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AT 8:30 ..... M
WILLIAM T. WALSH
CLERK

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

UNITED STATES OF AMERICA, Plaintiff, v. AlliedSignal Inc.; Ashland Inc.; BASF Corp.; Becton, Dickinson and Co.; Benjamin Moore & Co.; Borden, Inc.; Ciba Specialty Chemicals Corp.; Colgate-Palmolive Co.;Con-Lux Coatings, Inc.; Curtiss-Wright Corp.; Cytec Industries Inc.; The Dow Chemical Co.; E.I. du Pont de Nemours and Co.; Exxon Chemical Americas; Fisher-Price, Inc.; Ford Motor Co.; General Electric Co.; General Motors Corp.; Gulton Industries; Henkel Corp.; Hercules, Inc.; HNA Holdings, Inc.; Hoffmann-LaRoche, Inc.; Indopco, Inc. d/b/a National Starch and Chemical Co.; International Business Machines Corporation; International Flavors & Fragrances Inc. Johnson & Johnson; Kimberly- Clark Corp.; Lucent Technologies Inc.;	CIVIL ACTION NO. 99-3766(WHW) CONSENT DECREE

ENTERED
on
THE DOCKET
on 1/26/00
WILLIAM T. WALSH, CLERK
By (Deputy Clerk)

Mattel, Inc.; Mayco Oil & Chemical;)
Merck & Co.; Mobil Business)
Resources Corp.; Morton)
International, Inc.; Novartis)
Corp.; Olin Corp.; Pfizer)
Inc.; PPG Industries, Inc.;)
Pratt & Whitney; Reichhold, Inc.)
Rohm and Haas Co.; Schering Corp.;)
Sequa Corp.; Shell Oil Co.;)
Solutia Inc.; Tang Realty, Inc.;)
Texaco, Inc.; Union Carbide Corp.;)
USX Corp.; W.R. Grace & Co.;)
Wyeth-Ayerst Pharmaceuticals Inc.,)
)
Defendants.)

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

STATE OF NEW JERSEY, Plaintiff, v. AlliedSignal Inc.; Ashland Inc.; BASF Corp.; Becton, Dickinson and Co.; Benjamin Moore & Co.; Borden, Inc.; Ciba Specialty Chemicals Corp.; Colgate-Palmolive Co.; Con-Lux Coatings, Inc.; Curtiss-Wright Corp.; Cytec Industries Inc.; The Dow Chemical Co.; E.I. du Pont de Nemours and Co.; Exxon Chemical Americas; Fisher-Price, Inc.; Ford Motor Co.; General Electric Co.; General Motors Corp.; Gulton Industries; Henkel Corp.; Hercules, Inc.; HNA Holdings, Inc.; Hoffmann-LaRoche, Inc.; Indopco, Inc. d/b/a National Starch and Chemical Co.; International Business Machines Corporation; International Flavors & Fragrances Inc.; Johnson & Johnson; Kimberly-Clark Corp.; Lucent Technologies Inc.; Mattel, Inc.; Mayco Oil & Chemical;	CIVIL ACTION NO. CONSENT DECREE

Merck & Co.; Mobil Business)
Resources Corp.; Morton)
International, Inc.; Novartis)
Corp.; Olin Corp.; Pfizer Inc.;)
PPG Industries, Inc.;)
Pratt & Whitney; Reichhold,)
Inc.; Rohm and Haas Co.;)
Schering Corp.; Sequa Corp.;)
Shell Oil Co.; Solutia Inc.;)
Tang Realty, Inc.; Texaco,)
Inc.; Union Carbide Corp.; USX)
Corp.; W.R. Grace & Co.;)
Wyeth-Ayerst Pharmaceuticals Inc.,)
)
Defendants.)

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

UNITED STATES OF AMERICA Plaintiffs, v. ALLIED SIGNAL CORP., ET AL., Defendants.	CIVIL ACTION NO.

STATE OF NEW JERSEY Plaintiff, ALLIED SIGNAL CORP., ET AL., Defendants.	CIVIL ACTION NO.

CONSENT DECREE

I. BACKGROUND

A. The United States of America ("United States"), on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), filed a complaint in this matter pursuant to Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9606, 9607.

B. The United States in its complaint seeks, inter alia: (1) reimbursement of costs incurred by EPA and the Department of Justice for response actions at the Chemsol, Inc. Superfund Site ("Site") in Piscataway Township, Middlesex County, New Jersey, together with accrued interest; and (2) performance of studies and response work by the defendants at the Site consistent with the National Contingency Plan, 40 C.F.R. Part 300 (as amended) ("NCP").

C. In accordance with the NCP and Section 121(f)(1)(F) of CERCLA, 42 U.S.C. § 9621(f)(1)(F), EPA notified the State of New Jersey (the "State") on July 8, 1998 of negotiations with potentially responsible parties regarding the implementation of the remedial design and remedial action for the Site, and EPA has provided the State with an opportunity to participate in such negotiations and be a party to this Consent Decree.

D. The State has also filed a complaint against the defendants and the United States in this Court alleging that the defendants and the Settling Federal Agencies are liable to the State under Section 107 of CERCLA, 42 U.S.C. § 9607, and under the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., the Sanitary Landfill Facility Closure and Contingency Fund Act, N.J.S.A. 13:1E-100 et seq., the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq., the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., water quality legislation set forth at N.J.S.A. 23:5-28, the common law of nuisance, the common law of negligence and strict liability, all with respect to the Site.

E. In its complaint, the State seeks, among other things, (1) reimbursement of costs incurred by the State at the Site, (2) reimbursement of future costs to be incurred by the State at the Site, (3) performance by the defendants of the operation and maintenance of the remedial action at the Site, (4) damages for injury to, destruction of, or loss of natural resources within the State or belonging to, managed by, controlled by or held in trust by, or appertaining to, the State resulting from releases or discharges of hazardous substances at the Site, and (5) reimbursement of costs and fees incurred by the State.

F. The complaints filed by the United States and the State have been consolidated for the purpose of the entry of this Consent Decree.

G. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C. § 9622(j)(1), EPA notified the National Oceanographic and Atmospheric Administration and the Department of Interior on September 30, 1998 of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal trusteeship and encouraged the trustee(s) to participate in the negotiation of this Consent Decree. EPA has also informed the State, which has informed the Commissioner , as the trustee responsible for the protection of the Natural Resources within the State or belonging to, managed by, controlled by, held in trust by, or appertaining to, the State, of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the Natural Resources under State trusteeship and the Commissioner has participated in the negotiation of this Consent Decree.

H. The defendants that have entered into this Consent Decree ("Settling Defendants") do not admit any liability to the Plaintiffs or to anyone else, arising out of the transactions or occurrences alleged in the complaints filed by the United States and the State, or with respect to any issue dealt with in this Consent Decree, nor do they acknowledge that the release or threatened release of hazardous substance(s) at or from the Site constitutes an imminent or substantial endangerment to the public

health or welfare or the environment. More particularly, the Settling Defendants do not admit that their settlement of the NJDEP's claims regarding natural resources damages in any way prejudices the position of the appellants in New Jersey Site Remediation Industry Network, et al. v. New Jersey Department of Environmental Protection, Docket No. A-5272-97T3, now pending in the Appellate Division. The Settling Federal Agencies do not admit any liability arising out of the transactions or occurrences alleged in any counterclaim asserted by the Settling Defendants or any claim by the State.

I. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on September 8, 1983, 48 Fed. Reg. 40658.

J. On September 20, 1991, EPA issued a Record of Decision, selecting an interim groundwater remedy ("Interim Remedy") for the Site. On March 9, 1992, EPA issued Administrative Order Index No. II-CERCLA-20104 ("Order"), under Section 106(a) of CERCLA, 42 U.S.C. § 9606(a), requiring the respondents named in the Order to perform and pay for the Interim Remedy. Subsequently, some of the respondents named in the Order, together with other Settling Defendants, completed construction of the Interim Remedy and continue to operate and maintain the Interim Remedy pursuant to the requirements of the Order.

K. EPA completed a Remedial Investigation Report in October, 1996, and EPA issued a Feasibility Study ("FS") Report on August 11, 1997.

L. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA published notice of the completion of the FS and of the proposed plan for remedial action on August 11, 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 for remedial action. 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.

M. The decision by EPA on the remedial action to be implemented at the Site is embodied in a Record of Decision ("ROD"), executed on September 18, 1998, on which the State had a reasonable opportunity to review and comment. The ROD includes a responsiveness summary to the public comments. Notice of the final plan was published in accordance with Section 117(b) of CERCLA.

N. Based on the information presently available to EPA and the State, EPA and the State believe that the Work will be properly and promptly conducted by the Settling Work Defendants if conducted in accordance with the requirements of this Consent Decree and its appendices.

O. The Site is owned by Tang Realty, Inc. ("Tang"). Tang has provided a deed notice to the Settling Work Defendants to be placed in escrow until NJDEP requests that it be recorded.

P. Solely for the purposes of Section 113(j) of CERCLA, the Remedial Action selected by the ROD and the Work to be performed by the Settling Work Defendants shall constitute a response action taken or ordered by the President.

Q. The Settling Defendants have provided to a neutral allocator all factual information relating to their alleged liability for response costs at the Site, on the basis of which the neutral allocator has issued a plan for the allocation among the Settling Defendants and others of such response costs. The plan issued by the neutral allocator has formed the basis for the settlement by the Settling Defendants among themselves.

R. EPA and the State have determined that certain of the Settling Defendants ("De Minimis Settling Defendants") meet the criteria set forth in Section 122(g) of CERCLA, 42 U.S.C. § 9622(g), authorizing de minimis settlements; that, except as provided herein, the settlement embodied in this Consent Decree is intended to be a final settlement of all present and future claims asserted by the United States and the State in their complaints in this matter against the De Minimis Settling Defendants with respect to the Site; and that the settlement embodied in this Consent Decree is consistent with the public interest.

