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EXHIBIT 1: RECORD OF DECISION

## I. JURISDICTION

A. This Administrative Order ("Order"), concerning the North Penn Area 12 Superfund Site ("Site"), in Worcester Township, Montgomery County, Pennsylvania, is issued to the Respondents by the Environmental Protection Agency ("EPA") under the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, ("CERCLA"), 42 U.S.C. § 9606(a). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order No. 12580 (52 Fed. Reg. 2923, January 29, 1987), and was further delegated to the EPA Regional Administrators on September 13, 1987, by EPA Delegation No. 14-14-B.

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 is issued to Schlumberger Industries, Inc.; Fitz Waterwheel Company, Inc.; Morfontaine Properties; and Bernard Manuel, (collectively, "Respondents").

B. This Order shall apply to and be binding upon the Respondents and their agents, successors and assigns.

C. Except for the requirements of Paragraph VIII.A. (Access to and Use of the Site) and Section XVI (Notice of Obligations and Transfer of Interests) which apply only to those Respondents who own or control the Site (or any portion thereof) or any

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property where access and/or land use restrictions are needed to implement this Order, all Respondents are jointly and severally responsible for implementing all of the requirements of this Order.

D. Neither a change in ownership of any property covered by this Order, nor a change in the ownership or corporate or partnership status of a Respondent, shall in any way alter, diminish, or otherwise affect the Respondents' obligations and responsibilities under this Order.

E. In the event of any change in name, majority 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 the prospective owner(s) or successor(s) of such Respondent before any change of ownership or control becomes irrevocable.

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

G. Respondents shall provide a copy of this Order to all contractors, subcontractors, laboratories, consultants, and other persons retained to conduct or monitor any portion of the Work performed pursuant to this Order prior to execution of any agreements or contracts with such persons. If the Respondents are under contract or agreement with any contractor,

subcontractor, laboratory, consultant or other person retained to conduct or monitor any portion of the Work required pursuant to this Order at the time this Order is issued, Respondents shall provide a copy of this Order to all such persons within five (5) days of receipt of this Order. Respondents shall condition all contracts and agreements with such persons on compliance with the terms of this Order. Notwithstanding the terms of such contracts or agreements, Respondents remain responsible for complying with the terms of this Order and for ensuring that its contractors, subcontractors, laboratories, consultants, and other persons retained to conduct or monitor any portion of the Work required by this Order comply with the terms of this Order.

### III. FINDINGS OF FACT

The following facts, including the Administrative Record for this Order, support issuance of this Order. That Administrative Record is incorporated by reference as if fully set forth herein.

#### A. Site Location, History and Uses

1. The North Penn Area 12 Site includes the former Transicoil facility, the former control facility for the Nike Missile Battery installation, and the extent of contamination emanating from those properties.

2. The former Transicoil facility occupies approximately 25 acres on Trooper Road in Worcester Township, Montgomery County, Pennsylvania (See Record of Decision, Figure 1). The former Transicoil facility was used for industrial and

manufacturing activities from approximately 1952 to 1991. Activities included the manufacturing of electric motors for use by the aerospace industry. As part of the manufacturing operations, trichloroethene ("TCE"), 1,1,1-trichloroethane ("1,1,1-TCA"), Freon and other solvents were used to clean and degrease parts and equipment, and were allegedly disposed of on the facility property.

3. The United States Army operated a Control facility for a Nike Missile Battery installation (PH-191) on property located adjacent to the former Transicoil facility from 1954 to 1968. This property consisted of approximately 12 acres of land. TCE was allegedly used and disposed of at the former Nike Control facility between 1954 and 1968. In 1975, the Army donated approximately 9 acres of the property to Worcester Township for use as a park. The remaining portion of the property was assigned to the Commonwealth of Pennsylvania and is currently operated by Montgomery County as a rehabilitation center for the handicapped. This rehabilitation center is known as the Center Point Training Center.

#### B. Responsible Parties

1. **Fitz Waterwheel Company, Inc.** - Fitz Waterwheel Company, Inc. purchased the former Transicoil facility on September 8, 1994, and currently owns and operates that property.

2. **Schlumberger Industries, Inc.** - Schlumberger Technology Corporation, a wholly-owned subsidiary of Schlumberger Ltd., owned and operated the former Transicoil facility for a

short period of time in 1965. As a result of a series of mergers and through transfer of the former Transicoil facility among various Schlumberger Ltd. subsidiaries, liability for operations at the former Transicoil facility from the period 1952 through 1965 transferred to Schlumberger Technology Corporation, and in turn to Schlumberger Industries, Inc. According to former employees, the following were reported to occur at the former Transicoil facility during the period for which Schlumberger is responsible as an owner/operator:

a. It was standard practice between 1953 and 1965 for employees to dispose of spent TCE around the plant grounds and wash TCE into a floor drain which flowed to the plant exterior.

b. A degreasing unit, located outside on the plant grounds, was utilized and there were no containment measures implemented to prevent spills. Reportedly, TCE occasionally was spilled on the ground as it was poured into and removed from the unit.

c. In the 1960's, a 5-gallon bucket of TCE spilled onto the floor of the manufacturing plant and the contents were washed into the floor drain.

d. Until the mid-1970s, it was common practice to hand carry TCE from the TCE drum storage area, which was located outside, into the manufacturing plant by using open buckets. Occasionally, TCE splashed onto the floor of the manufacturing facility.

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e. Spent solvents were stored in a 1,000 gallon underground tank located on the southwest side of the building. Facility personnel would occasionally spill some of the TCE on the ground when pouring it into the tank.

3. Morfontaine Properties and Bernard Manuel -

Morfontaine Properties, a limited partnership, purchased the former Transicoil facility on or about April 11, 1979 and leased the facility property to various facility operators during the period of facility operation which lasted until approximately January 7, 1991. As discussed below, studies performed by the Pennsylvania Department of Environmental Protection and Betz-Converse-Murdoch, Inc. determined that continuous leakage of TCE and 1,1,1-TCA from an underground waste solvent tank into the environment occurred during the period that Morfontaine Properties owned the property. Bernard Manuel is the general partner of Morfontaine Properties.

4. Transicoil, Inc. and Eagle-Picher Industries, Inc.

- Transicoil, Inc.; Eagle-Picher Industries, Inc.; and several related corporate entities operated the former Transicoil facility from approximately 1971 to approximately 1991.

a. According to former employees, it was standard practice between 1965 and 1976 for employees to dispose of spent TCE around the plant grounds and wash TCE into a floor drain which flowed to the plant exterior.

b. In 1991, Transicoil, Inc. and Eagle-Picher Industries, Inc. filed for bankruptcy under Chapter 11. Both

Transicoil, Inc. and Eagle-Picher Industries, Inc. settled their liability to the United States for contamination at a number of Superfund sites around the country in a global bankruptcy settlement entered June 7, 1996 in the United States Bankruptcy Court for the Southern District of Ohio, Western Division.

5. The United States Department of the Army - The U.S. Army owned approximately 12 acres of property located adjacent to the former Transicoil facility from 1954 until 1972. The Army operated a Control facility for the nearby NIKE missile base on this property. A former Department of Defense employee, who worked periodically at the Control facility from 1956 to 1968 repairing electronic equipment, has stated that several hundred electronic chassis were cleaned routinely at the former Control facility. The cleaning procedure involved filling one half of a 55-gallon drum with TCE and submerging 4 to 8 chassis into the TCE. During the cleaning procedure, some TCE splashed onto the ground. After each set of chassis was cleaned, the remaining spent TCE would be discarded on the ground and then replaced with fresh TCE to clean the next set of chassis.

C. Response Actions and Investigations Performed at the Site

1. On September 19, 1979, the Pennsylvania Department of Environmental Protection ("PADEP") (at the time known as the Pennsylvania Department of Environmental Resources) sampled the material contained in an underground waste solvent storage tank at the former Transicoil facility. The results indicated that

the concentrations of TCE and 1,1,1-TCA were greater than 300,000 parts per billion ("ppb") and 500,000 ppb, respectively.

2. Betz-Converse-Murdoch, Inc. ("BCM") prepared a report entitled "Interim Report on Phase I and II Hydrogeologic Investigation", which was dated October 21, 1980. In that report, BCM reported that the underground waste solvent tank at the former Transicoil facility was removed from the Site on June 18, 1980. Two samples were taken of soils which were under the tank. The analytical results of the samples indicated that the concentration of TCE was as high as 20 ppb and the concentration of 1,1,1-TCA was as high as 129 ppb. A sample of the material in the tank was also taken and the results indicated that the concentrations of TCE and 1,1,1-TCA in the such material were at levels above the analytical instruments' measuring capability.

3. During the summer of 1988, a hydrogeologic study was conducted by Environmental Resources Management, Inc. ("ERM") for Eagle-Picher Industries, Inc. The results of sampling on-site monitoring wells, supply wells, and several adjacent property supply wells indicated elevated concentrations of TCE, 1,1,2-trichloro-1,2,2-trifluoroethane ("Freon"), 1,1-dichloroethylene ("1,1-DCE"), 1,1,1-TCA and other related organic compounds in the ground water in these wells.

