 101(14) of CERCLA, 42 U.S.C. § 9601(14), have been disposed of, deposited, stored, placed, or otherwise come to be located on and remain at the Site.

C. The hazardous substances at the Site are being released or threatened to be released, as "release" is defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22), and may present an imminent and substantial endangerment to the public health or welfare or the environment.

D. Respondents Occidental Chemical Corporation (OCC) and Bridgestone/Firestone, Inc. (BFI) and BFI's predecessor FTR are (a) "person"(s) within the meaning of Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

E. Respondent OCC is an owner or operator of a vessel or a

facility (the Site) within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. §9607(a)(1).

F. Respondents OCC and BFI, through BFI's predecessor (FTR), are "persons" who at the time of disposal of any hazardous substance owned or operated the facility (the Site) at which such hazardous substances were disposed of within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. §9607(a)(2).

G. Pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), the Respondents are jointly and severally liable for carrying out the provisions of this Order.

H. EPA has determined that in order to protect against an imminent and substantial endangerment to the public health and release of a hazardous substance from a facility, the actions required by this Order must be undertaken.

V. DEFINITIONS

A. Unless otherwise expressly provided herein, terms used in this Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Order or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

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

2. "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 close of business of the next working day.

3. "Duly Authorized Representative" shall mean a person designated in accordance with the procedures set forth in 40 C.F.R. § 270.11(b).

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

5. "PADER" shall mean the Commonwealth of Pennsylvania and any successor departments or agencies of the State.

6. "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, but not limited to, any amendments thereto.

7. "Operable Unit" shall mean that portion of Site remediation work specified in a Record of Decision issued pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604 and defined in 40 C.F.R. § 300.5.

8. "Operation and Maintenance" or "O & M" shall mean all activities required to maintain the effectiveness of the Remedial Action (as defined below) as required under the Operation and Maintenance Plan approved or developed by EPA pursuant to this

Order.

9. "Order" shall mean this Order [and all appendices attached hereto]. In the event of conflict between this Order and any appendix, this Order shall control.

10. "Owner Respondent" shall mean Occidental Chemical Corporation Inc.

11. "Paragraph" shall mean a portion of this Order identified by an arabic numeral or an upper case letter.

12. "Parties" shall mean the EPA and the Respondents.

13. "Performance Standards" shall mean those cleanup standards, standards of control, and other substantive requirements, criteria or limitations that are used to determine whether the objectives of the ROD and this Order are being achieved. Performance Standards include those set forth on pages 81-90 of the ROD, attached hereto as Appendix A.

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

15. "Record of Decision" or "ROD" shall mean the EPA Record of Decision relating to the Site set forth in Appendix A hereto and signed on June 30, 1993, by the Regional Administrator, EPA Region III, and all attachments thereto.

16. "Remedial Action" shall mean all activities, as defined by Section 101(24) of CERCLA, 42 U.S.C. § 9601(24), except for Remedial Design and Operation and Maintenance, to be undertaken by the Respondents to implement both the ROD and the final plans

and specifications submitted by the Respondents pursuant to the Remedial Design Work Plan and approved by EPA.

17. "Remedial Action Work Plan" shall mean a plan for Remedial Action, including a schedule for implementation of Remedial Action, submitted by Respondents and approved by EPA pursuant to Section VII.C(9) of this Order.

18. "Remedial Design" shall mean those activities to be undertaken by the Respondents pursuant to the Remedial Design Work Plan to develop the final plans and specifications for the Remedial Action as specified in the ROD.

19. "Remedial Design Work Plan" shall mean a plan for Remedial Design, including a schedule for remedial design work, submitted by the Respondents and approved by EPA pursuant to Section VII.C. of this Order.

20. "Respondents" shall mean Occidental Chemical Corporation Inc. and Bridgestone/Firestone Inc.

21. "Section" shall mean a portion of this Order identified by a roman numeral.

22. "Site" shall mean the Occidental Chemical Corporation Superfund site, encompassing approximately 257 acres, located at Armand Hammer Boulevard in Pottsgrove Township, Montgomery County, Pennsylvania described in Section III.A. and depicted more particularly on the map attached as Appendix B.

23. "State" or "Commonwealth" shall mean the Commonwealth of Pennsylvania.

24. "Supervising Contractor" shall mean the contractor

retained by the Respondents to carry out the Work under this Order and accepted by EPA pursuant to Section VII.B.

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

26. "Work" shall mean all activities Respondents are required to perform under this Order.

VI. GENERAL PROVISIONS

A. Compliance With Applicable Law

All activities undertaken by Respondents pursuant to this Order shall be performed in accordance with the requirements of all applicable federal and state laws and regulations.

Respondents must also comply with all applicable or relevant and appropriate requirements of all federal and state environmental laws as set forth in the ROD (Appendix A).

B. Permits

1. As provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. § 300.400(e), no permits shall be required for any portion of the Work conducted entirely on-Site.

However, the Respondents shall ensure that all portions of the Work on the Site shall meet the substantive requirements of any applicable or relevant and appropriate requirement subject to EPA's right of review and approval. Where any portion of the

off-site Work requires a federal, state or local permit or approval, Respondents shall timely submit complete applications and take all other actions necessary to obtain all such permits or approvals.

2. This Order is not, and shall not be construed to be, a permit issued pursuant to any federal, state or local statute, regulation or ordinance.

C. Notice of Obligations to Successors-in-Title

1. Within 15 days after the effective date of this Order, the Owner Respondent (OCC) shall record a certified copy of this Order with the Recorder's Office or Registry of Deeds or other appropriate office in Montgomery County, Commonwealth of Pennsylvania, in such manner as shall be effective to bring this Order to the attention of any person examining or researching the state and/or quality of the title to the real property constituting the Site or searching for any encumbrances, covenants, easements, liens, restrictions, or other limitations relating to said property. Thereafter, each deed, title, or other instrument of conveyance for property included in the Site shall contain a notice stating that the property is subject to this Order and any lien held by the EPA pursuant to Section 107(1) of CERCLA, 42 U.S.C. § 9607(1) and shall reference the recorded location of the Order and any restrictions applicable to the property under this Order.

2. The obligations of OCC with respect to the provision of access under Section XII (Access) and the implementation of

institutional controls pursuant to pages 86 of Appendix A shall be binding upon OCC and any and all persons who subsequently acquire any such interest (hereinafter "Successors-in-Title"). Within 15 days after the effective date of this Order, OCC shall record at the Recorder's Office or Registry of Deeds, or other appropriate office where land ownership and transfer records are maintained for the property, a notice of obligation to provide access under Section XII (Access) and related covenants. Each subsequent instrument conveying an interest to any such property included in the Site shall reference the recorded location of such notice and covenants applicable to the property.

3. OCC and any Successor-in-Title shall, at least thirty days prior to the conveyance of any such interest give written notice of this Order to the grantee and written notice to EPA of the proposed conveyance, including the name and address of the grantee, and the date on which notice of the Order was given to the grantee. In the event of any such conveyance, the Respondents' obligations under this Order including their obligations to provide or secure access pursuant to Section XII (Access), shall continue to be met by the Respondent. In addition, if the EPA approves, the grantee may perform some or all of the Work under this Order. In no event shall the conveyance of an interest in property that includes, or is a portion of, the Site release or otherwise affect the liability of the Respondents to comply with the Order.