S. With respect to the De Minimis Settling Defendants, EPA and the State have found, in accordance with Section 122(g)(1) of CERCLA, 42 U.S.C. § 9622(g)(1), that prompt settlement with each of the De Minimis Settling Defendants is practicable and in the public interest; that the payment to be made by each of the De Minimis Settling Defendants under this Consent Decree involves only a minor portion of the response costs at the Site, based upon the estimate contained in the ROD of the total response costs incurred and to be incurred at or in connection with the Site; that the amount of hazardous substances contributed or allegedly contributed to the Site by each of the De Minimis Settling Defendants is minimal in comparison to other hazardous substances at the Site, because the amount of hazardous substances contributed or allegedly contributed to the Site by each of the De Minimis Settling Defendants does not exceed one percent (1%) of the hazardous substances at the Site; and that the hazardous substances contributed to the Site by the De Minimis Settling Defendants are not significantly more toxic or of significantly greater hazardous effect than other hazardous substances at the Site.

T. The Settling Defendants have established the Chemsol Superfund Site Environmental Remediation Trust to receive certain settlement and other payments with respect to the Site from certain of the Settling Defendants, and the Chemsol Superfund Site Qualified Settlement Fund Trust to receive certain other settlement

and other payments from certain of the Settling Defendants.

U. The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and implementation of this Consent Decree will expedite the cleanup of the Site and will avoid prolonged and complicated litigation among the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, with the consent of the parties to this Decree, it is hereby Ordered, Adjudged, and Decreed:

II. JURISDICTION

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 9606, 9607, and 9613(b). This Court also has personal jurisdiction over the United States, the State and the Settling Defendants. Solely for the purposes of this Consent Decree and the underlying complaints, the United States, the State and the Settling Defendants waive all objections and defenses that they may have to jurisdiction of the Court or to venue in this District. Settling Defendants shall not challenge the terms of this Consent Decree. The United States, the State and the Settling Defendants shall not challenge this Court's jurisdiction to enter and enforce this Consent Decree.

III. PARTIES BOUND

2. This Consent Decree applies to and is binding upon the United States and the State, including, without limitation, the Commissioner, as Trustee for State Natural Resources, and upon the Settling Defendants and their successors and assigns. Any change in ownership or corporate or other legal status of a Settling Defendant including, but not limited to, any transfer of assets or real or personal property, shall in no way alter such Settling Defendant's responsibilities under this Consent Decree.

3. Settling Work Defendants shall provide a copy of this Consent Decree to each contractor hired to perform the Work (as defined below) required by this Consent Decree and to each person representing any Settling Work Defendant with respect to the Site or the Work and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Consent Decree. Settling Work Defendants or their contractors shall provide written notice of this Consent Decree to all subcontractors hired to perform any portion of the Work required by this Consent Decree. Settling Work Defendants shall nonetheless be responsible for ensuring that their contractors and subcontractors perform the Work contemplated herein in accordance with this Consent Decree. With regard to the activities undertaken pursuant to this Consent Decree, each contractor and subcontractor

shall be deemed to be in a contractual relationship with the Settling Work Defendants within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

IV. DEFINITIONS

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

"Access Easement" shall mean the easement running with the land, to be provided by the Owner Settling Defendant with respect to the Site pursuant to Paragraph 20 of Section VIII(Access and Institutional Controls).

"CEA" shall mean a Classification Exception Area established by NJDEP pursuant to N.J.A.C. 7:26E-6.1(g).

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

"Closure Act" shall mean the Sanitary Landfill Facility Closure and Contingency Fund Act, N.J.S.A. 13:1E-100 *et seq.*

"Code" shall mean the Internal Revenue Code of 1986, 26 U.S.C. § 1 *et seq.*

"Code Regulations" shall mean the Internal Revenue Regulations, 26 C.F.R. § 1 *et seq.*, issued by the Internal Revenue Service pursuant to the Code.

"Commissioner" shall mean the Commissioner of the New Jersey Department of Environmental Protection, who has been duly designated to act on behalf of the public as trustee of all State Natural Resources and for the assessment and recovery of damages for injury to, destruction of, or loss of all State Natural Resources.

"Consent Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXVIII). In the event of conflict between this Decree and any appendix, this Decree shall control.

"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 Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"Deed Notice" shall mean the document attached hereto as Appendix A, to be executed and to be held in escrow by the Settling Work Defendants until such time that NJDEP requests that the Deed Notice be recorded in the office of the Clerk of Middlesex County, New Jersey pursuant to Paragraph 9(b) of Section VIII (Access and Institutional Controls).

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

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

"ERT" shall mean the Chemsol Superfund Site Environmental Remediation Trust, established by the Settling Defendants pursuant to the ERT Agreement, and all monies therein. The ERT was established under the laws of the State of New Jersey as a "grantor trust" under Section 671 *et seq.* of the Code and is designed to qualify as an environmental remediation trust under Code Regulations Section 301.7701-4(e).

"ERT Agreement" shall mean the Chemsol Superfund Site Environmental Remediation Trust Agreement, dated as of June 1, 1999.

"Five Year Reviews" shall mean reviews conducted pursuant to Section 121(c) of CERCLA, 42 U.S.C. § 9621(c).

"Future Response Costs," shall mean all costs, including, but not limited to, direct and indirect costs, that the United States or the State incurs, as to the United States, from or after the Effective Date of this Consent Decree, and as to the State, from or after February 13, 1998, in reviewing or developing plans, reports and other items pursuant to this Consent Decree, verifying the Work, or otherwise implementing, overseeing, or enforcing this Consent Decree, including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Sections VIII (including, but not limited to, the amount of just compensation), XIV, and Paragraph 79 of Section XX. Future Response Costs, as to EPA, shall also include all Interim Response Costs and all Interest on the Past Response Costs that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from April 25, 1998 for Payroll Costs and from May 12, 1998 for all other costs, to the Effective Date of this Consent Decree.

"Interim Remedy" shall mean the interim groundwater remedy selected in the Interim ROD issued September 20, 1991.

"Interim Response Costs" shall mean all costs, including direct and indirect costs, (a) paid by the United States in connection with the Site between April 25, 1998 and the Effective Date of this Consent Decree for Payroll Costs and between May 12, 1998 and the Effective Date of this Consent Decree for all other costs, or (b)

incurred by the United States prior to the Effective Date of this Consent Decree but paid after that date.

"Interim ROD" shall mean the Record of Decision signed by the Regional Administrator, EPA Region II on September 20, 1991, selecting the Interim Remedy.

"Interest" shall mean interest at the rate specified for interest on investments of the Hazardous Substance Superfund established under Subchapter A of Chapter 98 of Title 26 of the U.S. Code, compounded on October 1 of each year, in accordance with 42 U.S.C. § 9607(a).

"Municipal Sewage Sludge" shall mean any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage, and may include residue removed, all or in part, during the treatment of wastewater from manufacturing or processing operations, provided that such residue has essentially the same characteristics as residue removed during the treatment of domestic sewage.

"Municipal Solid Waste" shall mean household waste and solid waste collected from non-residential sources that is essentially the same as household waste. While the composition of such wastes may vary considerably, municipal sold waste generally is composed of large volumes of non-hazardous substances (e.g., yard waste, food waste, glass, and aluminum) and can contain small amounts of other waste as typically may be accepted in RCRA Subtitle D landfills.

"Natural Resources" for the purpose of Paragraphs 75 and 77 shall have the broader of the meanings provided in Section 101(16) of CERCLA, 42 U.S.C. §9601(16), or Section 3 of the Spill Act, N.J.S.A. 58:10-23.11b, and shall include, but not be limited to, all land, fish, shellfish, wildlife, biota, air, waters, and other such resources.

"Natural Resources Damages" for the purpose of Paragraphs 75 and 77 shall have the broader of the meanings provided in Section 107(a)(4)(C) of CERCLA, 42 U.S.C. §9607(a)(4)(C), or Section 8(a)(2) of the Spill Act, N.J.S.A. 58:10-23.11g(a)(2), and shall include, but not be limited to, injury to, destruction of or loss of Natural Resources, including the costs of assessing such injury, destruction or loss resulting from a release of hazardous substances and the costs of restoration, lost use, lost services and non-use values, and shall also include, without limitation, "any natural resource damaged or destroyed by a discharge," within the meaning of Section 8(a)(2) of the Spill Act, N.J.S.A. 58:10-23.11g(a)(2).

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

"NJDEP" or "Department" shall mean the New Jersey Department of Environmental Protection and any successor departments or agencies of the State.

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

"Order" shall mean Administrative Order Index No. II-CERCLA-20104, issued by EPA Region II on March 9, 1992 under Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

"Owner, Operator, or Lessee of Residential Property" shall mean a person who owns, operates, manages, or leases Residential Property and who uses or allows the use of the Residential Property exclusively for residential purposes.

"Owner Settling Defendant" shall mean Tang Realty, Inc.

"Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral or an upper case letter.

"Parties" shall mean the United States, the State and the Settling Defendants.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States and the State paid at or in connection with the Site, as to the United States, through April 25, 1998 for Payroll costs and through May 12, 1998 for all other costs, plus Interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through such dates, and as to the State, through February 13, 1998.

"Performance Standards" shall mean the cleanup standards and other measures of achievement of the goals of the Remedial Action, set forth in the Sections of the ROD entitled "Remedial Action Objectives"(at page 13 of the ROD), Protection of Human Health and the Environment (at Page 29 of the ROD) and Compliance with ARARs (at Page 30 of the ROD) and Section I of the SOW and any modified performance standards established by EPA pursuant to the "technical impracticability" provision of Paragraph 12(d).

"Plaintiffs" shall mean the United States and the State.

"QSF Agreement" shall mean the Chemsol Superfund Site Qualified Settlement Fund Trust Agreement, dated as of June 1, 1999, a copy of which is attached hereto as Appendix B.