4. In June of 1989, Transicoil, Inc. and Eagle-Picher Industries, Inc. ("Transicoil/Eagle-Picher") entered into a consent agreement with EPA to perform a remedial investigation/feasibility study ("RI/FS") at the Site.

5. On February 21, 1990, pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the North Penn Area 12 Site on the National Priorities List ("NPL"), set forth at 40 C.F.R. Part 300, Appendix B. The NPL update that listed the North Penn Area 12 Site was published at 55 Fed. Reg. 6154 (Feb. 21, 1990).

6. In May 18, 1990, Transicoil/Eagle-Picher submitted an RI/FS work plan to EPA. This work plan was subsequently approved by EPA. Seventy-one residential wells in the area were sampled, and the results indicated that eleven wells contained TCE above the drinking water Maximum Contaminant Level ("MCL") of 5 ppb, 40 C.F.R. § 141.61. Two of the wells contained TCE at levels above 400 ppb. Eagle-Picher agreed to install and maintain carbon filters on the eleven home wells that contained TCE above the MCL.

7. On January 7, 1991, Transicoil/Eagle-Picher filed for bankruptcy under Chapter 11 of the United States Bankruptcy Code. Transicoil/Eagle-Picher ceased the RI/FS work that it was conducting. EPA, Region III assumed responsibility for completion of all remaining RI/FS activities.

8. In January 1995, residential wells in the vicinity of the former Transicoil facility were sampled by a contractor to EPA as an RI/FS sampling activity. The results of the sampling indicated that nine additional wells contained TCE above the MCL and other residential wells sampled contained TCE and volatile organic compounds including 1,1-DCE, Freon, and 1,1,1-TCA.

9. On March 30, 1995, an EPA Toxicologist conducted a review of the January 1995 residential well sample results and concluded that prompt action should be taken to reduce exposure to the contamination found in nine contaminated residential wells. Residents could be exposed to TCE through consumption of well water contaminated with TCE and from the inhalation of TCE during showering. Such TCE exposure could increase the residents' risk of developing cancer.

10. On August 25, 1995, EPA issued an Administrative Order For Removal Response Action pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606, to several parties responsible for contamination the Site. The Order required the responsible parties to periodically sample homes at or near the Site and install carbon filters on any residential well found to contain site-related contaminants above the MCL. To date, thirty-two residential wells have been found to contain TCE above the safe drinking MCL of 5 ppb. Those homes have been provided carbon filters under terms of the August 25, 1995 Order.

11. Samples taken by EPA during the RI/FS sampling activities indicated that on-site monitoring wells contained TCE and tetrachloroethylene ("PCE") above safe drinking water levels. In addition, 1,1,1-TCE, 1,1-DCE, Freon-113, and other volatile organic compounds were detected in on-site monitoring wells. The highest levels of contamination were found in on-site monitoring wells MW-1 (TCE at 380 ppb and PCE at 25 ppb) and MW-3 (TCE at 88 ppb and PCE at 3 ppb).

12. Hazardous substances detected in ground water during the RI include numerous volatile, semi-volatile and inorganic compounds. Among the hazardous substances found in the ground water are VOCs including TCE, 1,1-DCE, 1,2-dichloroethene (total), 1,2-dichloroethene (cis), tetrachloroethene, and chloroform.

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

1. The facts below are the major findings of the RI and the Risk Assessment concerning the primary contaminants at the Site.

2. The following substances, identified in the RI/FS Report, were found at the North Penn Area 12 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. Most of these substances are also carcinogens. 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.

a. Trichloroethene - TCE is a Class B2 carcinogen. TCE also affects 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.

b. 1,1-dichloroethene ("1,1-DCE") - 1,1-DCE is used primarily in the manufacture of polyvinylidene copolymers. Films of copolymers are used in packaging and offer excellent resistance to water vapor and most gases. Acute exposure to high doses of 1,1-DCE may produce nervous system damage while chronic exposure can cause liver damage. Aspects of the reported carcinogenicity of 1,1-DCE appear conflicting, and indicate gender, species, and strain specificity. Laboratory studies have demonstrated that exposure by inhalation caused angiosarcoma of the liver and other cancers in experimental animals.

c. 1,2-dichloroethene ("1,2-DCE") - 1,2-DCE exists in two isomers, cis (60%) and trans (40%). There are slight variations in toxicity between these two forms. 1,2-DCE is used as a solvent for waxes and resins, in the extraction of rubber, as a refrigerant, and in the manufacture of pharmaceuticals. As a liquid, 1,2-DCE can act as a primary irritant, producing dermatitis and irritation of mucous membranes. Systemic impacts include central nervous system depression, as 1,2-DCE acts principally as a narcotic. Symptoms of acute exposure include dizziness and frequent vomiting, and central nervous system intoxication similar to that caused by alcohol.

d. Tetrachloroethene ("PCE") - PCE is a Class B2 carcinogen. Non-cancer effects caused by PCE in animals include neurological depression, increased liver weight/body weight ratios, decreased body weight, increased liver triglycerides, decreased DNA content of cells, and altered liver enzyme activity.

e. Chloroform - Chloroform is widely used as a solvent, in the extraction and purification of pharmaceuticals, and in some sterilization processes. Chloroform is widely distributed in the atmosphere and in water, including municipal drinking water as a consequence of chlorination. Chloroform may produce burns if left in contact with skin. Chloroform is also a relatively potent anesthetic, and can cause liver damage and cardiac arrest at high concentrations. Exposure may result in digestive disturbance, dizziness, mental dullness, and coma. Though no direct evidence exists in humans, chloroform is carcinogenic in experimental animals.

3. This Site poses potential risk to human health due to 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 and inhalation of contamination in ground water.

#### **E. Record of Decision**

1. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA published notice of the completion of the RI/FS and of its Proposed Remedial Action Plan ("Proposed Plan") for the



Site on July 15, 1997, in a major local newspaper of general circulation. EPA provided an opportunity for written and oral comments from the public on the Proposed Plan. A copy of the transcript of the public meeting is available to the public as part of the Administrative Record upon which the Regional Administrator based the selection of the response action.

2. The decision by EPA on the remedial action to be implemented at the Site is embodied in a final Record of Decision ("ROD"), executed on September 30, 1997, on which the State has given its concurrence. The ROD includes a responsiveness summary to the public comments.

3. The ROD is appended to this Order as "Exhibit 1" and is incorporated herein by reference. The ROD is supported by an Administrative Record, prepared in accordance with Section 113(k) of CERCLA, 42 U.S.C. § 9613(k), and which contains the documents and information upon which EPA based its selection of the Remedial Action.

4. The Remedial Action selected in the ROD for the Site will protect human health and the environment by controlling exposure to contaminated soils and sediment and reducing the potential for future migration of contaminants. A summary of the selected remedy includes:

a. Ground water extraction and treatment. A ground water extraction and treatment system shall be installed and operated on the former Transicoil facility property. Treated

water will be reinjected into the ground through injection wells, unless found to be infeasible.

b. Additional Study. Additional study will be conducted during the pre-design, design or implementation of the extraction system to determine what, if any, remedial measures, including natural attenuation or modification of the extraction system, may be needed or are technically practicable to reduce site-related contaminants to MCL concentrations or below in contaminated ground water which lies beyond the influence of the selected pump and treat extraction system within a reasonable time frame.

c. Providing an alternative, public water supply. The existing North Penn Water Authority water lines shall be extended in order to provide water to those residences and commercial establishments designated by the ROD.

d. Long-term Monitoring. Sampling and analysis shall be performed to determine whether the remedy is effective. This additional investigation includes long-term (30 years) ground water monitoring for water quality, as needed, to ensure protection of human health and welfare and the environment.

e. Site Use. A deed restriction shall be placed on the former Transicoil facility property prohibiting use of the ground water until EPA determines that this water is safe to use as drinking water.

f. Operation and Maintenance. The ground water extraction and treatment system and the extension to the public

water supply system shall be operated and maintained to ensure proper functioning. EPA anticipates that the responsibility for operation and maintenance of the public water supply system will be assumed by the local water authority(ies) after construction is certified to be completed.

g. Five Year Review. Site conditions shall be reviewed five years from the commencement of the remedial action to ensure that the remedy remains protective of human health and the environment.

#### IV. CONCLUSIONS OF LAW AND DETERMINATIONS

A. The North Penn Area 12 Superfund Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

B. "Hazardous Substances", 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 have otherwise come to be located on, and remain at, the Site.

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

D. Respondents are all "persons" within the meaning of Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

E. Respondents Schlumberger Industries, Inc.; Fitz Waterwheel Company, Inc.; Morfontaine Properties; and Bernard

Manuel are persons who currently own and/or owned or operated a portion of the Site at the time of disposal of hazardous substances, as the term "owner or operator" is defined at Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and are therefore liable pursuant to Sections 107(a)(1) and/or 107(a)(2) of CERCLA, 42 U.S.C. §§ 9607(a)(1) and/or 9607(a)(2).