D. Nothing in this Order shall constitute or be construed

as a release from any claim, cause of action, or demand in law or equity against any person, firm, partnership, or corporation not bound by this Order for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any Waste Materials found at, taken to, or taken from the Site.

E. This Order does not constitute any decision on preauthorization of funds under section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2).

F. Nothing herein shall constitute or be construed as a satisfaction or release from liability of Respondents or any other person.

G. Invalidation of any provision or requirement of this Order shall not affect the validity of any other provision or requirement of this Order.

H. Nothing in this Order, the Remedial Design Specifications, or Remedial Action Work Plan constitutes a warranty or representation of any kind by EPA that compliance with this Order will achieve the Performance Standards or that such compliance will foreclose EPA from seeking compliance with all terms and conditions of this Order including, but not limited to, the Performance Standards.

I. In the event EPA determines that Respondents have failed to implement any provision(s) of the Work in an adequate or timely manner, or have otherwise violated this Order, EPA may exercise any and all rights it may have, including but not

limited to, those expressly reserved in Section XVIII (Reservation of Rights) of this Order.

J. Respondents shall obtain all permits and authorizations necessary for any off-site work and shall timely submit complete applications and requests for any such permits and authorizations. This Order is not, and shall not be construed to be, a permit issued pursuant to any Federal, State or local statute or regulation.

VII. PERFORMANCE OF WORK BY RESPONDENTS

A. General Statement of Requirements/Permits

1. Based on the foregoing, and the Administrative Record supporting this Order, it is hereby Ordered that Respondents implement the ROD (attached hereto as Appendix A) in accordance with that document; CERCLA; the NCP; and the requirements and schedules specified in this Order including, but not limited to, the Performance Standards. Nothing in this Order, the Remedial Design, or Remedial Action Work Plan constitutes a warranty or representation of any kind by EPA that compliance with this Order will achieve the Performance Standards or that such compliance will foreclose EPA from seeking compliance with all terms and conditions of this Order including, but not limited to, the Performance Standards.

2. All actions and activities carried out by Respondents pursuant to this Order shall be performed in accordance with all applicable Federal and state laws and with

applicable EPA regulations, requirements, and guidance documents (and any applicable amendments to such laws, regulations, requirements, and guidance documents which take effect during the pendency of this Order).

3. In the event EPA determines that Respondents have failed to implement any provision(s) of the Work in an adequate or timely manner, or has otherwise violated this Order, EPA may exercise any and all rights it may have including, but not limited to, those rights expressly reserved in Section XVIII (Reservation of Rights) of this Order.

4. Respondents shall obtain all permits and authorizations necessary for off-site Work and shall timely submit complete applications and requests for any such permits or authorizations. This Order is not, and shall not be construed to be, a permit issued pursuant to any Federal, State, or local statute or regulation.

B. Selection of Contractor(s)

1. All aspects of the Work to be performed by Respondents pursuant to this Order shall be under the direction and supervision of qualified personnel, the selection of which shall be subject to acceptance or disapproval by EPA.

2. Remedial Design Professional(s) (a) Within fifteen (15) days after the acceptance of the Project Coordinator, Respondents shall notify EPA and the State in writing of the name, title, and qualifications of the contractor(s), including subcontractor(s), to be used in carrying out all Remedial Design activities

required by this Order. If at any time thereafter Respondents propose to change any such contractor(s), Respondents shall give written notification to EPA and the State and shall obtain acceptance from EPA before the new contractor(s) perform, direct, or supervise any Work under this Order. (b) EPA will notify Respondents in writing of its acceptance or disapproval of the selection of proposed contractor(s), including subcontractor(s). If EPA disapproves of the selection of Respondent's proposed contractor(s), Respondents shall submit to EPA and the State the names and qualifications of at least three (3) contractors that would be acceptable to Respondents within fourteen (14) days of receipt of EPA's disapproval of the selection of the contractor(s) previously proposed. Except as provided below, EPA will provide written notice of the name of the contractor(s) that EPA accepts. Respondents may select any accepted contractor(s) from that list and shall notify EPA and the State of the name of the contractor(s) selected within fourteen (14) days of EPA's designation of accepted contractors. Within fourteen (14) days of receipt of EPA acceptance of the Respondents' contractor(s), Respondents shall enter into an agreement with such contractor(s) selected by Respondents to perform the Work for which such contractor(s) were accepted by EPA. In the event EPA does not accept any of the contractors proposed in Respondents' list, Respondents shall be in violation of this Order. EPA may in such event direct Respondents to submit to EPA and the State the names and qualifications of at least three (3) additional contractors

that would be acceptable to Respondents within fourteen (14) days of receipt of EPA's disapproval of the selection of the contractors proposed by Respondents.

3. Remedial Action Constructor(s) (a) Within thirty (30) days after EPA approves the Remedial Action Work Plan submitted by Respondents pursuant to Section VII.C(9) of this Order, Respondents shall notify EPA in writing of the name, title, and qualifications of any contractor(s), including subcontractor(s), proposed to be used in carrying out Work required by such approved Remedial Action Work Plan. If at any time thereafter Respondents propose to change any such contractor(s), Respondents shall give written notification to EPA and the State and shall obtain acceptance from EPA before the new contractor(s) perform(s), direct(s), or supervise(s) any Work under this Order. (b) EPA will notify Respondents in writing of its acceptance or disapproval of the selection of the proposed contractor(s), including subcontractor(s). If EPA disapproves of the selection of Respondents' proposed contractor(s), Respondents shall submit to EPA and the State the names and qualifications of at least three (3) contractors that would be acceptable to Respondents within fourteen (14) days of receipt of EPA's disapproval of the selection of the contractor(s) previously proposed. Except as provided below, EPA will provide written notice of the name of the contractor(s) that EPA accepts. Respondents may select any accepted contractor(s) from that list and shall notify EPA and the State of the name of the contractor(s) selected within

fourteen (14) days of EPA's designation of accepted contractors. Within fourteen (14) days of receipt of EPA acceptance of the Respondents' contractor(s), Respondents shall enter into an agreement with such contractor(s) selected by Respondents to perform the Work for which such contractor(s) were approved by EPA. In the event EPA does not accept any of the contractors proposed in Respondents' list, Respondents shall be in violation of this Order. EPA may in such event direct Respondents to submit to EPA and the State the names and qualifications of at least three (3) additional contractors that would be acceptable to Respondents within fourteen (14) days of receipt of EPA's disapproval of the selection of the contractors proposed by Respondents.

4. EPA retains the right to disapprove at any time the contractor(s), including subcontractor(s); supervisory personnel; or other persons retained to conduct any of the Work required by this Order. In such event, Respondents shall propose replacements in accordance with the requirements of this Section.

5. Neither the United States nor EPA shall be held out to be or be considered a party to any contract between Respondents and any contractors, including subcontractors, or other persons retained to conduct Work required by this Order.