"QSF Trust" shall mean the Chemsol Superfund Site Qualified Settlement Fund Trust, established by the Settling Work Defendants pursuant to the terms of the QSF Agreement, and approved by the

Court pursuant to this Consent Decree, and all monies therein. The QSF Trust was established as a trust under the laws of the State of New Jersey and is designed to qualify as a Qualified Settlement Fund under Section 468B of the Code and the Code Regulations thereunder.

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

"Remedial Action" shall mean those activities, except for Operation and Maintenance, to be undertaken by the Settling Work Defendants to implement the ROD, in accordance with the SOW and the final Remedial Design and Remedial Action Work Plans and other plans approved by EPA.

"Remedial Action Work Plan" shall mean the document developed pursuant to Paragraph 12 of this Consent Decree and approved by EPA, and any amendments thereto. A separate Remedial Action Work Plan shall be submitted for each Remedial Work Element.

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

"Remedial Design Work Plan" shall mean the document developed pursuant to Paragraph 11 of this Consent Decree and approved by EPA, and any amendments thereto.

"Remedial Work Element" shall mean a portion of the Work identified in the SOW. Remedial Work Element I shall mean the portion of the Remedial Action which addresses contaminated soils. Remedial Work Element II shall mean the portion of the Remedial Action which addresses contaminated groundwater.

"Residential Property" shall mean single or multi-family residences, including accessory land, buildings, or improvements incidental to such dwellings, which are exclusively for residential use.

"ROD" shall mean the EPA Record of Decision signed on September 18, 1998, by the Regional Administrator, EPA Region II, or her delegate, and all attachments thereto. The ROD is attached hereto as Appendix C.

"Section" shall mean a portion of this Consent Decree identified by a roman numeral.

"Settling Defendants" shall mean those Parties identified in Appendix D to this Consent Decree, which are resolving any claims which have been or could be asserted against them with regard to the Site as provided in this Consent Decree, and includes their

corporate predecessors, parents, subsidiaries, affiliated corporations, officers, directors, employees or agents, whose alleged liability is based upon the generation of or transport by said Settling Defendants of Waste Material to the Site. Settling Defendants identified in Section 1 of Appendix D are the Settling Work Defendants. Settling Defendants identified in Section 2 of Appendix D are the De Minimis Settling Defendants. Settling Defendant identified in Section 3 of Appendix D is the current owner Settling Defendant. This definition of Settling Defendants specifically does not include Marvin Mahan, Transtech Industries, Inc., Chemsol, Inc., Scientific, Inc., and Scientific Chemical Treatment Company, Inc.

"Settling Federal Agencies" shall mean those departments, agencies, and instrumentalities of the United States identified in Appendix E, which are resolving any claims which have been or could be asserted against them with regard to the Site as provided in this Consent Decree.

"Sewage Sludge" means solid, semisolid, or liquid residue removed during the treatment of municipal waste water, domestic sewage, or other waste water at or by publicly owned or federally owned treatment works.

"Site" shall mean the Chemsol, Inc. Superfund Site, encompassing approximately forty acres, located at the end of Fleming Street in Piscataway Township, Middlesex County, New Jersey, and as described in the ROD, and the areal extent of the contamination from the property. The Site is generally depicted on the map attached as Appendix F to this Consent Decree.

"Small Business" shall mean any business entity that employs no more than 100 individuals and is a "small business concern" as defined under the Small Business Act (15 U.S.C. 631, *et seq.*).

"Small Nonprofit Organization" shall mean any organization that does not distribute any part of its income or profit to its members, directors, or officers, employs no more than 100 paid individuals at the involved chapter, office, or department, and was recognized as a nonprofit organization under Section 501(c)(3) of the Internal Revenue Code of 1986.

"State Natural Resources Damages" for the purpose of Paragraph 75 and 77 shall mean Natural Resources Damages recoverable by the State under Section 107 of CERCLA, 42 U.S.C. §9607, Section 8(a)(2) of the Spill Act, N.J.S.A. 58:10-23.11(a)(2), or any other State law, for injury to, destruction of, or loss of any and all Natural Resources within the State or belonging to, managed by, controlled by, or held in trust by, or appertaining to, the State.

"SOW" shall mean the Statement of Work for implementation of the Remedial Design, Remedial Action, and Operation and Maintenance and Post Remedial Monitoring at the Site, as set forth in Appendix G to

this Consent Decree and any modifications made in accordance with this Consent Decree.

"Spill Act" shall mean the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 *et seq.*

"State" shall mean the State of New Jersey, including its departments, agencies, and instrumentalities.

"Supervising Contractor" shall mean the principal contractor retained by the Settling Work Defendants to supervise and direct the implementation of the Work under this Consent Decree.

"SWMA" shall mean the Solid Waste Management Act, N.J.S.A. 13:1E-1 *et seq.*

"Tang" shall mean Tang Realty, Inc. a New Jersey corporation, owner of the Site and one of the Settling Defendants.

"United States" shall mean the United States of America, including all of its departments, agencies, and instrumentalities, which includes without limitation EPA, the Settling Federal Agencies and any federal natural resources trustee.

"Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27), and (4) any "hazardous substance" under Section 3(k) of the Spill Act, N.J.S.A. 58:10-23.11b(k).

"Work" shall mean all activities Settling Work Defendants are required to perform under this Consent Decree, except those required by Section XXIV (Retention of Records).

"WPCA" shall mean the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1, et seq.

V. GENERAL PROVISIONS

5. Objectives of the Parties

The objectives of the Parties in entering into this Consent Decree are (a) to protect public health or welfare or the environment at the Site by the design and implementation of response actions at the Site by the Settling Work Defendants, (b) to reimburse certain response costs of the Plaintiffs, and to resolve all claims against Settling Defendants for damages to State Natural Resources, including, but not limited to, injury to or loss of groundwater and wetland resources, and (c) to resolve the claims of the Plaintiffs against the Settling Defendants and the claims of the State and Settling Defendants which have been or could have been asserted against the United States with regard to the Site as

provided in this Consent Decree, (d) to reach a final settlement among the Plaintiffs and the De Minimis Settling Defendants with respect to the Site pursuant to Section 122(g) of CERCLA, 42 U.S.C. §9622(g), that recognizes that the De Minimis Settling Defendants have made or will make any required cash payments , including premiums, to the Settling Work Defendants, all of which payments are to be used by the Settling Work Defendants to finance and perform response actions at the Site, including the Work, and (e) to resolve the alleged civil liability of the De Minimis Settling Defendants to the State and the Settling Work Defendants under Sections 107 and 113 of CERCLA, 42 U.S.C. § 9607, 9613, the Spill Act, the SWMA, the Closure Act, the common law of nuisance, the common law of negligence and strict liability, for injunctive relief with regard to the Site and for response costs incurred and to be incurred at or in connection with the Site.

6. Commitments by Settling Defendants and Settling Federal Agencies.

a. As provided in this Consent Decree, Settling Work Defendants shall finance and perform the Work in accordance with this Consent Decree, the ROD, the SOW, and all work plans and other plans, standards, specifications, and schedules set forth herein or developed by Settling Work Defendants and approved by EPA pursuant to this Consent Decree. Settling Work Defendants shall also reimburse the United States and the State for Past Response Costs and Future Response Costs as provided in this Consent Decree and shall pay the State damages for State Natural Resources Damages. The De Minimis Settling Defendants shall make any required payments to the Settling Work Defendants in accordance with their respective settlements with each other. The Owner Settling Defendant shall provide the Deed Notice and the Access Easement and notice to successors-in-title required by Paragraphs 9 and 20 hereof, and cause the Access Easement and the notice to successors-in-title to be duly recorded in accordance with the requirements of this Consent Decree and shall comply with the access and easement requirements of Section VIII hereof. The Settling Federal Agencies shall reimburse the EPA Hazardous Substance Superfund for Past Response Costs and Future Response Costs, the State for its response costs and shall pay the State for State Natural Resource Damages, and the Settling Work Defendants for their response costs, by making payment to the EPA Hazardous Substance Superfund, as provided in this Consent Decree.

b. The obligations of Settling Work Defendants to finance and perform the Work and to pay amounts owed the United States and the State under this Consent Decree are joint and several. In the event of the insolvency or other failure of any one or more Settling Work Defendants to implement the requirements of this Consent Decree, the remaining Settling Work Defendants shall complete all such requirements.

c. Except as specifically otherwise provided herein, (i) the obligations of the De Minimis Settling Defendants under this Consent Decree shall be limited to any required payment of money to the Settling Work Defendants in the amounts and on the terms provided in their settlements with the Settling Work Defendants, and (ii) the obligations of the Owner Settling Defendant under this Consent Decree shall be limited to providing and recording the notice to successors-in-title required by Paragraph 9, providing the Deed Notice and providing and recording the Access Easement, and complying with the access and easement requirements of Section VIII hereof. Accordingly, the De Minimis Settling Defendants who have either already paid or who are already legally obligated to pay any required settlement amounts to the Settling Work Defendants, shall not be subject to joint and several liability to the Plaintiffs for the obligations of this Consent Decree, but shall only be severally liable to the Settling Work Defendants for the unpaid balance of any required settlement amounts. The Owner Settling Defendant shall not be subject to joint and several liability to the Plaintiffs, provided the Owner Settling Defendant complies with the requirements imposed upon it by this Consent Decree.

d. The Settling Work Defendants have established the ERT, to receive settlement payments from the Settling Work Defendants pursuant to this Consent Decree, and the QSF Trust, to receive settlement payments from the Settling Work Defendants and the De Minimis Settling Defendants. The Court approves the QSF Trust. The Settling Work Defendants may make payments required to be made to fulfill their obligations under this Consent Decree from both the ERT and the QSF Trust; provided, however, that payments from the ERT shall be used only for Operation and Maintenance and/or for Five Year Reviews.

e. If EPA determines that the respondents to the Order are in full compliance with its terms and conditions as of the date of entry of this Consent Decree, this Consent Decree shall supersede the Order upon entry of the Consent Decree with respect to all subsequent obligations. If EPA determines that the respondents to the Order are not in full compliance with its terms and conditions as of the date of the entry of this Consent Decree, then both the Order and the Consent Decree shall be in full force and effect until EPA subsequently determines that the respondents have achieved full current compliance with the terms and conditions of the Order. If this Consent Decree is not entered by the Court, the Order shall not be superseded and the respondents shall perform all work under the Order in accordance with its terms and conditions. Any documents that are required to be submitted under this Consent Decree that have been submitted pursuant to the Order need not be resubmitted after the date that this Consent Decree supersedes the Order, unless EPA determines that such submittal is inadequate. Nothing in this Consent Decree shall be deemed to bar EPA from enforcing the Order for respondents' failure to comply with the Order as of the date of entry of this Consent Decree. EPA may seek

penalties or punitive damages from the respondents to the Order pursuant to Sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c)(3), with respect to violations of the Order occurring prior to the date that the Order is superseded by this Consent Decree at any time permitted by law, including after the date that the Order has been superseded by this Consent Decree, notwithstanding any correction of such violations.