F. EPA has determined that actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in the ROD and by achieving the Performance Standards set forth in the ROD, may present an imminent and substantial endangerment to public health, welfare, or the environment.

G. EPA has determined that in order to implement the response actions selected in the ROD, the Work required by this Order must be performed.

#### V. DEFINITIONS

Unless otherwise expressly provided herein, terms used in this Order that are defined in CERCLA or in regulations promulgated pursuant to CERCLA shall have the meaning assigned to them in the statute or its implementing regulations. Whenever terms listed below are used in this Order or in the documents attached to this Order or incorporated by reference into this Order, the following definitions shall apply:

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

B. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or federal holiday. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the end of the next working day.

C. "Data Quality Objectives" or "DQOs" are qualitative and quantitative statements which specify the quality of the data required to support EPA decisions during the remedial response actions. DQOs are determined based on the end uses of the data to be collected.

D. "Duly Authorized Representative" shall mean a person designated in accordance with the procedures set forth in 40 C.F.R. § 270.11(b) and approved as a Duly Authorized Representative by EPA.

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

F. "PADEP" shall mean the Pennsylvania Department of Environmental Protection and any successor departments or agencies.

G. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan, codified at 40 C.F.R. Part 300, including any amendments thereto.

H. "Operation and Maintenance" or "O&M" shall mean all activities that are required under the Operation and Maintenance Plan developed pursuant to this Order and the ROD, and approved by EPA.

I. "Order" shall mean this Order and all exhibits appended hereto. In the event of conflict between the Order and any exhibit, the Order shall control.

J. "Performance Standards" shall mean those cleanup standards, standards of control, and other substantive requirements, criteria or limitations identified in Section IX of the Record of Decision, that the Remedial Action and Work required by this Order must attain and maintain. "Performance Standards" shall include: (1) those Standards set forth in Section IX of the ROD which are applicable to the Remedial Action and Work required by this Order; (2) the applicable or relevant and appropriate requirements set forth in Section VIII.2. of the ROD which are applicable to the Remedial Action and Work required by this Order; and (3) those Performance Standards that will be developed by the Respondents and approved by EPA during the performance of the Work.

K. "Record of Decision" or "ROD" shall mean, unless otherwise stated, the EPA Record of Decision for the North Penn Area 12 Superfund Site, which was signed on September 30, 1997 by

the Regional Administrator of EPA Region III, and all attachments thereto. The ROD is appended hereto as Exhibit 1.

L. "Remedial Action" or "RA" shall mean those activities, except for Operation and Maintenance ("O&M"), to be undertaken by Respondents to implement the final plans and specifications that are submitted by Respondents pursuant to the Remedial Design Work Plan and subsequently approved by EPA, including any additional activities required under Section VI (Performance of the Work) and Section XIII (Plans and Reports Requiring EPA Approval) of this Order.

M. "Remedial Action Work Plan" shall mean a plan for Remedial Action, including a schedule for implementation of Remedial Action, submitted by Respondents pursuant to Paragraph VI.C.3. of this Order and approved by EPA.

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

O. "Remedial Design Work Plan" shall mean a plan for Remedial Design, including a schedule for remedial design work, submitted by Respondents pursuant to Section VI., Paragraph C.1. of this Order and approved by EPA.

P. "Respondents" shall mean Schlumberger Industries, Inc.; Fitz Waterwheel Company, Inc.; Morfontaine Properties; and Bernard Manuel.

Q. "Site" shall mean the North Penn Area 12 Superfund Site, a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9). The Site is located in Worcester Township, Montgomery County, Pennsylvania. The Site includes the former Transicoil facility, the former NIKE Control facility and all of the areas to which Site-related contaminants have come to be located.

R. "State" shall mean the Commonwealth of Pennsylvania.

S. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33).

T. "Work" shall mean all activities Respondents are required to perform under this Order to implement the remedy selected in the ROD (Section IX). The "Work" includes Remedial Design, Remedial Action and O&M as defined above, tasks to be performed in accordance with any EPA-approved Work Plan required by this Order, and any other activities required to be undertaken pursuant to this Order.

## VI. PERFORMANCE OF THE WORK

### A. Compliance with the ROD and the Law

1. Based on the foregoing, and the Administrative Record supporting this Order, it is hereby ordered that Respondents implement the remedy selected in Section IX of the ROD. This Work shall be conducted in accordance with CERCLA, the NCP, and the requirements and schedules specified in this Order



and any future written modifications to this Order, including, but not limited to, achieving the applicable Performance Standards as defined in Paragraph V.J. of this Order.

Respondents may jointly propose separate contractors and jointly submit separate work plans for each portion of the remedy selected in Section IX of the ROD.

2. Nothing in this Order, in Section IX of the ROD (Selected Remedy and Performance Standards), or in EPA's approval of the Remedial Design Work Plan or the Remedial Action Work Plan, constitutes a warranty or representation of any kind by EPA that compliance with this Order, the ROD, or the EPA-approved Remedial Design Work Plan or the EPA-approved Remedial Action Work Plan 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.

3. All actions and activities carried out by Respondents pursuant to this Order shall be performed in accordance with all applicable federal, state, and local laws and regulations. Respondents shall also comply with all applicable or relevant and appropriate requirements of federal and state environmental laws and regulations and relevant guidance documents as set forth in the ROD.

4. Respondents shall obtain all permits and authorizations necessary for off-Site Work and shall submit

timely and complete applications and requests for any such permits or authorizations.

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

6. 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 expressly reserved in Section XXII (Enforcement and EPA's Reservation of Rights) of this Order.

B. Selection of Contractor(s)

1. General

a. All aspects of the Work to be performed by the Respondents pursuant to this Order shall be under the direction and supervision of contractors and subcontractors, as well as qualified personnel of such contractors and subcontractors. The selection of such contractors and subcontractors shall be subject to acceptance or disapproval by EPA.

b. Neither the United States on behalf of EPA, nor EPA, shall be held out to be, or be considered, a party to any contract between or among Respondents and any contractor, including any subcontractor, or other person(s) retained to conduct Work pursuant to this Order.

c. For purposes of this Section VI.B (Selection of Contractor(s)), the term "contractor(s)" shall be deemed to include contractor(s) and subcontractor(s).

2. Remedial Design Contractor(s)

a. Within five (5) days after the effective date of this Order, the Respondents shall: (1) notify EPA and the State in writing of the name, title, and qualifications of all contractor(s) to be used in carrying out all Remedial Design activities required by this Order; and (2) identify the personnel that will be used during construction to ensure that the Work is performed in accordance with the approved Remedial Design submittal(s).

b. EPA will notify Respondents in writing of its acceptance or disapproval of the selection of the Remedial Design contractor(s). If EPA disapproves of the selection of the Respondents' proposed Remedial Design contractor(s), the Respondents shall submit to EPA the names, titles, and qualification of at least three (3) contractors that would be acceptable to the Respondents, and the information required in Paragraphs VI.B.2.a.(1) and (2), above, within fourteen (14) days of receipt of EPA's disapproval. Except as provided below, EPA will provide written notice of the name of the contractor(s) whose selection EPA accepts. The Respondents may select any contractor(s) from that list and shall notify EPA and the State in writing of the name(s) of the contractor(s) selected within fourteen (14) days of EPA's designation. The Respondents shall

notify EPA and the State of the date the Respondents enter into an agreement or contract with such contractor(s) to perform the Work for which the selection of such contractor(s) were accepted by EPA. In the event EPA does not accept the selection of any of the contractors proposed in the Respondents' list, EPA may direct the Respondents to submit to EPA the names and qualifications of at least three (3) additional contractors whose selection would be acceptable to the Respondents within fourteen (14) days of receipt of EPA's disapproval.

c. If at any time during the pendency of this Order a decision is made by the Respondents to retain an additional or substitute Remedial Design contractor, the Respondents shall give written notification to EPA and shall obtain acceptance from EPA in accordance with the procedures described in Paragraphs VI.B.2.a. and b., above, before any new contractor performs, directs, or supervises any Work pursuant to this Order.

3. Remedial Action Contractor(s)

a. Within thirty (30) days after EPA approves the Remedial Action Work Plan submitted by the Respondents pursuant to Section VI.C.3. of this Order, and prior to the commencement of any Work thereunder, the Respondents shall notify EPA in writing of the name(s), title(s) and qualifications of all contractor(s) and the personnel of such contractor(s) proposed to be used in carrying out Work required by such approved Remedial Action Work Plan.

b. EPA will accept or disapprove the selection of the Remedial Action contractor(s) proposed by the Respondents in accordance with the procedures described for the acceptance or disapproval of Remedial Design contractor(s) in Paragraph VI.B.2.b. above.

c. If at any time during the pendency of this Order a decision is made by the Respondents to retain an additional or substitute Remedial Action contractor, the Respondents shall give written notification to EPA and shall obtain acceptance of the selection from EPA in accordance with the procedures described in Paragraphs VI.B.2.a. and b., above, before the new contractor(s) performs, directs, or supervises any Work pursuant to this Order.