C. Remedial Design/Remedial Action

1. Within 30 days after receiving notice of EPA acceptance of the Remedial Design Professional(s), Respondents shall submit to EPA and the State, for approval by EPA, a work plan for the

design of the Remedial Action at the Site ["Remedial Design Work Plan"] and shall submit the Quality Assurance Project Plan ["QAPjP"], prepared in accordance with Section XI of this Order. The Remedial Design Work Plan shall provide a step by step plan for the design of the remedy as set forth in the ROD and this Order and, upon its approval by EPA, shall be incorporated into and become enforceable under this Order. The Remedial Design Work Plan shall include plans, schedules, and methodologies for implementation of all necessary remedial design and pre-design tasks, including but not limited to: (a) Tentative formation of the design team; (b) Requirements for additional field data collection, including a Sampling and Analysis Plan ["SAP"], prepared in accordance with Section XI (Quality Assurance); (c) Requirements for treatability studies; (d) Design criteria and assumptions; (e) tentative treatment schemes; (f) a Remedial Design Contingency Plan; and (g) A schedule for completion of the design, including plans and schedules for the preparation and submission of preliminary, pre-final, and final design submittals. In addition, the Remedial Design Work Plan shall include an expeditious schedule for completion of all components of the Remedial Design.

2. At the same time the Work Plan is submitted, the Respondents shall submit to EPA and the State a Health and Safety Plan for field design activities which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120

and guidance document "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" dated October 1985, as amended.

3. Upon approval of the Remedial Design Work Plan by EPA, Respondents shall implement the Remedial Design Work Plan in accordance with the schedules and methodologies contained therein. Respondents shall submit all plans, submittals, and other deliverables required in accordance with the approved schedule therein for review and approval pursuant to Section XIII (Reporting Requirements) of this Order. Unless otherwise directed by EPA, Respondents shall not commence Remedial Design or Remedial Action activities at the Site prior to approval of the Remedial Design Work Plan.

4. Respondents shall, within thirty (30) days of receipt of notification from EPA that treatability studies are necessary, submit to EPA and the State, for approval by EPA, work plans and schedules for the design and implementation of such treatability studies.

5. The preliminary design begins with the initial design and ends with the completion of approximately 30 percent of the design effort. The preliminary design submittal required under Paragraph C(1), above, shall include, at a minimum, the following: (a) Design criteria; (b) Project delivery strategy; (c) Results of treatability studies (if any) and results of additional field sampling; (d) Preliminary plans, drawings, and sketches; (e) Required specifications in outline form; and (f) a

Preliminary construction schedule.

6. The Intermediate Design is a continuation and expansion of the Preliminary Design submittal. The Intermediate design submittal will be submitted at and consist of approximately 60% percent of the design effort. The Intermediate design shall clearly address comments of the Preliminary Design review, and clearly show any modification of the design as a result of any value engineering recommendation by the Remedial Design Professional or others.

7. The pre-final design shall be submitted at approximately 90% of the design effort. The pre-final and final design submittals required under Paragraph C(1), above, shall each include, at a minimum, the following plans, as well as expeditious schedules and specific methodologies for implementation of these plans:

- (a) final designs and specifications for the Remedial Action;
- (b) Remedial Action Construction schedule;
- (c) Operation and Maintenance (O & M) Plan;
- (d) A Sampling and Analysis Plan including a Field Sampling Plan to be used as a basis for ascertaining whether performance standards have been met (directed at measuring progress towards meeting Performance Standards);
- (e) a Remedial Action Construction Quality Assurance Plan ["CQAP"];

(f) complete specifications for preparation of a Health and Safety Plan for field activities required by the final design;

(g) a Remedial Action Contingency Plan; and

(h) a plan for implementation of deed restrictions which will ensure that the structures, devices, and other components of the Work are not interfered with or disturbed by future use of the property. Respondents shall ensure that specifications required under item (e), above, as accepted by EPA and under item (f), above, as approved by EPA, are met by Respondent's contractor(s) in preparing the Health and Safety Plan. The Health and Safety Plan shall conform to applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, the regulations at 54 Fed. Reg. 9294 (March 6, 1989) and guidance document "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" dated October 1985, as amended. The Health and Safety Plan for remedial action activities shall be submitted for acceptance, along with the pre-final and final design submittals in accordance with the schedule set forth in the Remedial Design Work Plan, and upon acceptance of such Health and Safety Plan by EPA, shall be incorporated in, and become enforceable as part of, this Order. The CQAP, which shall detail the approach

to quality assurance during construction activities at the Site, shall specify an Independent Quality Assurance Team ["IQAT"] to conduct the quality assurance program during the construction phase of the project. The IQAT shall be responsible for examining and testing various materials, procedures, and equipment during implementation of the construction activities. The IQAT shall perform on-site inspections of the work to assess compliance with project standards, verify that the CQAP is implemented, and report to the Respondents and EPA the results of all inspections.

8. The EPA-approved final design submittal shall be incorporated into and become enforceable as part of this Order.

9. Not later than 30 days after EPA approves all submissions requiring EPA approval required as part of the Remedial Design and EPA accepts the Health and Safety Plan, Respondents shall submit a Remedial Action Work Plan to EPA and the State, for approval by EPA. The Remedial Action Work Plan is the basis for the Respondents' approach to the implementation of the Remedial Action and shall be developed in accordance with the ROD and shall be consistent with the Remedial Design, as approved by EPA, and shall provide for implementation of the ROD. The Remedial Action Work Plan shall include, at a minimum: (a) tentative formation of the Remedial Action Team, including the key personnel, descriptions of duties and lines of authorities in

the management of construction activities; (b) A description of the roles and relationships of the Respondents, the Respondents Project Coordinator, Resident Engineer, IQAT, Remedial Design Professional and Remedial Action Constructor; (c) Process for selection of the Remedial Action Constructor; (d) Schedule for the Remedial Action and the process to continuously update the project schedule; (e) Method to implement the Construction Quality Assurance Plan, including the criteria and composition of the IQAT; (f) Strategy for implementing the Contingency Plan; (g) Procedures for data collecting during the Remedial Action to validate the completion of the project; (h) Requirements for project closeout. Upon approval by EPA, the Remedial Action Work Plan is incorporated into this Order as a requirement of this Order.

10. Upon approval of the Remedial Action Work Plan by EPA, Respondents shall implement the Remedial Action Work Plan according to the schedules and methodologies contained therein. Unless otherwise directed by EPA or required under the Remedial Design Work Plan, the Respondents shall not commence physical on-site activities at the Site prior to the date for commencement set forth in the approved schedule in the Remedial Action Work Plan.

11. Not later than twenty-one (21) days after EPA's acceptance of Respondents' Remedial Action Constructor(s) in accordance with Section VI.B.3 of this Order, Respondents shall submit to EPA and the State, for approval by EPA, a Construction

Management Plan. The Construction Management Plan is prepared by the Remedial Action Constructor and shall identify key personnel, their experience, their qualifications, and their responsibilities for construction activities, and shall include a detailed schedule for completing all construction activities. Upon approval by EPA, the Construction Management Plan shall be incorporated in, and become an enforceable part of, this Order.

12. Within forty-five (45) days after EPA approves the Construction Management Plan, Respondents shall begin on-site implementation of the Remedial Action. Upon approval by EPA of the Construction Management Plan, Respondents shall implement and comply with the schedules and terms of all requirements relating to Remedial Action including the Remedial Action Work Plan and the Construction Management Plan.

13. The Work performed by Respondents pursuant to this Order shall, at a minimum, be consistent with the ROD and shall attain the Performance Standards set forth in pages 81 through 90 of the ROD.