7. Compliance With Applicable Law

All activities undertaken by Settling Work Defendants pursuant to this Consent Decree shall be performed in accordance with the requirements of all applicable federal and state laws and regulations. Settling Work Defendants must also comply with all applicable or relevant and appropriate requirements of all Federal and State environmental laws as set forth in the ROD and the SOW. The activities conducted pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP. The amounts paid by the Settling Defendants to the United States and the State under Section XV (Reimbursement of Response Costs) shall be considered to be costs of removal or remedial action incurred by the United States Government or the State within the meaning of Section 107(a)(4)(A) of CERCLA, 42 U.S.C.§ 9607(a)(4)(A).

8. Permits

a. As provided in Section 121(e) of CERCLA and Section 300.400(e) of the NCP, no permit shall be required for any portion of the Work conducted entirely on-site (*i.e.*, within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-site requires a federal or state permit or approval, Settling Work Defendants shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. The Settling Work Defendants may seek relief under the provisions of Section XVII (Force Majeure) of this Consent Decree for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit required for the Work.

c. This Consent Decree is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

9. Notice to Successors-in-Title

a. With respect to any property owned or controlled by the Owner Settling Defendant that is located within the Site, within 15 days after the entry of this Consent Decree, the Owner Settling Defendant shall submit to EPA for review and approval a notice to

be filed with the Recorder's Office or Registry of Deeds or other appropriate office, Middlesex County, State of New Jersey, which shall provide notice to all successors-in-title (hereinafter, "Successors-in-Title") that the property is part of the Site, that EPA issued the ROD, selecting a remedy for the Site, on September 18, 1998 and that potentially responsible parties have entered into a Consent Decree requiring implementation of the remedy. Such notice shall identify the United States District Court in which the Consent Decree was filed, the name and civil action number(s) of this case, and the date the Consent Decree was entered by the Court. The Owner Settling Defendant shall record the notice within 10 days of EPA's approval of the notice. The Owner Settling Defendant shall provide EPA with a certified copy of the recorded notice within 10 days of recording such notice. Thereafter, each deed, title, or other instrument conveying an interest in the property included in the Site shall contain a notice stating that the property is subject to this Consent Decree and shall reference the recorded location of the Consent Decree and any restrictions applicable to the property under this Consent Decree.

b. The obligations of the Owner Settling Defendant with respect to the provision of access and the implementation of institutional controls under Section VIII (Access and Institutional Controls) shall be binding upon said Owner Settling Defendant and any and all persons who subsequently acquire any such interest or portion thereof (hereinafter, "Successors-in-Title"). Within 30 days of the entry of this Consent Decree, the Owner Settling Defendant shall execute a deed notice that grants the right to enforce the land/water use restrictions listed in Paragraph 20(b) of this Consent Decree on the property included within the Site. Owner Settling Defendant shall deliver the executed deed notice to the attorney for Settling Work Defendants, who shall hold the deed notice in escrow until such time that, after Remedial Work Element 1 is completed, NJDEP if it so desires and in its sole discretion, requests that the deed notice be recorded at the Recorder's Office or Registry of Deed or other appropriate office where land ownership and transfer records are maintained for the property. Pursuant to Paragraph 20, within 30 days after the entry of this Consent Decree, the Owner Settling Defendant shall record at the Recorder's Office or Registry of Deeds or other appropriate office where land ownership and transfer records are maintained for the property, the Access Easement. Each subsequent instrument conveying an interest in any such property included in the Site shall reference the recorded location of such Access Easement and, if necessary, Deed Notice applicable to the property.

c. At least 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 Settling Defendant and any Successors-in-Title conveying the interest shall give the grantee written notice of (i) this Consent Decree, (ii) the Access Easement, and (iii) the Deed Notice. At least 30 days prior to such conveyance, the Owner Settling

Defendant and any Successors-in-Title conveying the interest shall also give written notice to EPA and the State of the proposed conveyance, including the name and address of the grantee, and the date on which notice of the Consent Decree, Access Easement, and Deed Notice was given to the grantee.

d. In the event of any such conveyance, Owner Settling Defendant's obligations under this Consent Decree, including, but not limited to, its obligations under the Access Easement and the Deed Notice shall continue to be met by the Owner Settling Defendant. In no event shall the conveyance release or otherwise affect the liability of the Owner Settling Defendant to comply with all provisions of this Consent Decree, absent the prior written consent of EPA. If the United States approves, the grantee may perform some or all of the Work under this Consent Decree.

VI. PERFORMANCE OF THE WORK BY SETTLING WORK DEFENDANTS

10. Selection of Supervising Contractor.

(a) All aspects of the Work to be performed by Settling Work Defendants pursuant to Sections VI (Performance of the Work by Settling Work Defendants), VII (Quality Assurance, Sampling and Data Analysis), and XIV (Emergency Response) of this Consent Decree shall be under the direction and supervision of the Supervising Contractor, the selection of which shall be subject to disapproval by EPA, after a reasonable opportunity for review and comment by the State. With the approval of EPA, the Supervising Contractor may be the same as the Project Coordinator designated by the Settling Work Defendants pursuant to Paragraph 37 of Section XI (Project Coordinators). Within 10 days after the lodging of this Consent Decree, Settling Work Defendants shall notify EPA in writing of the name, title, and qualifications of any contractor proposed to be the Supervising Contractor. Within 10 days after receipt of such notification, EPA will issue a notice of disapproval or an authorization to proceed. For the time period between EPA's issuance of notice to proceed and the Court's entry of the Consent Decree, the Settling Work Defendants' obligations to begin work under this Consent Decree may be limited to the following activities: (1) Pre-Remedial Design Activities Work Plan; (2) Remedial Design Work Plan; and (3) the Remedial Design Reports (*See* SOW, Appendix G). If at any time thereafter, Settling Work Defendants propose to change a Supervising Contractor, Settling Work Defendants shall give such notice to EPA and the State and must obtain an authorization to proceed from EPA, after a reasonable opportunity for review and comment by the State, before the new Supervising Contractor performs, directs, or supervises any Work under this Consent Decree.

(b) If EPA disapproves a proposed Supervising Contractor, EPA will notify Settling Work Defendants in writing. In such event, Settling Work Defendants shall submit to EPA and the State a list of contractors, including the qualifications of each contractor,

that would be acceptable to them within 30 days of receipt of EPA's disapproval of the contractor previously proposed. EPA will provide written notice of the names of any contractor(s) that it disapproves and an authorization to proceed with respect to any of the other contractors. Settling Work Defendants may select any contractor from that list that is not disapproved and shall notify EPA and the State of the name of the contractor selected within 21 days of EPA's authorization to proceed.

(c) If EPA fails to provide written notice of its authorization to proceed or disapproval as provided in this Paragraph and this failure prevents the Settling Work Defendants from meeting one or more deadlines in a plan approved by EPA pursuant to this Consent Decree, Settling Work Defendants may seek relief under the provisions of Section XVII (Force Majeure) hereof.

11. Remedial Design

(a) Within 60 days after EPA's issuance of the authorization to proceed pursuant to Paragraph 10(a), Settling Work Defendants shall submit to EPA and the State the Remedial Design Work Plan. The Remedial Design Work Plan shall provide for design of the remedy set forth in the ROD, in accordance with the SOW and for achievement of the Performance Standards and other requirements set forth in the ROD, this Consent Decree and/or the SOW. Upon its approval by EPA, the Remedial Design Work Plan shall be incorporated into and become enforceable under this Consent Decree.

(b) The Remedial Design Work Plan shall include plans and schedules for implementation of all remedial design and pre-design tasks identified in the SOW, including, but not limited to, plans and schedules for the completion of: (1) a Remedial Design Sampling and Analysis Monitoring Plan (including, but not limited to, a Remedial Design Quality Assurance Project Plan ("RD QAPP") in accordance with Section VII (Quality Assurance, Sampling and Data Analysis); (2) a Pre-Design Activities Work Plan; (3) a separate Preliminary Design Report (50% completion) for Remedial Work Element I and Remedial Work Element II; (4) a separate Final Design Report (100% completion) for Remedial Work Element I and Remedial Work Element II; (5) a Health and Safety Contingency Plan for all field activities; (6) a description of any additional Remedial Design Tasks; and (7) a Plan for Obtaining Access and Other Approvals. In addition, the Remedial Design Work Plan shall include a schedule for completion of the Remedial Action Work Plan.

(c) Upon approval of the Remedial Design Work Plan by EPA, after a reasonable opportunity for review and comment by the State, Settling Work Defendants shall implement the Remedial Design Work Plan. The Settling Work Defendants shall submit to EPA and the State all plans, submittals and other deliverables required under the approved Remedial Design Work Plan in accordance with the approved schedule, for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions). Unless otherwise

directed by EPA, Settling Work Defendants shall not commence further Remedial Design activities at the Site prior to approval of the Remedial Design Work Plan.