4. Disapproval of Contractor(s)

EPA retains the right to disapprove at any time, the selection of contractors, supervisory personnel and other persons retained to conduct any of the Work required by this Order. In such event, the Respondents shall propose replacements in accordance with the requirements of this Section VI.

C. **Work To Be Performed By Respondents**

1. Remedial Design Work Plan

a. Within forty-five (45) days after receiving notice of EPA's acceptance of the selection of the Remedial Design Contractor(s) in accordance with Paragraph VI.B.2.b., Respondents shall submit to EPA for review and approval a work plan for the design of the Remedial Action at the Site ("Remedial Design Work

Plan" or "RD Work Plan"). The RD Work Plan shall include a step-by-step plan for completing the Remedial Design for the remedy identified in the ROD and for attaining and maintaining all requirements, including the Performance Standards that apply to the remedy identified in the ROD. The RD Work Plan must describe in detail the tasks that the Respondents will complete and the deliverables the Respondents will submit during the Remedial Design phase, and contain an expeditious schedule for completing the tasks and submitting the deliverables described in the RD Work Plan. The major tasks and deliverables described in the RD Work Plan shall include, but not be limited to the following: (1) a Preliminary Design; (2) an Intermediate Design; (3) a Pre-Final Design; (4) a Final Design; (5) a Report of the Findings of any pre-design sampling; (6) a Site Monitoring Plan; (7) a Design Sampling and Analysis Plan; (8) a Site Health and Safety Plan for design activities; (9) a Contingency Plan; (10) a Construction Quality Assurance Plan ("CQAP"); (11) a plan for gathering additional data or information, or performing additional studies; and (12) other appropriate components including a Permitting Plan and an Institutional Controls Plan. At a minimum, the Institutional Controls Plan shall include the requirements of this Order set forth in Section VIII (Access to and Use of the Site) and XVI (Notice of Obligations and Transfer of Interests), below.

b. The RD Work Plan shall be consistent with, and shall provide for, implementing the Performance Standards for the

remedy. The RD Work Plan shall conform with EPA's "Remedial Design/ Remedial Action Handbook," EPA 540/R-95/059, and any amendments to such Guidance.

c. Upon approval, or approval upon condition by EPA, the RD Work Plan shall be deemed to be incorporated into this Order and made an enforceable part hereof.

d. Upon approval of the RD Work Plan by EPA, Respondents shall implement the RD Work Plan in accordance with the schedules and methodologies contained therein. The 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 (Plans and Reports Requiring EPA Approval) of this Order. Except for activities approved by EPA prior to the issuance of this Order, unless otherwise directed by EPA, the Respondents shall not commence Remedial Design activities at the Site prior to approval of the Remedial Design Work Plan.

2. Remedial Design

a. Within sixty (60) days after EPA approves the RD Work Plan, Respondents shall submit a Preliminary Design for the remedy to EPA for review and approval. The preliminary design submittal begins with the initial design of the remedy and ends with the completion of approximately thirty (30) percent of the design effort. The Preliminary Design shall include, at a minimum; (1) design criteria; (2) results of additional field sampling; (3) project delivery strategy; (4) preliminary plans,

drawings, and sketches; (5) required specifications in outline form; and (6) a preliminary construction schedule.

b. Within sixty (60) days after EPA approves the Preliminary Design, Respondents shall submit an Intermediate Design to EPA for review and approval unless EPA determines that submission of an Intermediate Design is not warranted. This submittal shall represent approximately sixty (60) percent of the design effort. The Intermediate Design shall address all of EPA's comments on the Preliminary Design and shall include, at a minimum: (1) Intermediate Plans, Specifications and Schedules; (2) a draft Operation and Maintenance Plan; (3) a draft Construction Quality Assurance Plan ("CQAP"); (4) a draft Sampling and Analysis Plan ("SAP"), directed at measuring progress towards meeting the remedy performance standards; (5) a draft Site Health and Safety Plan which conforms to applicable Occupation Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120 and guidance entitled "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" dated October 1985, as amended; (6) a draft Contingency Plan which includes an air monitoring plan to protect the public during any soil excavation activities (e.g. well drilling) and a Spill Control and Countermeasure Plan ("SPCC") if applicable; (7) a draft Institutional Controls Plan which, at a minimum, shall include the requirements of this Order set forth in Sections VIII (Access to and Use of the Site) and XVI (Notice of Obligations and Transfer of Interests), below, and



which will ensure that the structures, devices, and other components of the Work along with the naturally occurring hydrogeologic conditions at the Site are not interfered with or disturbed by future use of the property, and (8) a draft Permitting Requirements Plan for any work that may require permits. The CQAP shall detail the approach to quality assurance during construction activities at the Site, and 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 a separate contractor, submitted for EPA acceptance or disapproval pursuant to Paragraph VI.B., above, who is not involved in any other aspects of the Remedial Design and Remedial Action and 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;

c. Within sixty (60) days after EPA approves the Intermediate Design or, if EPA determines that an Intermediate Design is not warranted, within ninety (90) days after EPA approves the Preliminary Design, Respondents shall submit to EPA for review and approval a Pre-Final Design for the remedy for EPA review and approval. This submittal shall represent approximately ninety (90) percent of the design effort. The Pre-final Design shall address all of EPA's comments on the previous

design submittal and shall include, at a minimum: (1) Pre-final Plans, Specifications and Schedules; (2) the pre-final Operation and Maintenance Plan; (3) the pre-final Construction Quality Assurance Plan ("CQAP"); (4) the pre-final Sampling and Analysis; (5) the pre-final Site Health and Safety Plan; (6) the pre-final Contingency Plan; (7) the pre-final Institutional Controls Plan; and (8) the pre-final Permitting Requirements Plan;

d. Within thirty (30) days after EPA approves the Pre-final Design, Respondents shall submit a Final Design for the remedy to EPA for review and approval. The Final Design which shall address all of EPA's comments on the Pre-final design shall include, at a minimum: (1) final Plans, Specifications, and Schedules; (2) the final Operation and Maintenance Plan; (3) the final CQAP; (4) the final Sampling and Analysis Plan; (5) the final Site Health and Safety Plan; (6) a final Contingency Plan; (7) a final Institutional Controls Plan; (8) a final Permitting Requirements Plan; and (9) a Design Analysis Report that contains all of the Design calculations;

e. Upon EPA approval, the Final Design shall be incorporated into this Order and made an enforceable part hereof.

### 3. Remedial Action Work Plan

a. Not later than thirty (30) days after EPA approves all deliverables required as part of the Final Design, Respondents shall submit a Remedial Action Work Plan ("RA Work Plan") for the remedy to EPA for review and approval. The RA Work Plan shall be developed in accordance with the ROD, any

amendment to the ROD, and any Explanation of Significant Differences ("ESD") issued by EPA pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617 and shall be consistent with the Final Design for the remedy approved by EPA. The RA Work Plan shall include methodologies, plans and schedules for completion of, at a minimum, the following: (1) selection of the Remedial Action Contractor; (2) implementation of the Remedial Design; (3) implementation of the CQAP; (4) development and submission of the Field Sampling Plan; (5) identification of and satisfactory compliance with applicable permitting requirements; (6) implementation of the Operations and Maintenance ("O&M") Plan; (7) implementation of the Contingency Plan; and (8) development and submission of the Performance Standards assessment plan. The RA Work Plan shall also include an expeditious schedule for implementing all Remedial Action tasks identified in the ROD for the remedy and shall identify the initial formulation of Respondents' Remedial Action Project Team.

b. Respondents shall submit for EPA acceptance the RA Work Plan and the Health and Safety Plan for Remedial Action activities. Upon acceptance by EPA, the Health and Safety Plan for Remedial Action shall be incorporated in, and enforceable as part of the Remedial Action Work Plan. The Respondents shall ensure that the Health and Safety Plan for Remedial Action, as accepted by EPA, is met by Respondents' contractor(s).

c. Upon approval by EPA, the RA Work Plan shall be incorporated into this Order as a requirement of this Order.

4. Remedial Action

a. Upon approval of the RA Work Plan by EPA, Respondents shall implement the RA Work Plan according to the schedules and methodologies in the RA Work Plan. Unless otherwise directed by EPA in writing, Respondents shall not commence Remedial Action at the Site prior to approval of the RA Work Plan.

b. If Respondents seek to retain a construction contractor to assist in the performance of the Remedial Action, then Respondents shall submit a copy of the solicitation documents, including but not limited to the Request For Proposals, to EPA not later than five (5) days after publishing the solicitation documents.

c. Within thirty (30) days after EPA approves the RA Work Plan, Respondents shall notify EPA in writing of the name, title, and qualifications of any construction contractor(s) proposed to be used in carrying out Work under this Order.

d. Not later than twenty-one (21) days after EPA's acceptance of the Remedial Action contractor(s) in accordance with Section VI.B.3. of this Order, Respondents shall submit to EPA, for approval by EPA, a Construction Management Plan. The Construction Management Plan 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 into this Order and made an enforceable part hereof.

e. Within thirty (30) 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 deliverables relating to Remedial Action including the RA Work Plan and the Construction Management Plan.

f. The Work performed by the Respondents pursuant to this Order shall, at a minimum, achieve the Performance Standards specified for the remedy in the Record of Decision and in the EPA-approved work plans and shall be consistent with CERCLA and the NCP.

g. Notwithstanding any action by EPA, Respondents remain fully responsible for achieving the Performance Standards in the ROD and EPA-approved work plans.