D. Off-Site Shipment of Waste Materials

1. Respondents shall, prior to any off-Site shipment of Waste Material from the Site to a waste management facility, provide written notification to the appropriate state environmental official in the receiving facility's state and to the EPA Remedial Project Manager of such shipment of Waste Material. However, the requirement to notify EPA shall not apply to any off-Site shipment when the total volume of all shipments

from the Site to the facility will not exceed ten (10) cubic yards.

2. The Respondents shall include in the written notification the following information, where available: (a) the name and location of the facility to which the Waste Materials are to be shipped; (b) the type and quantity of the Waste Materials to be shipped; (c) the expected schedule for the shipment of the Waste Materials; and (d) the method of transportation. The Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Materials to another facility within the same state, or to a facility in another state.

3. The identity of the receiving facility and state will be determined by the Respondents following the award of the contract for Remedial Action construction. The Respondents shall provide written notification required by this Section VII.D, including the information required by Paragraph D(1), as soon as practicable after the award of the contract, but in no case less than fourteen (14) days before the Waste Materials are actually shipped.

VIII. ADDITIONAL RESPONSE ACTIONS

A. In the event that EPA determines, or the Respondents propose, that additional response actions are necessary to meet the Performance Standards or to carry out the remedy selected in

the ROD, notification of such additional response actions shall be provided by EPA to the Respondents' Project Coordinator or by Respondents to the EPA Remedial Project Manager.

B. Within thirty days (or such longer time as may be specified by EPA) of receipt of notice from EPA pursuant to Paragraph A of this Section VIII, that additional response actions are necessary, Respondents shall submit to EPA for its approval, a work plan for the additional response actions. The plan shall conform to the applicable requirements of Section VII (Performance of the Work by Respondents). Upon approval of the plan pursuant to Section XIV (Submissions Requiring Agency Approval; State Review and Comment), Respondents shall implement the plan for additional response actions in accordance with the schedule contained therein.

C. Any additional response actions that Respondents propose necessary to meet the Performance Standards or to carry out the remedy selected in the ROD shall be subject to approval by EPA, and, if authorized by EPA, shall be completed by Respondents in accordance with plans, specifications, and schedules approved or established by EPA pursuant to Section XIV (Submissions Requiring Agency Approval; State Review and Comment).

D. If required by Sections 113(k)(2) or 117 of CERCLA, 42 U.S.C. §§ 9613(k)(2) or 9617, or the NCP, Respondents and the public will be provided with an opportunity to comment on any additional response actions proposed pursuant to this Section VIII.B or C and to submit written comments for the record during

the public comment period. After the period for submission of written comments is closed, the Regional Administrator, EPA Region III, or his/her delegate will determine in writing whether additional response actions are appropriate.

IX. PERIODIC REVIEW

A. Respondents shall conduct any studies and investigations as requested by EPA in order to permit EPA to conduct reviews at least every five years as required by Section 121(c) of CERCLA, 42 U.S.C. § 9621(c), and any applicable regulations.

B. If required by Sections 113(k)(2) or 117 of CERCLA, 42 U.S.C. §§ 9613(k)(2) or 9617, or the NCP, Respondents and the public will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of the review conducted pursuant to Section 121(c) of CERCLA, 42 U.S.C. § 9621(c), and to submit written comments for the record during the public comment period. After the period for submission of written comments is closed, the Regional Administrator, EPA Region III, or his/her delegate will determine in writing whether further response actions are appropriate.

C. If the Regional Administrator, EPA Region III, or his/her delegate determines that information received, in whole or in part, during the review conducted pursuant to Section 121(c) of CERCLA, indicates that the Remedial Action is not protective of human health and the environment, the Respondents shall undertake any further response actions EPA has determined

are appropriate.

D. Within sixty days after notice of EPA's determination that further response actions are necessary Respondents shall submit plans for design and implementation of any further response actions they are required to perform in accordance with the applicable procedures set forth in Sections VII (Performance of the Work by Respondents) and XIV (Submissions Requiring Agency Approval; State Review and Comment) and, upon approval of such plans by EPA, shall complete the further response action in accordance with such plans and any schedules contained therein.

X. FAILURE TO PERFORM/PERFORMANCE EVENTS

A. In the event of an inability or anticipated inability on the part of Respondents to perform any of the actions required by this Order in the time and manner required herein, the Respondents' Project Coordinator (as defined in Section XV, below) shall notify EPA orally within twenty-four (24) hours of such event and in writing as soon as possible, but in no event more than ten (10) days after such event. Such notice shall set forth the reason(s) for, and the expected duration of, the inability to perform; the actions taken and to be taken by Respondents to avoid and mitigate the impact of such inability to perform; and the proposed schedule for completing such actions. Such notification shall not relieve Respondents of any obligation of this Order. Respondents shall take all reasonable actions to prevent and minimize any delay.

B. Failure of Respondents to carry out any requirement of this Order in accordance with the terms and conditions specified herein may result in the unilateral performance of the required actions by EPA pursuant to applicable authorities, an action to recover treble damages pursuant to CERCLA, and/or the initiation of an enforcement action against Respondents to require Respondents to perform such actions, in addition to any other relief that may be available to EPA pursuant to applicable law.

C. Nothing in this Section or any other provision of this Order shall be construed to limit any powers EPA may have under CERCLA, the NCP, or any other law or regulation.

XI. QUALITY ASSURANCE

A. While conducting all sample collection and analysis activities required by this Order, the Respondents shall implement quality assurance, quality control and chain of custody procedures in accordance with "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA", 1988 (OSWER Directive 9355.3-01); "EPA NEIC Policies and Procedures Manual", May 1978, revised May 1986 (EPA 330/978-001-R); "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans", December 1980 (QAMS 005/80); "A Compendium of Superfund Field Operations Methods", December 1987 (OSWER Directive 9355-0-14) "Data Quality Objectives for Remedial Response Activities", March 1987 (OSWER Directive 9355.0-7B); and amendments to these guidelines.

B. The Respondents shall consult with EPA in planning for, and prior to, all sampling and analysis required by this Order, and any subsequent EPA-approved plans prepared as part of this Order. Further, the Respondents shall not commence sampling until EPA approves the Remedial Design Work Plan and the Sampling and Analysis Plan (SAP).

C. In order to provide quality assurance and maintain quality control regarding all samples collected pursuant to this Order, the Respondents shall:

1. Submit to the EPA Remedial Project Manager the selected laboratory's(ies') Quality Assurance Program Plan (QAPP) and their qualifications, which shall include, at a minimum, previous certifications, Performance Evaluation (PE) results, equipment lists and personnel resumes. The SAP must state that all protocols described therein take precedence over protocols listed in the Laboratory QAPP.

2. Ensure that EPA personnel and/or their authorized representatives are allowed reasonable access to the laboratory(ies), records and personnel utilized by the Respondents in implementing this Order.

3. Prepare a SAP, consisting of a Quality Assurance Project Plan (QAPjP) and a Field Sampling Plan (FSP), for sample collection, transportation, analysis, validation and reporting to be conducted pursuant to this Order. The SAP shall be submitted as part of the Remedial Design Work Plan to the EPA Remedial Project Manager for review and approval prior to commencing

sampling and analysis. Each plan shall specify, for the phase of activity addressed, the data quality objectives (DQOs), sample collection and transportation procedures, data analysis methods, data reduction, data review, and reporting procedures. Selection of analytical methods shall be justified in conjunction with the DQOs. The guidelines referenced in Paragraph (A), above, shall be followed in the preparation of the SAP; additional guidance may be provided by EPA when applicable.