(d) Unless any of the following items is determined by EPA to be duplicative, the Preliminary Design Reports for Remedial Work Element I and Remedial Work Element II shall include, at a minimum, the following: (1) design criteria for Remedial Work Elements I and II, as applicable; (2) the results of additional field sampling and pre-design work; (3) a project delivery strategy; (4) preliminary plans, drawings and sketches; (5) a summary of required specifications in outline form; and (6) a preliminary construction schedule.

(e) Unless any of the following items is determined by EPA to be duplicative, the Final Design Reports for Remedial Work Element I and Remedial Work Element II shall include, at a minimum, the following: (1) final plans and specifications; (2) a Construction Quality Assurance Project Plan ("CQAPP"); (3) a Field Sampling Plan (directed at measuring progress toward meeting Performance Standards); (4) a Health and Safety Contingency Plan and (5) a Wetland Mitigation Plan. The CQAPP, which shall detail the approach to quality assurance during construction activities at the Site, shall specify a quality assurance official ("QA Official"), independent of the Supervising Contractor, to conduct a quality assurance program during the construction phase of the project (See Section VII of the SOW).

12. Remedial Action

(a) Within 90 days after the approval by EPA of the Final Design Report for each Remedial Work Element, Settling Work Defendants shall award a contract for Remedial Action for that Remedial Work Element. Within 30 days of the award of a contract for each Remedial Work Element, Settling Work Defendants shall submit to EPA and the State a work plan for the performance of the Remedial Action for that Remedial Work Element ("Remedial Action Work Plan"). Each Remedial Action Work Plan shall provide for construction and implementation of the remedy set forth in the ROD and achievement of the Performance Standards, in accordance with this Consent Decree, the ROD, the SOW, and the design plans and specification developed in accordance with the Remedial Design Work Plan and approved by EPA. Upon its approval by EPA, the Remedial Action Work Plan shall be incorporated into and become enforceable under this Consent Decree. At the same time as they submit the Remedial Action Work Plan for each Remedial Work Element, Settling Work Defendants shall submit to EPA and the State an updated remedial construction Health and Safety Contingency Plan for field activities required by the Remedial Action Work Plan which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. §1910.120.

(b) Unless the following items are determined by EPA to be duplicative, the Remedial Action Work Plan for each Remedial Work Element shall include the contents required by the SOW. These requirements include, but are not limited to, the following: (1) the schedule for completion of the Remedial Action; (2) a schedule for developing and submitting other required Remedial Action plans; (3) a methodology for implementation of the CQAPP, (4) a groundwater monitoring plan, (5) methods for satisfying permitting requirements, (6) methodology for implementation of Operation and Maintenance; (7) methodology for implementation of the Health and Safety Contingency Plan; and (8) procedures and plans for the decontamination of equipment and the disposal of contaminated materials. The Remedial Action Work Plan for each Remedial Work Element shall also include a schedule for implementation of all Remedial Action tasks identified in the Final Design Report for that Remedial Work Element and shall identify the initial formulation of the Settling Work Defendants Remedial Action Project Team (including, but not limited to, the Supervising Contractor)(See Section IX of the SOW).

(c) Upon approval of the Remedial Action Work Plan by EPA, after a reasonable opportunity for review and comment by the State, Settling Work Defendants shall implement the activities required under the Remedial Action Work Plan. The Settling Work Defendants shall submit to EPA and the State all plans, submittals, or other deliverables required under the approved Remedial Action Work Plan in accordance with the approved schedule for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions). Unless otherwise directed by EPA, Settling Work Defendants shall not commence physical Remedial Action activities at the Site prior to approval of the Remedial Action Work Plan.

(d) The Settling Work Defendants shall continue implementation and operation of the Remedial Action until all of the Performance Standards are achieved, unless EPA determines that compliance with any of the Performance Standards shall be waived based upon a determination of technical impracticability, and for so long thereafter as is otherwise required under this Consent Decree. If EPA waives compliance with any Performance Standard, based upon a determination of technical impracticability, the Settling Work Defendants shall be responsible for the attainment of any modified Performance Standards established by EPA. The Settling Work Defendants shall perform post-remedial monitoring in accordance with the SOW.

13. Modification of the SOW or Related Work Plans and Oversight.

a. If EPA determines that modification to the work specified in the SOW and/or in work plans developed pursuant to the SOW is necessary to achieve and maintain the Performance Standards or to carry out and maintain the effectiveness of the remedy set forth in the ROD, EPA may require that such modification be

incorporated in the SOW and/or such work plans. Provided, however, that a modification may only be required pursuant to this Paragraph to the extent that it is consistent with the scope of the remedy selected in the ROD.

b. For the purposes of this Paragraph 13 and Paragraph 44 only, the "scope of the remedy selected in the ROD" encompasses the following:

For soil: The excavation and off-site disposal of approximately 18,500 cubic yards of soil contaminated with polychlorinated biphenyls (PCBs) above 1 part per million (ppm) and lead above 400 ppm, followed by backfilling with clean fill and topsoil and seeding. In addition, sediment and surface water monitoring will be conducted to determine whether remediation of Lot 1B results in a lowering of PCB levels in the streams in Lot 1A (*see* SOW, Appendix G).

For groundwater: The installation and pumping of additional extraction wells to contain and remediate the contaminated groundwater on the Site. The extracted water will be treated in the existing treatment facility and the discharge from the treatment plant would continue to be sent to the Middlesex County Utilities Authority ("MCUA") Publicly Owned Treatment Works. However, if discharging to the MCUA becomes infeasible, treated groundwater will undergo additional treatment as necessary, prior to being discharged on-site, to Stream 1A, in compliance with the State of New Jersey requirements. Additional treatment may include biological treatment in the on-site biological treatment unit. An additional groundwater investigation will be performed to determine if contaminated groundwater is leaving the property boundaries.

c. If Settling Work Defendants object to any modification determined by EPA to be necessary pursuant to this Paragraph, they may seek dispute resolution pursuant to Section XVIII (Dispute Resolution), Paragraph 60 (record review). The SOW and/or related work plans shall be modified in accordance with final resolution of the dispute.

d. Settling Work Defendants shall implement any work required by any modifications incorporated in the SOW and/or in work plans developed pursuant to the SOW in accordance with this Paragraph.

e. EPA, the State and the Settling Work Defendants' Project Coordinator may meet, at EPA and the State's discretion, to discuss the oversight activities that the EPA and the State intend to perform during the next year.

f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions as otherwise provided in this Consent Decree.

14. Settling Work Defendants acknowledge and agree that nothing in this Consent Decree, the SOW, or the Remedial Design or Remedial Action Work Plans constitutes a warranty or representation of any kind by Plaintiffs that compliance with the work requirements set forth in the SOW and the Work Plans will achieve the Performance Standards.

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

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

b. The identity of the receiving facility and state will be determined by the Settling Work Defendants following the award of the contract for Remedial Action construction. The Settling Work Defendants shall provide the information required by Paragraph 15(a)as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

VII. QUALITY ASSURANCE, SAMPLING, and DATA ANALYSIS

16. Settling Work Defendants shall use quality assurance, quality control, and chain of custody procedures for all samples in accordance with the *Region II CERCLA Quality Assurance Manual, Revision 1, EPA-Region* II, dated October, 1989, and "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operation," (EPA QA/R5; "Preparing Perfect Project Plans," (EPA/600/9-88/087), and subsequent amendments to such guidelines upon notification by EPA to Settling Work Defendants of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. Prior to the commencement of any monitoring project under this Consent Decree, Settling Work Defendants shall submit to EPA for approval, after a reasonable opportunity for review and comment by the State, a Quality Assurance Project Plan ("QAPP") that is consistent with the SOW, the NCP and any applicable guidance documents. If relevant to the proceeding, the Parties agree that validated sampling data

generated in accordance with the QAPP(s) and reviewed and approved by EPA shall be admissible as evidence, without objection, in any proceeding under this Decree. Settling Work Defendants shall ensure that EPA and State personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized by Settling Work Defendants in implementing this Consent Decree. In addition, Settling Work Defendants shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring. Settling Work Defendants shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Decree perform all analyses according to accepted EPA methods. Accepted EPA methods consist of those methods which are documented in the "Contract Lab Program Statement of Work for Inorganic Analysis," dated September 1991, and the "Contract Lab Program Statement of Work for Organic Analysis," dated March 1990, and any amendments made thereto during the course of the implementation of this Decree. Settling Work Defendants shall ensure that all laboratories they use for analysis of samples taken pursuant to this Consent Decree participate in an EPA or EPA-equivalent QA/QC program. Settling Work Defendants shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Decree will be conducted in accordance with the procedures set forth in the QAPP approved by EPA.

17. Upon request, the Settling Work Defendants shall allow split or duplicate samples to be taken by EPA and the State or their authorized representatives. Settling Work Defendants shall notify EPA and the State not less than 28 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 Settling Work Defendants to take split or duplicate samples of any samples they take as part of the Plaintiffs' oversight of the Settling Work Defendants' implementation of the Work.

18. Settling Work Defendants shall submit to EPA and the State 4 copies each of the results of all sampling and/or tests or other data obtained or generated by or on behalf of Settling Work Defendants with respect to the Site and/or the implementation of this Consent Decree unless EPA agrees otherwise.

19. Notwithstanding any provision of this Consent Decree, the United States and the State hereby retain all of their information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA and any other applicable statutes or regulations.