**D. Reporting Requirements/Progress Reports**

1. In addition to any other requirement of this Order, Respondents shall submit to EPA three (3) copies, and to the State, two (2) copies, of a written monthly progress report that provides a summary of actions and activities undertaken pursuant to this Order. The progress reports shall be submitted on or before the fifth day of each calendar month following the effective date of this Order. Respondents' obligation to submit progress reports continues until EPA gives written notice that

Respondents have demonstrated, to EPA's satisfaction, that all Work required pursuant to this Order has been fully performed and all Performance Standards have been met. The monthly progress report shall: (a) describe the actions which have been taken toward achieving compliance with this Order during the previous month; (b) include all results of sampling and tests and all other data pertaining to the Work received or generated by Respondents or their contractors or agents (and not previously submitted to EPA) in the previous month; (c) identify all work plans, plans, and other deliverables required by this Order which were completed and submitted during the previous month; (d) describe 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; (e) include information regarding percentage or quantities of Work completed, 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; (f) describe any modifications to the work plans or other schedules that Respondents have proposed to EPA or that have been approved by EPA; and (g) describe all activities, as approved by EPA under Section XIX (Community Relations) undertaken in support of the Community Relations Plan during the previous month and those to be undertaken in the next month. If requested by EPA,

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

2. Except as otherwise provided in the next sentence, Respondents shall notify EPA of any anticipated change to the EPA-approved schedule for performance of any activity including, but not limited to, implementation of work plans, no later than seven (7) days prior to the scheduled performance of the activity. Notwithstanding the foregoing, Respondents shall notify EPA of any anticipated change to the EPA-approved schedule for the performance of data collection no later than thirty (30) days prior to the performance of such activity, unless otherwise directed by EPA. All modifications to the EPA-approved schedule must be approved by EPA in writing.

3. In addition to the reporting required by Section 103 of CERCLA, 42 U.S.C. § 9603, and 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 (24) hours of the onset of such event, orally notify the EPA Remedial Project Manager ("RPM") or the Chief, Eastern Pennsylvania Remedial Section, Superfund Remedial Branch, Hazardous Site Cleanup Division, EPA Region III ("Section Chief") (in the event of the unavailability of the EPA Remedial Project Manager), or, in the event that neither the EPA Remedial Project Manager nor

the Section Chief is available, the EPA Region III Hotline at (215) 814-9016. Within ten (10) 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 (30) days of the conclusion of such an event, Respondents shall submit a report setting forth all actions taken in response thereto.

4. Respondents shall submit to EPA two (2) copies, and to the State two (2) copies, each year within thirty (30) days of the anniversary of the effective date of this Order, a report setting forth the status of the Work, which shall at a minimum include a statement of major milestones accomplished in the preceding year, a statement of tasks remaining to be accomplished, and a schedule for implementation of the remaining Work.

5. Failure to submit written reports in accordance with the requirements of this Order shall constitute a violation of this Order.

#### E. Off-Site Shipments

1. Respondents shall, at least twenty-one (21) days prior to any off-Site shipment of Waste Materials which are generated as part of the RD/RA activities 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 Materials. 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. Respondents shall include in the written notification the following information: (a) the name and location of the facility to which the hazardous substances or Waste Materials are to be shipped; (b) the type and quantity of the hazardous substances or Waste Materials to be shipped; (c) the expected schedule for the shipment of the hazardous substances or Waste Materials; and (d) the method of transportation.

Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the hazardous substances or Waste Materials to another facility within the same state, or to a facility in another state.

3. The identity of the receiving facility and the state will be determined by the Respondents. Respondents shall provide written notification required by this Section VI.E., including the information required by Paragraph VI.E.2., immediately above, as soon as practicable, but in no case less than fourteen (14) days before the Waste Materials are actually shipped.

4. All Waste Materials that Respondents remove from the Site shall be disposed of or treated at a facility in accordance with Section 121(d)(3) of CERCLA, 42 U.S.C.

§ 9621(d)(3), 40 C.F.R. § 300.440, and all other applicable or relevant and appropriate federal, state and local laws and regulations.

F. Operation and Maintenance ("O&M")

Respondents shall perform the activities during O&M in accordance with the applicable Performance Standards, the RD and RA Work Plans and the EPA-approved O&M Plan to be submitted pursuant to this Order. Notification requirements for off-site shipments of Waste Materials, described above, shall also be met during the O&M.

G. Additional Response Activities

1. In the event that EPA determines that additional response activities are necessary to meet applicable Performance Standards in the ROD, or EPA determines, in accordance with Section XI, below, that the Remedial Action required by this Order is not protective of public health, welfare and/or the environment, EPA may notify Respondents that additional response actions are necessary.

2. Unless otherwise stated by EPA, within thirty (30) days of receipt of notice from EPA that additional response activities are necessary to meet any Performance Standard(s) in the ROD or, pursuant to Section XI, below, are necessary to protect public health, welfare and/or the environment, Respondents shall submit to EPA for approval a work plan for the additional response activities. The work plan shall conform to the applicable requirements of this Order.

3. Upon EPA's approval of the work plan for additional response activities, the work plan shall become an enforceable part hereof and Respondents shall implement that work plan in accordance with the provisions and schedule contained therein. Unless otherwise directed by EPA, Respondents shall not commence physical on-site implementation of the work plan for additional response actions prior to the date for commencement set forth in the EPA-approved plan.

4. Any additional response actions that Respondents propose are necessary to carry out the requirements to the ROD applicable to the Work to be performed pursuant to this Order or to achieve the applicable Performance Standards 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 by EPA.

5. If required by Sections 113(k)(2) or 117 of CERCLA, 42 U.S.C. §§ 9613(k)(2) or 9617, or the NCP, 40 C.F.R. Part 300, Respondents and the public will be provided with an opportunity to submit written comments for the record during the public comment period on any additional response actions proposed pursuant to this Section VI.G. After the expiration of any such required comment period, the Director, Hazardous Site Cleanup Division, EPA Region III, or his/her delegate will determine in writing whether additional response actions are appropriate.

## VII. SAMPLING AND QUALITY ASSURANCE

A. Respondents shall consult with EPA in planning for, and prior to, all sampling and analysis required by this Order, and by any plan which EPA approves pursuant to this Order. Unless otherwise directed by the EPA Remedial Project Manager, Respondents shall not commence sampling until EPA approves the Remedial Design Work Plan and the Sampling and Analysis Plan ("SAP").

B. Respondents shall 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 or field investigation. 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. The FSP shall also include the types, locations, analytical parameters, and frequency of samples. Selection of analytical methods shall be justified in conjunction with the DQOs. The guidelines referenced in Paragraph VII.C., immediately below, and any additional guidance provided to the Respondents by EPA, shall be followed in the preparation of the SAP.

C. While conducting all sample collection and analysis activities required by this Order, Respondents shall implement quality assurance, quality control and chain of custody procedures in accordance with "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operation," (US EPA Quality Assurance Management Staff: August 1994) (EPA QA/R-5); "EPA NEIC Policies and Procedures Manual," (May 1986) (EPA 330/978-001-R); National Functional Guidelines for Inorganic Data Review (EPA 540/R-94/013) and Modifications to the National Functional Guidelines for Inorganic Data Review (EPA Region III: April 1993); National Functional Guidelines for Organic Data Review (EPA 540/R-94/012) and Modifications to the National Functional Guidelines for Organic Data Review (EPA Region III: September 1994); Region III Innovative Approaches to Data Validation," (EPA Region III: September 1994); "Data Quality Objectives Process for Superfund," (EPA 540/R-93/071: September 1994); and subsequent amendments to such guidelines upon notification by EPA to Respondents of such amendments. Amended guidelines shall apply only to procedures conducted after such notification. Prior to the commencement of any monitoring project under this Order, Respondents shall submit to EPA for approval a QAPjP for the Work that is consistent with the NCP and the guidance documents cited above. Respondents shall ensure that EPA and State personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondents in implementing this Order. In addition,

Respondents shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPjP for quality assurance monitoring. Respondents shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Order perform all analyses according to accepted EPA methods. Respondents shall submit to EPA 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 résumés. Respondents shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Order will be conducted in accordance with the procedures set forth in the QAPjP approved by EPA. At the request of EPA, Respondents shall conduct one or more audits of the selected laboratory(ies) to verify analytical capability and compliance with the QAPjP. Auditors shall conduct lab audits 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 Office of Analytical Services and Quality Assurance, EPA Region III. Audit reports shall be submitted to the EPA Remedial Project Manager within fifteen (15) days of completion of the audit. The Respondents shall report deficiencies, including all those which adversely impact data quality, reliability, or accuracy, and take action to correct such deficiencies within twenty-four (24) hours

of the time the Respondents knew or should have known of the deficiency.