4. Ensure that the laboratory(ies) analyzing samples pursuant to this Order uses appropriate methods. If EPA Contract Lab Program (CLP) methods are selected, the laboratory(ies) shall use these methods and submit deliverables delineated in the current "Statement of Work of the EPA Contract Lab Program." If non-CLP methods are selected, all constituents and physical parameters shall be analyzed using methods that are specified (method and reference) and justified in the SAP. Non-CLP methods shall be fully described in the QAPjP and approved by the EPA Remedial Project Manager prior to conducting any sampling and analysis. This description shall include, at a minimum, the matrix, calibration, Quality Control (QC) samples (type and frequency), corrective measures, and deliverables.

5. Ensure that the laboratory(ies) analyzing samples pursuant to this Order agrees to demonstrate capability to perform the selected analyses by analyzing PE samples, supplied by EPA. Analysis of PE samples may be waived by EPA if the laboratory(ies) satisfactorily analyzed PE samples using the

selected methods within the six months prior to analysis conducted pursuant to this Order. Documentation of such PE sample analysis shall be submitted to the EPA Remedial Project Manager for verification.

6. At the request of EPA, conduct one or more audits of the selected laboratory(ies) to verify analytical capability and compliance with the SAP. Auditors shall conduct lab audits at sometime during the time the laboratory(ies) is analyzing samples collected pursuant to this Order. The lab audit shall be conducted according to procedures available from the EPA Environmental Services Division Quality Assurance Branch (QA Branch). Audit reports shall be submitted to the EPA Remedial Project Manager within fifteen days of completion of the audit. The Respondents shall report serious deficiencies, including all those which adversely affect data quality, reliability or accuracy, and take action to correct such deficiencies within twenty-four hours of the time the Respondents know or should have known of the deficiency.

7. Conduct at least one field audit (to be described in the QAPjP) during initial sampling activities to verify that field samplers are correctly following sampling procedures described in the SAP. A report of the field audit shall be submitted to the EPA Remedial Project Manager within fifteen days of completion of the audit. Respondents shall report the scope of the audit and the deficiencies noted, and take action to correct such deficiencies within twenty-four hours of the time

any of the Respondents know or should have known of the deficiency. EPA shall have the option to audit any stage of the field activities.

8. Provide data validation of analyses completed by the laboratory(ies), to determine data usability. If the data is derived by CLP methods, the data validation shall be performed in accordance with the most recent National Functional Guidelines for Data Review and Region III Modifications (available from the QA Branch). For non-CLP methods, the data validation shall be performed as described in the SAP and in accordance with the QC data validation criteria set forth in that method. The quality assurance data validation reports shall be prepared using EPA Region III format (available from the QA Branch) and shall be submitted, along with the validated data summary sheets and the laboratory sample results, to the EPA Remedial Project Manager.

D. Unless otherwise directed by EPA, the Respondents shall notify EPA in writing not less than thirty days in advance of any sample collection activity to be undertaken pursuant to this Order. At the request of EPA, the Respondents shall allow split or duplicate samples to be taken by EPA, and/or its authorized representatives, of any samples collected by the Respondents pursuant to this Order. In addition, EPA shall have the right to take any additional samples that EPA deems appropriate.

E. Within seven days of a request by EPA Respondents shall submit to EPA 5 copies of the results of any sampling and/or test or other data obtained or generated by or on behalf of the

Respondents with respect to the Site and/or pursuant to this Order.

F. Notwithstanding any provision of this Order, the EPA hereby retains all of its information gathering, inspection and enforcement authorities and rights under CERCLA, RCRA and any other applicable statute or regulation.

XII. ACCESS

A. Commencing upon the effective date of this Order, and to the extent the property is owned or access to the property is controlled by any of the Respondents, EPA and its representatives shall have access at all times to the Site and any other property to which access is required for the implementation of this Order, for the purposes of conducting any activity related to this Order including, but not limited to:

1. Monitoring the Work;
2. Verifying any data or information submitted to the EPA;
3. Conducting investigations relating to contamination at or near the Site;
4. Obtaining samples;
5. Assessing the need for, planning, or implementing additional response actions at or near the Site;
6. Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondents or their agents consistent with Section XXII (Access to Information); and

7. Assessing Respondents' compliance with this Order.

B. To the extent that the Site or any other property to which access is required for the implementation of this Order is owned or controlled by persons other than Respondents, Respondents shall use best efforts to secure from such persons access for themselves, as well as for the EPA and its representatives, including, as necessary to effectuate this Order. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. If any access required to complete the Work is not obtained within forty-five days of the date of issuance of this Order, or within forty-five days of the date EPA notifies the Respondents in writing that additional access beyond that previously secured is necessary, Respondents shall promptly notify the EPA, and shall include in that notification a summary of the steps Respondents have taken to attempt to obtain access. The EPA may, in its unreviewable discretion, assist Respondents in obtaining access.

C. Notwithstanding any provision of this Order, the EPA retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA and any other applicable statute or regulations.

XIII. REPORTING REQUIREMENTS

A. In addition to any other requirement of this Order, Respondents shall submit to EPA and the State five copies each of

a written monthly progress report that: (1) describes the actions which have been taken toward achieving compliance with this Order during the previous month; (2) includes all results of sampling and tests and all other data received or generated by Respondents or their contractors or agents in the previous month; (3) identifies all work plans, plans and other deliverables required by this Order completed and submitted during the previous month; (4) describes all actions, including, but not limited to, data collection and implementation of work plans, which are scheduled for the next month and provide other information relating to the progress of construction, including, but not limited to, critical path diagrams, Gantt charts and Pert charts; (5) includes information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated delays; (6) includes any modifications to the work plans or other schedules that Respondents have proposed to EPA or that have been approved by EPA; and (7) describes all activities, as approved by EPA under Section XXVII (Community Relations) undertaken in support of the Community Relations Plan during the previous month and those to be undertaken in the next month. Respondents shall submit these progress reports to EPA and the State by the tenth day of every month following the issuance of this Order until EPA notifies the Respondents pursuant to Paragraph B(2) of Section XVII (Certification of Completion). If requested by EPA, Respondents

shall also provide briefings for EPA and the State to discuss the progress of the Work.

B. The Respondents shall notify EPA of any anticipated change in the schedule described in the monthly progress report for the performance of any activity, including, but not limited to, implementation of work plans, no later than seven days prior to the scheduled date for performance of the activity. Notwithstanding the foregoing, the Respondents shall notify EPA of any anticipated change in the schedule described in the monthly progress report for the performance of data collection no later than thirty days prior to the performance of such activity. All modifications to EPA-approved schedules must be approved by EPA.