VIII. ACCESS AND INSTITUTIONAL CONTROLS

20. If the Site, or any other property where access and/or land/water use restrictions are needed to implement this Consent

Decree, is owned or controlled by any of the Settling Defendants, such Settling Defendants shall:

a. commencing on the date of lodging of this Consent Decree, provide the United States, the State and their representatives, including EPA, NJDEP and their contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Consent Decree including, but not limited to, the following activities:

i. Monitoring the Work;

ii. Verifying any data or information submitted to the United States;

iii. Conducting investigations relating to contamination at or near the Site;

iv. Obtaining samples;

v. Assessing the need for, planning, or implementing additional response actions at or near the Site;

vi. Implementing the Work pursuant to the conditions set forth in Paragraph 79 of this Consent Decree;

vii. Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Settling Work Defendants or their agents, consistent with Section XXIII (Access to Information);

viii. Assessing Settling Work Defendants' compliance with this Consent Decree; and

ix. Determining whether the Site or other property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, by or pursuant to this Consent Decree.

b. commencing on the date of lodging of this Consent Decree, refrain from using the Site, 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 Consent Decree. Such restrictions include, but are not limited to, the Deed Notice and the CEA.

c. if EPA so requests, execute and record in the Recorder's Office or Registry of Deeds or other appropriate land records office of Middlesex County, State of New Jersey, an easement, running with the land, that (i) grants a right of access for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 20(a) of this Consent Decree, and (ii) grants the right to enforce

the land/water use restrictions listed in Paragraph 20(b) of this Consent Decree, or other restrictions that EPA determines are necessary to implement, ensure non-interference with, or ensure the protectiveness of the remedial measures to be performed pursuant to this Consent Decree. Such Settling Defendants shall grant the access rights and the rights to enforce the land/water use restrictions to one or more of the following persons, as determined by EPA, (i) the United States, on behalf of EPA, and its representatives, (ii) the State of New Jersey and its representatives, (iii) the other Settling Defendants and their representatives, and/or (iv) other appropriate grantees. Such Settling Defendants shall within 45 days of EPA's request, submit to EPA for review and approval with respect to such property:

i. a draft easement that is enforceable under the laws of the State of New Jersey, free and clear of all prior liens and encumbrances (except as approved by EPA), and acceptable under the Attorney General's Title Regulations promulgated pursuant to 40 U.S.C. § 255; and

ii. a current title commitment or report prepared in accordance with the U.S. Department of Justice Standards for the Preparation of Title Evidence in Land Acquisitions by the United States (1970) (the "Standards").

d. For purposes of this paragraph only, the Settling Work Defendants shall not be deemed to "control" the property by virtue of their presence on the property to implement the Interim Remedy or to conduct the work required under this Consent Decree.

21. Within 15 days of EPA's approval and acceptance of the easement, such Settling Defendants shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment or report to affect the title adversely, record the easement with the Recorder's Office or Registry of Deeds or other appropriate office of Middlesex County. Within 30 days of recording the easement, such Settling Defendants shall provide EPA with final title evidence acceptable under the Standards, and a certified copy of the original recorded easement showing the clerk's recording stamps.

22. If the Site, or any other property where access and/or land/water use restrictions are needed to implement this Consent Decree, is owned or controlled by persons other than any of the Settling Defendants, Settling Work Defendants shall use best efforts to secure from such persons:

a. an agreement to provide access thereto for Settling Work Defendants, as well as for the United States on behalf of EPA, and the State of New Jersey, as well as their representatives (including contractors), for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 20(a) of this Consent Decree;

b. an agreement, enforceable by the Settling Work Defendants and the United States, to abide by the obligations and restrictions established by Paragraph 20(b) of this Consent Decree, 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 Consent Decree; and

c. if EPA so requests, the execution and recordation in the Recorder's Office or Registry of Deeds or other appropriate land records office of Middlesex County, State of New Jersey, of an easement, running with the land, that (i) grants a right of access for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 20(a) of this Consent Decree, and (ii) grants the right to enforce the land/water use restrictions listed in Paragraph 20(b) of this Consent Decree, or other restrictions that EPA determines are necessary to implement, ensure non-interference with, or ensure the protectiveness of the remedial measures to be performed pursuant to this Consent Decree. The access rights and/or rights to enforce land/water use restrictions shall be granted to one or more of the following persons, as determined by EPA (i) the United States, on behalf of EPA, and its representatives, (ii) the State and its representatives, (iii) the other Settling Work Defendants and their representatives, and/or (iv) other appropriate grantees. Within 45 days of EPA's request, Settling Work Defendants shall submit to EPA for review and approval with respect to such property:

i. a draft easement that is enforceable under the laws of the State of New Jersey, free and clear of all prior liens and encumbrances (except as approved by EPA), and acceptable under the Attorney General's Title Regulations promulgated pursuant to 40 U.S.C. § 255; and

ii. a current title commitment or report prepared in accordance with the Standards.

Within 15 days of EPA's approval and acceptance of the easement, such Settling Work Defendants shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment or report to affect the title adversely, record the easement with the Recorder's Office or Registry of Deeds or other appropriate office of Middlesex County. Within 30 days of recording the easement, such Settling Work Defendants shall provide EPA with final title evidence acceptable under the Standards, and a certified copy of the original recorded easement showing the clerk's recording stamps.

23. If any access or land/water use restriction agreements required by Paragraphs 22(a) or (b) of this Consent are not obtained within 45 days of the date of entry of this Consent Decree, or any access easements or restrictive easements if requested by EPA pursuant to Paragraph 22(c) of this Consent Decree

are not submitted to EPA in draft form within 45 days of the date of entry of this Consent Decree, Settling Work Defendants shall promptly notify the United States in writing, and shall include in that notification a summary of the steps that Settling Work Defendants have taken to attempt to comply with Paragraph 22 of this Consent Decree. The United States may, as it deems appropriate assist Settling Work Defendants in obtaining access or land/water use restrictions, either in the form of contractual agreements or in the form of easements running with the land. Settling Work Defendants shall reimburse the United States in accordance with the procedures in Section XV (Reimbursement of Response Costs), for all costs incurred, direct or indirect, by the United States in obtaining such access and/or land/water use restrictions including, but not limited to, the cost of attorney time and the amount of monetary consideration paid or just compensation.

24. If EPA determines that land/water 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, Settling Work Defendants shall cooperate with EPA's and the State's efforts to secure such governmental controls.

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

IX. REPORTING REQUIREMENTS

26. In addition to any other requirement of this Consent Decree, Settling Work Defendants, through their Project Coordinator, shall submit to the EPA and State Project Coordinators 3 copies each of written progress reports that: (a) describe the actions which have been taken toward achieving compliance with this Consent Decree since the previous report; (b) include a summary of all results of sampling and tests and all other data received or generated by Settling Work Defendants or their contractors or agents since the previous report; (c) identify all work plans, plans and other deliverables required by this Consent Decree completed and submitted since the previous report; (d) describe all actions, including, but not limited to, data collection and implementation of work plans, which are scheduled for the next six weeks 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 of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to

mitigate those delays or anticipated delays; (f) include any modifications to the work plans or other schedules that Settling Work Defendants have proposed to EPA or that have been approved by EPA; and (g) describe all activities undertaken in support of the Community Relations Plan since the previous report and those to be undertaken in the next six weeks. Settling Work Defendants shall submit these progress reports to EPA and the State monthly, or at such less frequent intervals as may be approved by EPA, by the tenth day of every month following the lodging of this Consent Decree. If requested by EPA or the State, upon reasonable notice and at reasonable times and places, Settling Work Defendants shall also provide briefings for EPA and the State to discuss the progress of the Work.

27. The Settling Work Defendants shall notify EPA of any change in the schedule described in the progress reports for the performance of any activity, including, but not limited to, data collection and implementation of work plans, no later than 7 days prior to the performance of the activity.

28. Upon the occurrence of any event during performance of the Work that Settling Work Defendants are required to report pursuant to Section 103 of CERCLA or Section 304 of the Emergency Planning and Community Right-to-know Act ("EPCRA"), Settling Work Defendants shall within 24 hours of the onset of such event orally notify the EPA Project Coordinator or the Alternate EPA Project Coordinator (in the event of the unavailability of the EPA Project Coordinator), or, in the event that neither the EPA Project Coordinator or Alternate EPA Project Coordinator is available, the Central New Jersey Remediation Section of the New Jersey Remediation Branch in the Emergency and Remedial Response Division, EPA Region II. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.

29. Within 20 days of the onset of such an event, Settling Work Defendants shall furnish to the EPA and NJDEP Project Coordinators a written report, signed by the Settling Work Defendants' Project Coordinator, setting forth the events which occurred and the measures taken, and to be taken, in response thereto. Within 30 days of the conclusion of such an event, Settling Work Defendants shall submit a report setting forth all actions taken in response thereto.

30. Settling Work Defendants shall submit 8 copies of all plans, reports, and data (other than the monthly reports) required by the SOW, the Remedial Design Work Plan, the Remedial Action Work Plan, or any other approved plans to EPA in accordance with the schedules set forth in such plans. Settling Work Defendants shall simultaneously submit 4 copies of all such plans, reports and data to the State.

31. All reports and other documents submitted by Settling Work Defendants to EPA and the State (other than the progress

reports referred to above) which purport to document Settling Work Defendants' compliance with the terms of this Consent Decree shall be signed by an authorized representative of the Settling Work Defendants, who may be the Settling Work Defendants' Project Coordinator.

X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

32. After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Decree, EPA, after reasonable opportunity for review and comment by the State, shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that the Settling Work Defendants modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Settling Work Defendants at least one notice of deficiency and an opportunity to cure within 14 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects and the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable. EPA will provide a written explanation to the Settling Work Defendants whenever EPA disapproves any submission, in whole or in part, and directs the Settling Work Defendants to modify that submission pursuant to this Paragraph.

33. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 32(a), (b), or (c), Settling Work Defendants shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XVIII (Dispute Resolution) with respect to the modifications or conditions made by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 32(c) and the submission has a material defect, EPA retains its right to seek stipulated penalties from the Settling Work Defendants, as provided in Section XIX (Stipulated Penalties).

a. Upon receipt of a notice of disapproval pursuant to Paragraph 32(d), Settling Work Defendants shall, within 14 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as provided in Section XIX (Stipulated Penalties), shall accrue during the 14 day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 34 and 35.

b. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 32(d), Settling Work Defendants shall

proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Settling Work Defendants of any liability for stipulated penalties under Section XIX (Stipulated Penalties).

34. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require the Settling Work Defendants to correct the deficiencies, in accordance with the preceding Paragraphs. EPA also retains the right to modify or develop the plan, report or other item. Settling Work Defendants shall implement any such plan, report, or item as modified or developed by EPA, subject only to their right to invoke the procedures set forth in Section XVIII (Dispute Resolution).

35. If upon resubmission, a plan, report, or item is disapproved or modified by EPA due to a material defect, Settling Work Defendants shall be deemed to have failed to submit such plan, report, or item timely and adequately unless the Settling Work Defendants invoke the dispute resolution procedures set forth in Section XVIII (Dispute Resolution) and EPA's action is overturned pursuant to that Section. The provisions of Section XVIII (Dispute Resolution) and Section XIX (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification under this paragraph is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XIX.

36. All plans, reports, and other items required to be submitted to EPA under this Consent Decree shall, upon approval or modification by EPA, be enforceable under this Consent Decree, subject to the Settling Work Defendants' right to invoke the procedures set forth in Section XVIII (Dispute Resolution). In the event EPA approves or modifies a portion of a plan, report, or other item required to be submitted to EPA under this Consent Decree, the approved or modified portion shall be enforceable under this Consent Decree.

XI. PROJECT COORDINATORS

37. Within 20 days of lodging this Consent Decree, Settling Work Defendants, the State and EPA will notify each other, in writing, of the name, address and telephone and facsimile numbers of their respective designated Project Coordinators and Alternate Project Coordinators. If a Project Coordinator or Alternate Project Coordinator initially designated is changed, the identity of the successor will be given to the other Parties at least 5 days before the changes occur, unless impracticable, but in no event later than the actual day the change is made. The Settling Work Defendants' Project Coordinator shall be subject to

disapproval by EPA and shall have the technical expertise sufficient to adequately oversee all aspects of the Work. The Settling Work Defendants' Project Coordinator shall not be an attorney for any of the Settling Defendants in this matter, but may be a representative or employee of the Supervising Contractor. He or she may assign other representatives, including other contractors, to serve as a Site representative for oversight of performance of daily operations during remedial activities.

38. Plaintiffs may designate other representatives, including, but not limited to, EPA or NJDEP employees, and federal or State contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Consent Decree. EPA's Project Coordinator and Alternate Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and an On-Scene Coordinator (OSC) by the National Contingency Plan, 40 C.F.R. Part 300. In addition, EPA's Project Coordinator or Alternate Project Coordinator shall have authority, consistent with the National Contingency Plan, to halt any Work required by this Consent Decree and to take any necessary response action when he or she determines that conditions at the Site constitute an emergency situation or may present an immediate threat to public health or welfare or the environment due to release or threatened release of Waste Material.

39. The Project Coordinators designated by EPA and NJDEP and the Settling Work Defendants' Project Coordinator will meet periodically, at such frequency and times as they shall agree upon, but in no event less frequently than once each 6 months, to discuss the progress of the project. The Settling Work Defendants' Project Coordinator shall be available to meet with the EPA and NJDEP Project Coordinators within 5 days after receiving their request to do so.

XII. ASSURANCE OF ABILITY TO COMPLETE WORK

40. Within 30 days of entry of this Consent Decree, Settling Work Defendants shall establish and maintain financial security in the initial amount of $16,272,000, to be adjusted from time to time, if approved by EPA, in accordance with Paragraph 42 of this Section XII (the "Financial Security Amount") in one or more of the following forms:

a. A surety bond guaranteeing performance of the Work;

b. One or more irrevocable letters of credit equaling the Financial Security Amount;

c. A trust fund;

d. A guarantee to perform the Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with at

least one of the Settling Work Defendants;

e. A demonstration that one or more of the Settling Work Defendants satisfies the requirements of 40 C.F.R. § 264.143(f). For these purposes, (i) references in 40 C.F.R. § 264.143(f) to "the sum of the current closure and post closure cost estimates and the current plugging and abandonment cost estimates" shall mean the amount of Financial Security Amount required to be established and maintained pursuant to this Section, and (ii) the demonstration by one or more of the Settling Work Defendants, individually or collectively, that they meet this test, may be made by submission to EPA of one or more certified financial statements of one or more of the Settling Work Defendants; or

f. Through the use of any other means acceptable to EPA.

41. If the Settling Work Defendants seek to demonstrate the ability to complete the Work through a guarantee by a third party pursuant to Paragraph 40(d) of this Consent Decree, Settling Work Defendants shall demonstrate that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f), applied in accordance with Paragraph 40(e). If Settling Work Defendants seek to demonstrate their ability to complete the Work by means of the financial test or the corporate guarantee pursuant to Paragraph 40(d) or (e), they shall resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, applied in accordance with Paragraph 40(e) on the anniversary of the effective date of this Consent Decree. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section are inadequate, Settling Work Defendants shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 40 of this Consent Decree. Settling Work Defendants' inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Consent Decree.

42. If Settling Work Defendants can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 40 above after entry of this Consent Decree, Settling Work Defendants may, on any anniversary date of entry of this Consent Decree, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining work to be performed. Settling Work Defendants shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security upon approval by EPA. In the event of a dispute, Settling Work Defendants may reduce the amount of the security in accordance with the final administrative or judicial decision resolving the dispute.

43. Settling Work Defendants may change the form of financial assurance provided under this Section at any time, upon notice to

and approval by EPA, provided that the new form of assurance meets the requirements of this Section. In the event of a dispute, Settling Work Defendants may change the form of the financial assurance only in accordance with the final administrative or judicial decision resolving the dispute.

XIII. CERTIFICATION OF COMPLETION

44. Completion of the Work.

a. Within 90 days after Settling Work Defendants conclude that all phases of the Work (including Operation and Maintenance plus Post-Remedial Monitoring) have been fully performed, Settling Work Defendants shall schedule and conduct a pre-certification inspection to be attended by Settling Work Defendants, EPA and the State. If, after the pre-certification inspection, the Settling Work Defendants still believe that the Work has been fully performed, Settling Work Defendants shall submit a written report by a registered professional engineer, who may be the same person as the Settling Work Defendants' Project Coordinator, stating that the Work has been completed in full satisfaction of the requirements of this Consent Decree. The report shall contain the following statement, signed by a responsible corporate official of a Settling Work Defendant or the Settling Work Defendants' Project Coordinator:

> "To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

If, after review of the written report, EPA, after reasonable opportunity to review and comment by the State, determines that any portion of the Work has not been completed in accordance with this Consent Decree, EPA will notify Settling Work Defendants in writing of the activities that must be undertaken by Settling Work Defendants pursuant to this Consent Decree to complete the Work. Provided, however, that EPA may only require Settling Work Defendants to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD," as that term is defined in Paragraph 13(b). EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the SOW or require the Settling Work Defendants to submit a schedule to EPA for approval pursuant to Section X (EPA Approval of Plans and Other Submissions). Settling Work Defendants shall perform all activities described in the notice in accordance with the specifications and schedules established therein, subject to their right to invoke the dispute resolution procedures set forth

in Section XVIII (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent request for Certification of Completion of the Work by Settling Work Defendants and after a reasonable opportunity for review and comment by the State, that the Work has been performed in accordance with this Consent Decree, EPA will so notify the Settling Work Defendants in writing.

XIV. EMERGENCY RESPONSE

45. In the event of any action or occurrence during the performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Settling Work Defendants shall, subject to Paragraph 46, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify the EPA's Project Coordinator, or, if the Project Coordinator is unavailable, EPA's Alternate Project Coordinator. If neither of these persons is available, the Settling Work Defendants shall notify the EPA, Region II, Emergency Spill Number at (732) 548-8730. Settling Work Defendants shall take such actions in consultation with EPA's Project Coordinator or other available authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plans, the Contingency Plans, and any other applicable plans or documents developed pursuant to the SOW. In the event that Settling Work Defendants fail to take appropriate response action as required by this Section, and EPA or the State takes such action instead, Settling Work Defendants shall reimburse EPA or the State all costs of the response action not inconsistent with the NCP pursuant to Section XV (Reimbursement of Response Costs).

46. Nothing in the preceding Paragraph or in this Consent Decree shall be deemed to limit any authority of the United States or the State, (a) to take all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, or (b) to direct or order such action, or seek an order from the Court, to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, subject to Section XX (Covenants by Plaintiffs).

XV. REIMBURSEMENT OF RESPONSE COSTS

47. Within 30 days of the effective date of this Consent Decree, Settling Work Defendants shall:

a. Pay to the EPA Hazardous Substance Superfund $1,544,664.55 in reimbursement of Past Response Costs of the United States, by FedWire Electronic Funds Transfer ("EFT") to the U.S.

Department of Justice account in accordance with current electronic funds transfer procedures, referencing U.S.A.O. file number , the EPA Region and Site/Spill ID #02C3, and DOJ case number 90-11-3-06104. Payment shall be made in accordance with instructions provided to the Settling Work Defendants by the Financial Litigation Unit of the United States Attorney's Office for the District of New Jersey following lodging of the Consent Decree. Any payments received by the Department of Justice after 4:00 P.M. (Eastern Time) will be credited on the next business day. Settling Work Defendants shall send notice that such payment has been made to the United States as specified in Section XXV (Notices and Submissions) and to:

Ronald Gherardi, Chief
Financial Management Branch
U.S. EPA, Region II
290 Broadway, 29th Floor
New York, New York 10007-1866

b. Pay to the State in accordance with directions received from the State the sum of $752,580 in reimbursement of Past Response Costs of the State and in payment of State Natural Resource Damages. Notice of the payment shall be sent by the Settling Work Defendants to the State in accordance with Section XXV (Notices and Submissions).

47.1. As soon as reasonably practicable after the effective date of this Consent Decree, and consistent with Subparagraph 47.1(a)(ii), the United States, on behalf of the Settling Federal Agencies, shall:

a. (i) Pay to the EPA Hazardous Substance Superfund $1,497,541, in reimbursement of Past Response Costs and in reimbursement of Future Response Costs of the United States.