D. Upon request, Respondents shall allow split or duplicate samples to be taken by EPA and the State, or their authorized representatives. Respondents shall notify EPA and the State not less than thirty (30) days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA and the State shall have the right to take any additional samples that EPA or the State deem necessary. Upon request, EPA and the State shall allow the Respondents to take split or duplicate samples of any samples taken as part of EPA's oversight of the Respondents' implementation of the Work.

E. Respondents shall submit to EPA and the State two (2) copies each 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 implementation of this Order unless EPA agrees otherwise.

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

#### VIII. ACCESS TO AND USE OF THE SITE

A. If the Site (or any portion thereof), or any other property where access and/or land use restrictions are needed to

implement this Order, is owned or controlled by any of the Respondents, such Respondents shall implement the following:

1. Commencing on the effective date of this Order, Respondents shall provide access to EPA, the State, the other Respondents and their respective authorized representatives, employees, agents, consultants, or contractors for the purposes of conducting any activity related to this Order including, but not limited to, the following:

- a. Monitoring the Work;
- b. Verifying any data or information submitted to EPA or the State;
- c. Conducting investigations relating to contamination at or near the Site;
- d. Obtaining samples;
- e. Assessing the need for, planning, or implementing additional response actions at or near the Site;
- f. Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondents or their agents, consistent with Section XVIII (Access to Information);
- g. Assessing Respondents' compliance with this Order; and
- h. Determining whether the Site (or any portion thereof) or other property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, by this Order.



2. Commencing on the effective date of this Order and thereafter, refrain from using the Site (or any portion thereof), or such other property, in any manner that would interfere with or adversely affect the integrity or protectiveness of the remedial measures to be implemented pursuant to this Order. In addition, such Respondents shall refrain from using the Site (or any portion thereof), or such other property, for any purpose which might interfere with, obstruct, or disturb the performance, support, or supervision of the Work, including any operation and maintenance activities taken pursuant to this Order. Unless otherwise required for implementation of the Work under this Order, such restrictions on use of the Site include, but are not limited to, the following: No use of ground water located, at or beneath the former Transicoil facility.

B. If the Site (or any portion thereof), or any other property where access and/or land use restrictions are needed to implement this Order, is owned or controlled by persons other than any of the Respondents, Respondents shall use best efforts to secure the following from such persons:

1. An agreement to provide access thereto for EPA, the State, the Respondents and their respective authorized representatives, employees, agents, consultants, or contractors, for the purpose of conducting any activity related to this Order including, but not limited to, those activities listed in Paragraph VIII.A.1. of this Order;

2. An agreement to abide by the obligations and restrictions established by this Paragraph VIII.B. of this Order, or that are otherwise necessary to implement, ensure non-interference with, or ensure the protectiveness of the remedial measures to be performed pursuant to this Order. Unless otherwise required for implementation of the Work under this Order, such obligations and restrictions include, but are not limited to the following: No use of ground water located at or beneath the former Transicoil facility.

C. If within forty-five (45) days of the effective date of this Order, Respondents have not submitted access and/or land use restriction agreements required by Paragraph VIII.B. of this Order, Respondents shall promptly notify EPA in writing and shall include in that notification a summary of the steps that Respondents have taken to attempt to comply with Paragraph VIII.B. of this Order. EPA may, as it deems appropriate, assist Respondents in obtaining access or land use restrictions.

D. If EPA determines that land use restrictions in the form of state or local laws, regulations, ordinances or other governmental controls are needed to implement the remedy selected in the ROD, ensure the integrity and protectiveness thereof, or ensure non-interference therewith, Respondents shall cooperate with EPA's efforts to secure such governmental controls.

E. Notwithstanding any provision of this Order, EPA retains all of its access authorities and rights, as well as all of its rights to require land use restrictions, including

enforcement authorities related thereto, under CERCLA, RCRA and any other applicable statutes or regulations.

#### IX. FAILURE TO PERFORM

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/or manner required herein, the Respondents' Project Coordinator, as defined in Section XII (Designated Project Coordinators), below, shall notify EPA orally within forty-eight (48) hours of such event and in writing as soon as possible, but in no event more than ten (10) days after Respondents knew or should have known about 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.

B. Any delay in performance of this Order that, in EPA's judgment, is not properly justified by Respondents under the terms of this Section shall be considered a violation of this Order.

C. Any delay in performance of this Order or inability to perform any action required by this Order shall not affect Respondents' obligation to fully perform all activities required under the terms and conditions of this Order.

D. 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.

E. 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.

F. Increased costs or expenses associated with implementation of the activities called for in this Order, are not justification for any delay in performance or failure to perform.

#### X. ENDANGERMENT AND EMERGENCY RESPONSE

A. In the event of any action, occurrence, or situation during the performance of the Work which causes or threatens to cause a release of a hazardous substance that constitutes an emergency situation or that may present an immediate threat to the public health or welfare or the environment, Respondents shall, subject to Paragraph B of this Section X, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release or endangerment, and shall immediately notify the EPA Remedial Project Manager, or, if the EPA Remedial Project Manager is unavailable, the Chief of the

Eastern Pennsylvania Remedial Section of the Remedial Branch, Hazardous Site Cleanup Division, EPA Region III. If neither of these persons is available, Respondents shall notify the EPA Region III Hotline at (215) 814-9016. 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 or welfare or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the Site.

#### XI. EPA PERIODIC REVIEW

A. Under Section 121(c) of CERCLA, 42 U.S.C. § 9621(c), and any applicable regulations, EPA must review the Remedial Action required by this Order at least every five (5) years after initiation of the Remedial Action if hazardous substances remain on the Site, to assure that the Work performed pursuant to this Order adequately protects human health and the environment. Until such time as EPA certifies completion of the Work, Respondents shall conduct the requisite studies, investigations, or other response actions as determined necessary by EPA in order

to permit EPA to conduct the reviews under Section 121(c) of CERCLA, 42 U.S.C. § 9621(c). As a result of any reviews performed under this Section, Respondents may be required to perform additional work in accordance with Paragraph C of this Section XI or to modify work previously performed.

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 submit written comments for the record during the public comment period on any additional 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). After the period for submission of written comments is closed, the Director, Hazardous Site Cleanup Division, EPA Region III, or his/her delegate will determine in writing whether additional response actions are appropriate.

C. If the Director, Hazardous Site Cleanup Division, 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, 42 U.S.C. § 9621(c), indicates that the Remedial Action required by this Order is not protective of human health and/or the environment, or that additional response activities are necessary to meet the applicable Performance Standards, Respondents shall undertake any additional response actions EPA has determined are appropriate in accordance with Paragraph VI.G. of this Order.

## XII. DESIGNATED PROJECT COORDINATORS

A. EPA's Project Coordinator shall be the EPA Remedial Project Manager ("RPM"). EPA's Remedial Project Manager is:

Patrick M. McManus(3HS21)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103  
Telephone: (215) 814-3198  
Fax: (215) 814-3002

B. EPA has the discretionary, non-reviewable right to change its Remedial Project Manager. If EPA changes its Remedial Project Manager, EPA will inform Respondents in writing of the name, address and telephone number of the new Remedial Project Manager.

C. The EPA Remedial Project Manager shall have the authority lawfully vested in a Remedial Project Manager by the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300, and any amendment thereto. 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 she/he determines that conditions at the Site may present an imminent and substantial endangerment to public health or welfare or the environment.

D. Within five (5) days after the effective date of this Order, Respondents shall designate a Project Coordinator and shall submit the name and qualifications of the Project Coordinator, including any support entities and staff, to EPA for

review and acceptance. Respondents' Project Coordinator shall have the technical expertise sufficient to adequately oversee all aspects of the Work and shall not be acting as an attorney for Respondents in this matter. If Respondents wish to change their Project Coordinator, Respondents shall provide written notice to EPA of the name and qualifications of the new Project Coordinator at least five (5) days prior to changing the Project Coordinator.

E. Respondents' selection of a Project Coordinator or replacement Project Coordinator shall be subject to EPA acceptance. If EPA does not accept the selection of the Project Coordinator, Respondents shall submit to EPA a list of the names and qualifications of proposed Project Coordinators that would be acceptable to them within fourteen (14) days after receipt of EPA's notice not to accept the Project Coordinator previously selected. EPA will then provide Respondents with written notice identifying each proposed Project Coordinator on the list whose designation would be acceptable to EPA. Within ten (10) days of receipt of EPA's notice identifying acceptable replacement Project Coordinators, Respondents shall select any acceptable Project Coordinator from the list and notify EPA of such selection.

F. Each Project Coordinator will be responsible for overseeing the implementation of this Order.

G. Unless otherwise directed by the EPA Remedial Project Manager, all communications, whether written or oral, from



Respondents to EPA shall be directed to the EPA Remedial Project Manager.