C. In addition to the reporting required by CERCLA § 103, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11004, upon the occurrence of any event during performance of the Work that Respondents are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of EPCRA, 42 U.S.C. § 11004, Respondents shall, within twenty-four hours of the onset of such event, orally notify the EPA Remedial Project Manager or the Central Pennsylvania Section Chief for the Superfund Remedial Branch, Hazardous Waste Division, EPA Region III (in the event of the unavailability of the EPA Remedial Project Manager) or, in the event that neither the EPA Remedial Project Manager or Central Pennsylvania Section Chief is available, the EPA Region

III Hotline at (215) 597-9898. Within twenty days of the onset of such an event, Respondents shall furnish to EPA and the State a written report, signed by the Respondents' Project Coordinator, setting forth the events which occurred and the measures taken, and to be taken, in response thereto. Within thirty days of the conclusion of such an event, Respondents shall submit a report setting forth all actions taken in response thereto.

D. Except as otherwise provided in this Order, Respondents shall submit 5 copies of all plans, reports, and data required by the Remedial Design Work Plan, the Remedial Action Work Plan, or any other approved plans to EPA in accordance with the schedules set forth in such plans. Respondents shall simultaneously submit 5 copies of all such plans, reports and data to the State.

E. Plans, design documents, proposals, reports or other documents shall be signed by a Duly Authorized Representative of each of the Respondents certifying the information as follows:

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

The Remedial Design Work Plan, Remedial Action Work Plan and any other work plan approved by EPA pursuant to this Order shall specify which documents shall be so certified.

F. To the maximum extent possible, communications from the

Respondents to EPA and all documents including, but not limited to, plans, reports, and other correspondence concerning Work performed pursuant to this Order, shall be directed to the EPA Remedial Project Manager by overnight mail or equivalent delivery.

XIV. SUBMISSIONS REQUIRING AGENCY APPROVAL; STATE REVIEW & COMMENT

A. Any plan, report, or other item which is required to be submitted for approval by EPA pursuant to this Order shall be submitted to the State at the same time it is submitted to EPA. After review of any such plan, report or other item, EPA shall, after reasonable opportunity for review and comment by the State: (1) approve, in whole or in part, the submission; (2) approve the submission upon specified conditions; (3) modify the submission to cure the deficiencies; (4) direct that the Respondents modify the submission; (5) disapprove, in whole or in part, the submission, notifying Respondents of deficiencies; or (6) any combination of the above.

B. In the event of approval, approval upon conditions, or modification by EPA, Respondents shall, unless otherwise directed by EPA, proceed to take any action required by the plan, report, or other item, as approved or modified by EPA.

C. Upon receipt of an EPA notice of disapproval or an EPA notice requiring a modification by Respondents, Respondents shall, within fourteen days or such other time as specified by EPA in such notice, correct the deficiencies and resubmit the

plan, report, or other item for approval. Notwithstanding the notice of disapproval or a notice requiring a modification, Respondents shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission.

D. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require the Respondents to correct the deficiencies, in accordance with the preceding Paragraphs. EPA also retains the right to amend or develop the plan, report or other item. Respondents shall implement any such plan, report, or item as amended or developed by EPA.

E. If a plan, report, or item is disapproved by EPA, Respondents shall be deemed to be in violation of the provision of this Order requiring the Respondents to submit such plan, report, or item.

F. All plans, reports, and other items required to be submitted to EPA under this Order shall, upon modification and/or approval by EPA, be incorporated in and be enforceable under this Order. In the event EPA approves a portion of a plan, report, or other item required to be submitted to EPA under this Order, the approved portion shall be enforceable under this Order.

XV. PROJECT COORDINATOR/REMEDIAL PROJECT MANAGER

A. Respondents' Project Coordinator

(1) Within ten days after the effective date of this Order, Respondents shall designate a Project Coordinator and shall

submit the name and qualifications of such persons to EPA for review and acceptance. Respondents' Project Coordinator shall be a technical and/or managerial representative of Respondents and may be a contractor and/or consultant; provided, however, the Respondents' Project Coordinator shall not be their legal representative in this matter.

(2) Respondents' designation of a Project Coordinator shall be subject to acceptance by EPA. In the event EPA does not accept Respondents' designation of a Project Coordinator, Respondents shall, within fourteen days after receipt of EPA's notice not to accept Respondents' designation of a Project Coordinator, submit to EPA a list identifying the names and qualifications of proposed Project Coordinators, that would be acceptable to Respondents. EPA shall then provide Respondents with a notice identifying each proposed Project Coordinator on the list whose designation would be accepted by EPA. Respondents shall, within (10) days of receipt of EPA's notice identifying acceptable replacement Project Coordinators, select any accepted Project Coordinator from the list and notify EPA of such selection.

(3) EPA may at any time disapprove Respondents' selection of Project Coordinator. In such event, Respondents shall follow the procedures set forth in Section XV.A(2) in selecting a replacement Project Coordinator.

(4) In the event Respondents wish to change their Project Coordinator, Respondents shall designate a new Project

Coordinator in accordance with the procedures set forth in Section XV.A(1), above. The designation of a new Project Coordinator must be accepted by EPA in accordance with the procedures set forth in Section XV.A(2) prior to the effective date of any such replacement.

B. EPA's Remedial Project Manager

1. EPA's Remedial Project Manager is:

Linda R. Dietz (HW24)
Central PA Section
U.S. Environmental Protection Agency
841 Chestnut Building
Philadelphia, PA 19107
(215) 597-6906

2. EPA has the right to change its Remedial Project Manager at any time. In the event EPA makes such a change, EPA will inform Respondents' Project Coordinator of the name, address, and telephone number of the new EPA Remedial Project Manager.

3. EPA's Remedial Project Manager shall have the authority vested in a Remedial Project Manager and an On-Scene Coordinator by the NCP. In addition, EPA's Remedial Project Manager shall have the authority, consistent with the NCP, to halt, conduct, or modify any work required by this Order, and to take any necessary response action when the EPA Remedial Project Manager or other EPA official determines that conditions at the Site may present a threat to the public health or welfare or the environment.

4. Unless otherwise directed by the EPA Remedial Project Manager, all communications concerning the implementation of this Order, whether written or oral, from Respondents to EPA shall be

directed to the EPA Remedial Project Manager.

5. No informal advice or guidance from the EPA Remedial Project Manager shall relieve Respondents from any obligations under this Order.

B. EPA may designate other representatives, including, but not limited to, EPA employees, and federal contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Order. The EPA Remedial Project Manager shall have the authority lawfully vested in a Remedial Project Manager by the NCP. In addition, the EPA Remedial Project Manager shall have authority, consistent with the NCP, to halt or redirect any Work required by this Order and to take any necessary response action when s/he determines that conditions at the Site may constitute an emergency situation or may present an immediate threat to public health or welfare or the environment due to a release or threatened release of Waste Material.

C. EPA's Remedial Project Manager and the Respondents' Project Coordinator will meet, at a minimum, on a monthly basis.

XVI. ASSURANCE OF ABILITY TO COMPLETE WORK

A. Within thirty days of the effective date of this Order, Respondents shall establish and maintain financial security in the amount of \$14,300,000.00² in one of the following forms:

- (1) A surety bond guaranteeing performance of the Work;
- (2) One or more letters of credit;

² 130% of estimated cost as set forth in FS.

(3) A trust fund;

(4) A guarantee to perform the Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with at least one of the Respondents; or

(5) A demonstration that the Respondents satisfy the requirements of 40 C.F.R. § 264.143(f) (April 7, 1982, as amended May 2, 1986).

Such financial security shall be maintained by the Respondents until EPA agrees that the Work has been completed and issues a Certification of Completion in accordance with Section XVII.

B. If the Respondents seek to demonstrate the ability to complete the Work through a guarantee by a third party pursuant to Paragraph A(4) of this Section XVI, Respondents shall demonstrate that the guarantor satisfies the requirements of 40 C.F.R. § 264.143(f). If Respondents seek to demonstrate their ability to complete the Work by means of the financial test or the corporate guarantee, they shall resubmit sworn statements conveying the information required by 40 C.F.R. § 264.143(f) annually, on the anniversary of the effective date of this Order. In the event that EPA, after a reasonable opportunity for review and comment by the State, determines at any time that the financial assurances provided pursuant to this Paragraph are inadequate, Respondents shall, within thirty days of receipt of notice of EPA's determination, obtain and present to EPA for

approval one of the other forms of financial assurance listed in Paragraph A of this Section XVI. Respondents' inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Order.

XVII. CERTIFICATION OF COMPLETION

A. Completion of the Remedial Action

1. Within thirty days after Respondents conclude that the Remedial Action has been fully performed and the Performance Standards have been attained, Respondents shall so certify to the EPA and shall schedule and conduct a pre-certification inspection to be attended by Respondents and EPA. If, after the pre-certification inspection, the Respondents still believe that the Remedial Action has been fully performed and the Performance Standards have been attained, they shall submit a written report to EPA for approval pursuant to Section XIV (Submissions Requiring Agency Approval; State Review and Comment) within thirty days of the inspection. In the report, a registered professional engineer ("RPE") and a Duly Authorized Representative of each of the Respondents shall certify pursuant to Section XIII.E that the Remedial Action has been completed in full satisfaction of the requirements of this Order. The written report shall include as-built drawings signed and stamped by an RPE and certified as required by Section XIII. If, after completion of the pre-certification inspection and receipt and review of the written report, EPA determines that the Remedial

Action or any portion thereof has not been completed in accordance with this Order or that the Performance Standards have not been achieved, EPA will notify Respondents in writing of the activities that must be undertaken to complete the Remedial Action and to achieve the Performance Standards. EPA will set forth in the notice a schedule for performance of such activities consistent with the Order or require the Respondents to submit a schedule to EPA for approval pursuant to Section XIV (Submissions Requiring Agency Approval; State Review and Comment). Respondents shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph.

2. If EPA concludes, based on the initial or any subsequent Certification of Completion by Respondents, that the Remedial Action has been fully performed in accordance with this Order and that the Performance Standards have been achieved, EPA will so certify in writing to Respondents. This certification shall constitute the Certification of Completion of the Remedial Action for purposes of this Order. Certification of Completion of the Remedial Action shall not affect Respondents' obligations under this Order that continue beyond the Certification of Completion (XVII), including, but not limited to, Access (XII), Operation and Maintenance (VII. Performance of Work by Respondents), Retention of Records (XXIII), Insurance (XXI), and any work to be conducted under Section VIII (Additional Response Actions) and Section IX (Periodic Review), Section XIII (Reporting

Requirements), Section XXII (Access to Information) and Section XXVII (Community Relations).

B. Completion of the Work

1. Within thirty days after Respondents conclude that all phases of the Work, including O & M, have been fully performed, Respondents shall so certify to the EPA by submitting a written report by a RPE certifying that the Work has been completed in full satisfaction of the requirements of this Order. The report shall also contain the certification required by Section XIII.E. If, after review of the written report, EPA determines that any portion of the Work has not been completed in accordance with this Order, EPA will notify Respondents in writing of the activities that must be undertaken to complete the Work. EPA will set forth in the notice a schedule for performance of such activities consistent with the Order or require the Respondents to submit a schedule to EPA for approval pursuant to Section XIV (Submissions Requiring Agency Approval; State Review and Comment). Respondents shall perform all activities described in the notice in accordance with the specifications and schedules established therein.

2. If EPA concludes, based on the initial or any subsequent Certification of Completion by Respondents that the Work has been fully performed in accordance with this Order, EPA will so notify the Respondents in writing.

XVIII. RESERVATION OF RIGHTS

A. EPA reserves all rights, claims, interests, and defenses it has under CERCLA or any other law or in equity.

B. Nothing herein shall be construed to prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, to seek injunctive relief, and/or to seek the imposition of statutory penalties.

C. EPA reserves the right to disapprove of Work performed by Respondents pursuant to this Order, to require that Respondents correct and/or re-perform any and all Work disapproved by EPA, and to require that Respondents perform response actions in addition to those required by this Order.

D. EPA reserves the right to take enforcement actions, including actions for monetary penalties, for any violation of law, regulation, or of this Order. Failure to comply with this Order may subject Respondents to the assessment of civil penalties of up to \$25,000 per day and/or punitive damages in an amount up to three times the amount of any costs incurred by EPA as a result of such failure pursuant to sections 106(b) and 107(c) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c). EPA may also undertake other actions as it may deem necessary or appropriate for any purpose, including, but not limited to, actions pursuant to sections 104 and/or 106 of CERCLA, 42 U.S.C. §§ 9604 and/or 9606.

E. EPA reserves the right to undertake removal and/or remedial actions, including all actions required by this Order,

at any time such actions are appropriate under CERCLA and the NCP and to seek reimbursement from Respondents for any costs incurred. Performance by EPA of any portion of the Work required by this Order shall not release Respondents of their obligation to comply with all other requirements of this Order and shall not release Respondents from liability for penalties and/or damages for any violations of this Order.

F. EPA reserves the right to bring an action against Respondents pursuant to section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of all response costs incurred by the United States in connection with this Order and not reimbursed by Respondents, as well as any other costs incurred by the United States in connection with response actions conducted pursuant to CERCLA at the Site.

G. Without limitation of any other provision in this Order, EPA reserves the right to bring actions against, and/or issue orders to, Respondents pursuant to applicable authorities for any purpose including, but not limited to, performance of response actions other than those performed by Respondents pursuant to this Order.

XIX. EMERGENCY RESPONSE

A. In the event of any action or occurrence during the performance of the Work which causes or threatens a release of Waste Material that constitutes an emergency situation or may present an immediate threat to the public health or welfare or

the environment, Respondents shall, subject to Paragraph B of this Section XIX, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify the EPA Remedial Project Manager, or, if the EPA Remedial Project Manager is unavailable, the Central Pennsylvania Section Chief for the Superfund Remedial Branch, Hazardous Waste Division, EPA Region III. If neither of these persons is available, the Respondents shall notify the EPA Region III Hotline at (215) 597-9898. Respondents shall take such actions in consultation with the EPA Remedial Project Manager or other available authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plans, the Contingency Plans, or any other applicable plans or documents developed and approved pursuant to this Order.

B. Nothing in the preceding Paragraph or in this Order shall be deemed to limit any authority of the EPA to take, direct, or order all appropriate action or to seek an order from the Court to protect human health, welfare and the environment or to prevent, abate, or minimize an actual or threatened release of Waste Material on, at, or from the Site.