H. No informal advice or guidance from the EPA Remedial Project Manager shall relieve Respondents of any obligation under this Order.

### XIII. PLANS AND REPORTS REQUIRING EPA APPROVAL

A. Unless otherwise specified in this Order or by the EPA Remedial Project Manager, five (5) copies of all documents, including plans, reports, and other items required to be submitted to EPA for approval pursuant to this Order, shall be submitted to the EPA Remedial Project Manager in accordance with the requirements of this Section. Two (2) copies of each, such document shall simultaneously be submitted to the State with one copy being sent to each of the following addresses:

Timothy Cherry, Project Officer  
Pennsylvania Department of Environmental Protection  
Hazardous Sites Cleanup Program  
Lee Park, Suite 6010  
555 North Lane  
Conshohocken, Pennsylvania 19428  
Telephone: (610) 832-6204; Fax: (610) 832-6143

and;

Craig Olewiler, Solid Waste Program Specialist  
Pennsylvania Department of Environmental Protection  
Bureau of Land Recycling and Waste Management  
Hazardous Sites Cleanup Program  
RCSOB, 400 Market Street  
P.O. Box 8471  
Harrisburg, Pennsylvania 17105-8471  
Telephone: (717) 783-9816; Fax: (717) 787-0884

To the maximum extent possible, communications from Respondents to EPA and all documents, including reports and other correspondence, concerning the activities performed pursuant to this Order, will be directed to the EPA and State Project Coordinators by overnight mail or equivalent delivery.

B. Plans, design documents, proposals, reports or other documents shall be signed by a Duly Authorized Representative (as defined in Paragraph V.D. of this Order) of Respondents. The Remedial Design Work Plan, Remedial Action Work Plan and any other work plan submitted to EPA for approval pursuant to this Order shall specify which documents shall contain the following certification:

"Except as provided below, I certify that the information contained in or accompanying this [type of submission] is true, accurate, and complete.

As to [the/those] portion(s) of this [type of submission] for which I cannot personally verify [its/their] accuracy, I certify under penalty of law that this [type of submission] 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."

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

C. After review of any plan, report or other item which is required to be submitted for approval by EPA pursuant to this Order, EPA shall, (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.

D. If EPA disapproves a plan, report, or item because EPA determines that it is deficient, Respondents shall be deemed to be in violation of the provision of this Order requiring Respondents to submit such plan, report, or item, and EPA may assume responsibility for performing all or any portion of the Work. Such EPA performance shall not release Respondents from their obligation to comply with the requirements of this Order.

E. In the event of approval, approval upon conditions, or modification by EPA, Respondents shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA with respect to the modifications or conditions made by EPA. In the event the preliminary, intermediate, or pre-final design is approved upon specified conditions by EPA, Respondents shall incorporate all of the requirements contained in EPA's notice of approval upon conditions in the subsequent design submittal. Such subsequent design submittal shall be submitted in accordance with the schedule set forth in the

Remedial Design Work Plan, unless otherwise directed by the EPA Remedial Project Manager.

F. Upon receipt of a notice of disapproval or a notice requiring modification of the submission, Respondents shall, within twenty-one (21) 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 modification of the submission, Respondents shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission.

G. In the event that a resubmitted plan, report or other item, or portion thereof, is again disapproved by EPA, EPA may require Respondents to correct the deficiencies, in accordance with Paragraph XIII.F., immediately above. 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.

H. All plans, reports, and other items required to be submitted to EPA under this Order shall, upon modification and/or approval by EPA, be deemed to be incorporated into and enforceable as part of this Order. In the event that 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 deemed to be incorporated into and enforceable as part of this Order.

I. Notwithstanding any action by EPA, Respondents remain fully responsible for achievement of the Performance Standards applicable to the Work required by this Order and to be delineated in the Remedial Design. Nothing in this Order, or in EPA's approval of any submission shall be deemed to constitute a warranty or representation of any kind by EPA that performance of the Remedial Design or the Remedial Action will achieve the Performance Standards set forth in the ROD and to be set forth in the Remedial Design. Respondents' compliance with EPA-approved documents does not foreclose EPA from seeking additional work to achieve the Performance Standards in the ROD.

J. No failure by EPA to approve, disapprove, or otherwise respond to a document submitted to EPA for approval shall be construed as an approval of such document.

K. EPA shall have the final decision regarding the sufficiency or acceptability of all documents and of any activities performed pursuant to this Order.

#### XIV. ASSURANCE OF ABILITY TO COMPLETE WORK

A. Within thirty (30) days of the effective date of this Order, Respondents shall demonstrate their ability to complete the Work required by this Order and to pay all claims which may arise from performance of the Work required by this Order by obtaining, and presenting to EPA for approval, financial assurance in the amount of \$3,500,000 in one of the following forms:

1. A surety bond or performance bond guaranteeing performance of the Work;
2. One or more letters of credit;
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 the Respondents;
5. A demonstration that the Respondents satisfy the requirements of 40 C.F.R. § 264.143(f); or
6. Yearly internal financial information sufficient to demonstrate to EPA's satisfaction that Respondents have enough assets to complete the Work required by this Order.

B. If 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 XIV, 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, Respondents 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 determines at any time that the financial assurances provided pursuant to this Section are

inadequate, Respondents shall, within thirty (30) days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance identified in Paragraph A of this Section XIV. Respondents' inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Order.

C. Such financial assurance shall be maintained by the Respondents until EPA determines in accordance with Section XX of this Order (Certification of Completion) that all Work required pursuant to this Order has been fully performed and all applicable Performance Standards have been met. After Respondents' receipt of a Certification of Completion of the Remedial Action from EPA in accordance with Paragraph XX.A. of this Order, Respondents may petition EPA for a decrease in the amount of financial assurance which must be maintained.

#### XV. INSURANCE

A. No later than fifteen (15) days before commencing any on-site Work, Respondents shall secure, and shall maintain until the first anniversary of EPA's Certification of Completion of the Remedial Action pursuant to Paragraph XX.A. of this Order, comprehensive general liability insurance with limits of five million dollars, combined single limit, and automobile liability insurance with limits of \$500,000 dollars, combined single limit, naming the United States as an additional insured. In addition, for the duration of this Order, Respondents shall satisfy, or

shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of 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 such 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 that contractor or subcontractor, Respondents need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

B. Respondents may satisfy the provisions of this Section XV if Respondents submit to EPA for approval one of the financial assurance mechanisms of Section XIV of this Order (Assurance of Ability to Complete Work) in at least the amounts stated in Paragraph A of this Section XV 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 XIV (Assurance of Ability to Complete Work) of this Order. If Respondents seek to utilize the mechanisms set forth in Section



XIV (Assurance of Ability to Complete Work) to satisfy the provisions of this Section XV, Respondents must demonstrate an ability to pay the amounts required under Paragraph A of this Section XV, above and beyond that required by the obligations of Section XIV (Assurance of Ability to Complete Work).

XVI. NOTICE OF OBLIGATIONS AND TRANSFER OF INTERESTS

A. Any Respondent that owns or controls any property located within the Site ("Owner Respondents") shall submit to EPA for review and approval, within fifteen (15) days after the effective date of this Order, a notice ("Title Notice") to be filed with the Office of the Recorder of Deeds for Montgomery County, Pennsylvania. This Title Notice(s) shall notify all successors-in-title that the property is part of the Site, that EPA selected a remedy for the Site on September 30, 1997, and that EPA has issued the Respondents this Order requiring the Respondents to implement the requirements of the ROD. Such Title Notice(s) shall identify the administrative docket number and the effective date of this Order. The Owner Respondents shall record the Title Notice(s) within ten (10) days of EPA's approval of the Title Notice(s). The Owner Respondents shall provide EPA with a certified copy of the recorded Title Notice(s) within ten (10) days of recording such Title Notice(s).

B. Within fifteen (15) days after the effective date of this Order, Owner Respondents shall record a certified copy of this Order with the Recorder's Office, Registry of Deeds, or

other office where land ownership and transfer records ("Land Records") are maintained for Montgomery County, 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 (or portions thereof) constituting the Site or searching for any encumbrances, covenants, easements, liens, restrictions, or other limitations relating to said property. At a minimum, such recording shall be made in the Grantor/Grantee and Lot/Block indices of the Land Records for the Site. Thereafter, each deed, title, or other instrument of conveyance for property included in the Site executed by Respondents shall contain a notice stating that the property is subject to this Order and any lien held by 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.

C. Within fifteen (15) days of the effective date of this Order, Owner Respondents shall record at the Recorder's Office, 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 VIII (Access to and Use of the Site) and related covenants. Each subsequent instrument executed by the Owner Respondents conveying an interest in any such property included in the Site shall reference the recorded location of such notice and covenants applicable to the property.

D. At least thirty (30) days prior to the conveyance of any interest in property located within the Site including, but not limited to, fee interests, leasehold interests, and mortgage interests, the Owner Respondents shall give the grantee or transferee-in-interest written notice of (i) this Order and (ii) any Site access and use restriction requirements set forth in Section VIII (Access to and Use of the Site). At least thirty (30) days prior to such conveyance, the Owner Respondents shall also give written notice to EPA and the State of the proposed conveyance, including the name, address and telephone number of the grantee or transferee-in-interest and the date on which notice of the Order and Site access and use restriction requirements was given to the grantee.