XX. LIABILITY OF THE UNITED STATES

Neither EPA nor the United States, by issuance of this Order, assumes any liability for any acts or omissions by Respondents or by Respondents' employees, agents, contractors, or consultants in carrying out any action or activity pursuant to

this Order, nor shall EPA or the United States be held out as a party to any contract entered into by Respondents, Respondents' employees, agents, contractors, or consultants in carrying out activities pursuant to this Order.

XXI. INSURANCE

A. The EPA shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Order. Neither the Respondents nor any such contractor shall be considered an agent of the EPA.

B. No later than fifteen days before commencing any on-site Work, Respondents shall secure and maintain or shall ensure that their Supervising Contractor, Contractors and Subcontractors secure and maintain until the first anniversary of EPA's certification of completion of the Remedial Action or issuance of the Concurrence Notice pursuant to Paragraph A.2 of Section XVII (Certification of Completion) comprehensive general liability insurance with limits of five million dollars, combined single limit, naming as additional insured the EPA. No later than fifteen days after the effective date of this Order, Respondents shall secure automobile liability insurance with limits of \$500,000 and shall maintain such insurance until the first anniversary of EPA's certification of completion of the Remedial Action pursuant to Paragraph A.2 of Section XVII (Certification of Completion). In addition, for the duration of this Order, Respondents shall satisfy, and shall ensure that their

contractors and/or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Order. Prior to commencement of the Work under this Order, Respondents shall provide to EPA certificates of comprehensive general liability and automobile insurance and a copy of each insurance policy. Respondents shall resubmit such certificates and copies of policies each year on the anniversary of the effective date of this Order. 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. Respondents may satisfy the provisions of this Paragraph B if they submit to EPA for approval one of the financial assurance mechanisms of Section XVI (Assurance of Ability to Complete Work) in at least the amounts stated in this Paragraph B demonstrating that Respondents are able to pay any claims arising out of Respondents' performance of their obligations under this Order. Such financial assurance mechanism shall meet all of the requirements of Section XVI (Assurance of Ability to Complete Work). If Respondents seek to utilize the mechanisms set forth in Section XVI (Assurance of Ability to Complete Work) to satisfy the provisions of this

Paragraph B, they must demonstrate an ability to pay the amounts required under this paragraph, above and beyond that required by the obligations of Section XVI (Assurance of Ability to Complete Work).

XXII. ACCESS TO INFORMATION

A. Subject to the limitations contained in Section XXII.B and C of this Order, Respondents shall provide to EPA, upon request, copies of all documents and information within their possession or control and/or that 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. Upon reasonable notice, Respondents and/or their contractors or subcontractors shall make themselves available for such meetings, conferences, and/or inspections with EPA, or its representatives, as may be necessary for EPA to oversee the performance of Work required by this Order.

B. Respondents may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Order to the extent permitted by and in

accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Such assertion shall be substantiated in accordance with 40 C.F.R. § 2.204(e)(4) at the time the assertion is made. Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA has notified Respondents that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, the public may be given access to such documents or information without further notice to Respondents. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

C. The Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal courts in actions involving the United States. If the Respondents assert such a privilege, they shall provide the EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the

document, record, or information; and (6) the nature and basis of the privilege asserted by Respondents.

XXIII. RETENTION OF RECORDS

A. Each Respondent shall preserve and retain all records and documents now in their possession or control or which come into their possession or control that relate in any manner to the performance of the Work or liability of any person, including any Respondent, for response actions conducted and to be conducted at the Site, regardless of any corporate retention policy to the contrary, until ten years after the Respondents' receipt of EPA's notification pursuant to Paragraph B.2 of Section XVII (Certification of Completion). Respondents shall use their best efforts to obtain copies of all documents relating in any way to the Site and which are in the possession of their employees, agents, accountants, contractors, or attorneys. Respondents shall ensure that any agreement between Respondents and any agent, contractor, consultant, or other person retained to perform or oversee Work pursuant to this Order shall explicitly require said agent, contractor, consultant, or other person to maintain and preserve, during the pendency of this Order and for a minimum of ten (10) years after Respondents' receipt of EPA's notification pursuant to Paragraph B.2 of Section XVII (Certification of Completion) of this Order, all data, records, and documents within their respective possession or control which relate in any manner to the performance of the Work or to

hazardous substance management and disposal at the Site.

B. Upon conclusion of this document retention period, Respondents shall notify the EPA at least ninety days prior to the destruction of any such records, documents or information, and, upon request of EPA and subject to Section XXII.B and C of this Order, Respondents shall deliver all such documents, records and information to EPA. In no event shall Respondents destroy such records or documents until EPA responds in writing approving such destruction.

XXIV. NOTICES AND SUBMISSIONS

A. Whenever, under the terms of this Order, written notice is required to be given or a report or other document is required to be sent by one party to another, it shall be directed to the individuals specified in the particular Section of this Order at the addresses specified below, unless those individuals or their successors give notice of a change to the other parties in writing. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of this Order with respect to the EPA and the Respondents respectively.

XXV. EFFECTIVE DATE, OPPORTUNITY TO CONFER, AND NOTICE OF INTENT TO COMPLY

A. Not later than twenty (20) days from the date of issuance of this Order, Respondents may confer with EPA to discuss the scope and applicability of this Order, the findings upon which this Order is based, the appropriateness of any action

or activity required to be undertaken hereby, or other issues directly relevant to issuance of this Order. Such a conference is not, and shall not be deemed to be, an adversarial hearing or part of a proceeding to challenge this Order, and no official stenographic record of such proceeding shall be kept. Any request for a conference within the prescribed timeframe shall be made to:

Rodney Travis Carter, 3RC21
Senior Assistant Regional Counsel
U.S. Environmental Protection Agency
841 Chestnut Building
Philadelphia, PA 19107
(215) 597-3176

B. This Order is deemed "issued" on the date it is signed by the Regional Administrator of EPA Region III. This Order shall become effective thirty (30) days following the date on which it is issued.

C. No later than two (2) days after the effective date of this Order, each Respondent shall provide notice in writing to the individual identified in Section XV.B.1 of this Order stating whether such Respondent intends to comply with the terms of this Order. Failure by Respondents to provide such notice shall be a violation of this Order and deemed to be a decision by Respondents not to comply with the terms of this Order. In the event any Respondent elects not to comply with this Order, such Respondent shall identify all reasons supporting such decision Respondent claims as "sufficient cause" within the meaning of section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3).

XXVI. ADMINISTRATIVE RECORD

The Administrative Record compiled in support of this Order is available for review at the EPA Region III offices and may be seen after contacting the EPA Remedial Project Manager.

XXVII. COMMUNITY RELATIONS

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 dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site.

XXVIII. MODIFICATIONS

A. Except as provided in Section XXVIII.B of this Order, the provisions of this Order may be modified at any time, in writing, solely by the EPA Region III Regional Administrator.

B. Modification to any document submitted to, and approved or accepted by EPA pursuant to this Order, may be made in writing by EPA. The effective date of such modifications shall be the date on which Respondents receive notice of such modification.

XXIX. APPENDICES

The following appendices are attached to and incorporated into this Order:

"Appendix A" is the ROD.

"Appendix B" is the map of the Site.

IT IS SO ORDERED THIS 23rd DAY OF June, 1994.

Date: 6-23-94


Peter H. Kostmayer
Regional Administrator, Region III
U.S. Environmental Protection
Agency
841 Chestnut Building
Philadelphia, PA 191070