E. In the event of any such conveyance, Owner Respondents' obligations under this Order, including, but not limited to, their obligation to provide access to and restrict use of the Site, pursuant to Section VIII (Access to and Use of the Site) of this Order, shall continue to be met by such Owner Respondents. In no event shall the conveyance release or otherwise affect the Owner Respondents' obligation to comply with all provisions of this Order, absent the prior written consent of EPA.

#### XVII. RECORD RETENTION

A. Respondents 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, implementation of this Order, or liability of any person, including Respondents, for the response actions conducted and to be conducted at the Site, regardless of any document retention policy to the contrary, for a minimum of ten (10) years after the Respondents' receipt of EPA's notification pursuant to Section XX.B. (Completion of the Work).

B. 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 its employees, agents, accountants, contractors, subcontractors, consultants or attorneys.

Respondents shall ensure that any agreement between Respondents and any agent, contractor, subcontractor, consultant, or other person retained to perform or oversee Work pursuant to this Order shall explicitly require said agent, contractor, subcontractor, 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 XX.B. (Completion of the Work), all data, records, and documents within their respective possession or control which relate in any way to this Order or to hazardous substance or waste material management and/or disposal at the Site.

C. Upon conclusion of this document retention period, Respondents shall notify EPA at least ninety (90) days prior to the destruction of any such records, documents or information, and, upon request of EPA and subject to Paragraphs B and C of Section XVIII (Access to Information) of this Order, Respondents

shall deliver all such records, documents and information to EPA. In no event shall Respondents destroy such records, documents or information until EPA responds in writing approving such destruction.

#### XVIII. ACCESS TO INFORMATION

A. Subject to the limitations contained in Paragraphs B and C of this Section XVIII, Respondents shall provide to EPA, within thirty (30) days of receipt of a request by EPA, copies of all documents and information within its possession or control or that of their contractors, subcontractors, or agents relating to activities at the Site or to the implementation of this Order, including, but not limited to, sampling data, analyses of samples, field notes, contractual documents, 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 all or part 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 made in the manner described in 40 C.F.R. § 2.203(b) and 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 (hereinafter referred to as "CBI") 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. Respondents shall maintain for the period during which this Order is in effect, an index of documents, if any, that Respondents are claiming as CBI and have substantiated as such. The index shall contain, for each document, the date, author, addressee and subject of the document. Upon written request by EPA, Respondents shall submit a copy of the index to EPA.

D. Respondents' obligation to disclose information requested by EPA pursuant to this Order is subject to applicable privileges recognized by federal Courts under federal law, provided that no sample results or analytical data shall be claimed as privileged. If the Respondents assert such a privilege, they shall provide 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.

E. Respondents shall cooperate with EPA to ensure that all data generated as part of the Work to be performed under this Order is maintained in a computerized system that is compatible with EPA's system. The means of storing and manipulating data generated as part of the Work shall be described in a Data Management Plan, as a component of the SAP. Upon request by EPA, Respondents' computerized data bases shall be provided to EPA within sixty (60) days of said request.

#### XIX. COMMUNITY RELATIONS

Respondents shall cooperate with EPA and the State 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 taking place at or concerning the Site.

## XX. CERTIFICATION OF COMPLETION

### A. Completion of the Remedial Action

1. Within thirty (30) days after Respondents conclude that the Remedial Action has been fully performed in accordance with this Order and any modifications or amendments made hereto, and the applicable Performance Standards have been attained, Respondents shall so certify to EPA in writing and shall schedule and conduct a pre-certification inspection to be attended by the EPA Remedial Project Manager, a Registered Professional Engineer and Respondents' Project Coordinator. Respondents shall also provide written notice to the State at least ten (10) days prior to the scheduled date of the inspection, and invite the State to such pre-certification inspection. If, after the pre-certification inspection, Respondents still believe that the Remedial Action has been fully performed in accordance with this Order and the applicable Performance Standards have been attained, Respondents shall submit a written report to EPA for approval pursuant to Section XIII (Plans and Reports Requiring EPA Approval) within thirty (30) days of the inspection. In the report, the registered Professional Engineer ("RPE") and a Duly Authorized Representative of the Respondents shall certify pursuant to Paragraph XIII.B. 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 the RPE and certified as required by Paragraph XIII.B. of this Order. If, after completion of the pre-certification inspection and receipt and review of the written report or any subsequent notification of completion by Respondents, EPA determines that the Remedial Action or any portion thereof has not been completed in accordance with this Order or that the applicable 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/or achieve the applicable 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 XIII (Plans and Reports Requiring EPA Approval). 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 applicable 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, including, but not limited to, access, Operation and Maintenance, record retention, indemnification, insurance, payment of fines, and any work to be conducted under Section VI.G. (Additional Response Activities), Section VI.D. (Reporting Requirements/Progress Reports), Section XI (EPA Periodic Review), Section XVII (Record Retention), Section XVIII (Access to Information), and Section XIX (Community Relations). This certification shall not limit EPA's right to perform periodic reviews pursuant to Section 121(c) of CERCLA, 42 U.S.C. § 9621(c).

B. Completion of the Work

1. Within thirty (30) days after Respondents conclude that all phases of the Work required by this Order (including O&M) have been fully performed, that all Performance Standards set forth in the ROD which are applicable to the Work required by this Order and/or revised by EPA in the Periodic Review discussed in Section XI of this Order and to be set forth in the Remedial Design, have been attained, Respondents shall so notify EPA's Remedial Project Manager by submitting a written report by an RPE certifying that the Work has been completed in full satisfaction of the requirements of this Order. The report shall also contain a sworn certification from a Duly Authorized Representative of Respondents in the form required by Paragraph XIII.B. of this Order. If, after review of the written report, EPA determines that any portion of the Work has not been completed in accordance

with this Order and/or that the applicable Performance Standards have not been achieved, 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 XIII (Plans and Reports Requiring EPA Approval). 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 and that the applicable Performance Standards have been achieved, EPA will so notify the Respondents in writing.

#### XXI. NON-LIABILITY OF EPA

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

XXII. ENFORCEMENT AND EPA'S 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 or punitive damages.

C. EPA reserves all rights, including the right to institute legal action against the Respondents, in connection with the performance of any response actions not addressed by this Order.

D. 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.

E. 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 subjects Respondents to the assessment of civil penalties of up to \$27,500 per day pursuant to 40 C.F.R. § 19.4 and/or punitive damages in an amount up to three times the amount of any costs incurred by the United States 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.

F. 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.

G. 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. This reservation shall include but not be limited to past costs, direct costs, indirect costs, the costs of oversight, the costs of analyzing the cost documentation to support oversight cost demand, as well as accrued interest as provided in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

H. 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. EPA also reserves the right to amend this Order and require any and all additional work EPA deems necessary to implement the ROD for the Site.

### XXIII. EFFECT OF ORDER/INVALIDATION OF A PROVISION

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

B. 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 hazardous substances, waste materials, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the Site.

C. This Order does not constitute any decision on pre-authorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2).

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

### XXIV. EFFECTIVE DATE AND OPPORTUNITY TO CONFER

A. 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.

B. 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 time frame shall be made to:

Natalie L. Katz (3RC42)  
Assistant Regional Counsel  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19107  
Telephone: (215) 814-2615  
Fax: (215) 814-2603

#### XXV. NOTICE OF INTENT TO COMPLY

A. No later than two (2) days after the effective date of this Order, Respondents shall provide notice in writing to EPA's Remedial Project Manager stating whether Respondents will comply with the terms of this Order. If Respondents do not unequivocally and unqualifiedly commit to perform all the Work required by this Order in such notice, EPA will assume that Respondents have decided not to comply with the terms of the Order and Respondents will be deemed to be in violation of this Order. Respondents shall describe, using facts that exist, on or prior to the effective date of this Order, any "sufficient cause" defenses asserted by Respondents within the meaning of

Sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c)(3). The absence of a response by EPA to the notice required by this Section shall not be deemed to be acceptance of Respondents' assertions nor as a position taken by the Agency with regard to those assertions.

B. Failure of 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. Said failure to comply may trigger an agency decision to file a judicial action or to initiate a Superfund response action at the Site.

#### XXVI. ADMINISTRATIVE RECORD

The Administrative Record compiled in support of this Order may be reviewed at the EPA Region III offices by contacting the EPA Remedial Project Manager.

#### XXVII. MODIFICATIONS

A. 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 modification shall be the date on which the Respondents receive notice of such modification.

B. Except as otherwise provided in Paragraph A of this Section XXVII, the provisions of this Order may be modified at



any time, in writing, solely by the EPA Region III Regional Administrator.

IT IS SO ORDERED.



W. MICHAEL MCCABE  
Regional Administrator  
U.S. Environmental Protection Agency  
Region III

JUL 22 1998

DATE