(ii) If the payment to the EPA Hazardous Substances Superfund required by this subparagraph is not made as soon as reasonably practicable, the appropriate EPA Regional Branch Chief may raise any issues relating to payment to the appropriate DOJ Assistant Section Chief for the Environmental Defense Section. In any event, if this payment is nct made within 120 days after the effective date of this Consent Decree, EPA and DOJ have agreed to resolve the issue within 30 days in accordance with a letter agreement dated December 28, 1998.

b. Pay to the State $32,339 in reimbursement of Past Response Costs and Future Response Costs of the State and of State Natural Resource Damages, in the form of a check or checks made payable to "Treasurer, State of New Jersey," or by Electronic Funds Transfer in accordance with instructions provided by the State. Settling Federal Agencies shall send the certified check or checks with a completed NJDEP Form 062A to the Department of Environmental Protection, Bureau of Revenue, P.O. Box 417, Trenton, New Jersey

08625. Notice of the payment shall be sent by the Settling Federal Agencies to the State in accordance with Section XXV (Notices and Submissions).

47.2. In the event that payments required by Paragraph 47 are not made within 30 days of the effective date of this Consent Decree, Interest on the unpaid balance shall be paid at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), commencing on the effective date of this Consent Decree and accruing through the date of the payment.

47.3. The Parties to this Consent Decree recognize and acknowledge that the payment obligations of the Settling Federal Agencies under this Consent Decree can only be paid from appropriated funds legally available for such purpose. Nothing in this Consent Decree shall be interpreted or construed as a commitment or requirement that any Settling Federal Agency obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341, or any other applicable provision of law.

47.4 The De Minimis Settling Defendants shall pay to the Settling Work Defendants or shall make payments to the QSF Trust to fund response actions in accordance with the agreements entered into between the Settling Work Defendants and the De Minimis Settling Defendants. Each De Minimis Settling Defendant has paid or will pay at least a nominal amount toward response actions in an amount no greater than the amount set forth on each De Minimis Settling Defendant's certification provided to EPA.

48. a. Settling Work Defendants shall reimburse the EPA Hazardous Substance Superfund for all Future Response Costs of the United States not inconsistent with the National Contingency Plan. The United States will send Settling Work Defendants a bill requiring payment that includes a SCORE$ Report on a periodic basis. Each such bill will include an accurate accounting of federal costs incurred for response actions for which reimbursement is claimed. Settling Work Defendants shall make all payments within 30 days of Settling Work Defendants' receipt of each bill requiring payment, except as otherwise provided in Paragraph 49. The Settling Work Defendants shall remit all payments required by this Paragraph via EFT, along with the following information, to EPA's Account with Mellon Bank, Pittsburgh, Pennsylvania, as follows:

i. Amount of payment

ii. Title of Mellon Bank account to receive the payment: EPA

iii. Account code for Mellon Bank account receiving the payment:

9108544

iv. Mellon Bank ABA Routing Number: 043000261

v. Name of Party making payment

vi. EPA Case Number: 02-98-0193

vii. Site/Spill Identifier No. 02C3

To ensure that a payment is properly recorded, a letter should be sent, within one week of the EFT, which references the date of the EFT, the payment amount, the name of the Site, the case number, and the name and address of the party making payment to the United States as specified in Section XXV (Notices and Submissions) and to:

Ronald Gherardi, Chief

Financial Management Branch

U.S. Environmental Protection Agency, Region II

290 Broadway, 29th Floor

New York, New York 10007-1866

b. Settling Work Defendants shall reimburse the State for all Future Response Costs of the State not inconsistent with the NCP. The State will send Settling Work Defendants a bill requiring payment of Future Response Costs of the State on an annual basis. Each such bill will be accompanied by an accurate accounting of direct Future Response Costs paid by the State, sufficient to satisfy the requirements of Section 300.160(a)(1) of the NCP, and by a calculation of the indirect Future Response Costs of the State. To the extent that such billings include extramural costs, the billing will also include copies of the cooperative or interagency agreements, work assignments, technical directive documents, or similar task orders under which such costs were incurred, subject to applicable law regarding the disclosure of confidential business information. Settling Work Defendants shall make all payments within 30 days of Settling Work Defendants' receipt of each bill requiring payment, except as otherwise provided in Paragraph 49. Settling Work Defendants shall make all payments to the State required by this Paragraph in the form of a certified check or checks made payable to "Treasurer, State of New Jersey." Settling Work Defendants shall send the certified check(s) with NJDEP Form 062A to the Department of Environmental Protection, Bureau of Revenue, P.O. Box 417, Trenton, New Jersey 08625. Notice of the payment shall be sent to the State as specified in Section XXV (Notices and Submissions).

49. Settling Work Defendants may contest payment of any Future Response Costs of the United States or the State under Paragraph 48 if they determine that the United States or the State

has made an accounting error or if they allege that a cost item that is included represents costs that are inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the United States (if the Future Response Costs of the United States are being contested) or the State (if the Future Response Costs of the State are being contested) pursuant to Section XXV (Notices and Submissions). Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, the Settling Work Defendants shall within the 30 day period pay all uncontested Future Response Costs to the United States or the State in the manner described in Paragraph 48. Simultaneously, the Settling Work Defendants shall establish an interest-bearing escrow account in a federally-insured, federally chartered bank or a federally-insured bank duly chartered in the State of New Jersey and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. The Settling Work Defendants shall send to the United States or the State, as provided in Section XXV (Notices and Submissions), a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank-stamped deposit slip and, as soon as practicable, a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, the Settling Work Defendants shall initiate the Dispute Resolution procedures in Section XVIII (Dispute Resolution). If the United States or the State prevails in the dispute, within 5 days of the resolution of the dispute, the Settling Work Defendants shall pay the sums due (with accrued interest) to the United States, or to the State, if State Future Response Costs are contested, in the manner described in Paragraph 49. If the Settling Work Defendants prevail concerning any aspect of the contested costs, the Settling Work Defendants shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to the United States or the State in the manner described in Paragraph 49; Settling Work Defendants shall disburse to themselves any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVIII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding the Settling Work Defendants' obligation to reimburse the United States and the State for their Future Response Costs.

50. In the event that the payments required by Paragraph 47 are not made within 30 days of the effective date of this Consent Decree or the payments required by Paragraph 48 are not made within 30 days of the Settling Work Defendants' receipt of the bill, Settling Work Defendants shall pay Interest on the unpaid balance. The Interest to be paid on Past Response Costs of the United States and of the State under this Paragraph shall begin to accrue 30 days

after the effective date of this Consent Decree. The Interest on Future Response Costs of the United States shall begin to accrue on the date of the bill. The Interest shall accrue through the date of the Settling Work Defendants' payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to Plaintiffs by virtue of Settling Work Defendants' failure to make timely payments under this Section. The Settling Work Defendants shall make all payments required by this Paragraph in the manner described in Paragraph 48.

XVI. INDEMNIFICATION AND INSURANCE

51. a. The United States and the State do not assume any liability by entering into this agreement or by virtue of any designation of Settling Work Defendants as EPA's authorized representatives under Section 104(e) of CERCLA. Settling Work Defendants shall indemnify, save and hold harmless the United States (with the exception of the Settling Federal Agencies) and the State and their officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Settling Work Defendants, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Decree, including, but not limited to, any claims arising from any designation of Settling Work Defendants as EPA's authorized representatives under Section 104(e) of CERCLA. Further, the Settling Work Defendants agree to pay the United States (with the exception of the Settling Federal Agencies) and the State all costs they incur including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States or the State based on negligent or other wrongful acts or omissions of Settling Work Defendants, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Decree. Neither the United States nor the State shall be held out as a party to any contract entered into by or on behalf of Settling Work Defendants in carrying out activities pursuant to this Consent Decree. Neither the Settling Work Defendants nor any such contractor shall be considered an agent of the United States or the State.

b. The United States and the State shall promptly give Settling Work Defendants notice of any claim for which the United States or the State plans to seek indemnification pursuant to Paragraph 51(a), shall consult with Settling Work Defendants prior to settling such claim, and shall not settle any such claim except upon a good faith basis.

52. Settling Work Defendants waive all claims against the United States and the State for damages or reimbursement or for

set-off of any payments made or to be made to the United States or the State, arising from or on account of any contract, agreement, or arrangement between any one or more of Settling Work Defendants and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Settling Work Defendants shall indemnify and hold harmless the United States and the State with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Settling Work Defendants and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

53. No later than 15 days before commencing any on-Site Work for Remedial Work Element I, Settling Work Defendants shall secure, and shall maintain until the Remedial Action for Remedial Work Element I has been completed, comprehensive general liability insurance with limits of $15 million combined single limit, and automobile liability insurance with limits of $12 million combined single limit, naming the United States and the State as additional insureds. Before commencing any on-Site Work for Remedial Work Element II, Settling Work Defendants shall secure, or shall assure that they have in place, and shall maintain until the Remedial Action for Remedial Work Element II and the Operation and Maintenance have been completed, comprehensive general liability insurance with limits of $5 million combined single limit, and automobile liability insurance with limits of $2 million combined single limit, naming the United States and the State as additional insureds. When the Remedial Action for Remedial Work Element II is completed, Settling Work Defendants may petition the EPA for a reduction in the amount of insurance required to be carried under this paragraph. For the duration of this Consent Decree, Settling Work Defendants shall satisfy, or shall assure 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 Settling Work Defendants in furtherance of this Consent Decree. Prior to the commencement of Work for any Remedial Work Element under this Consent Decree, Settling Work Defendants shall provide to EPA and the State certificates of such insurance and a copy of each insurance policy. Settling Work Defendants shall resubmit such certificates and copies of policies each year on the anniversary of the effective date of this Consent Decree. If Settling Work Defendants demonstrate by evidence satisfactory to EPA and the State 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, Settling Work Defendants need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

XVII. FORCE MAJEURE

54. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the Settling Work Defendants, of any entity controlled by Settling Work Defendants, or of Settling Work Defendants' contractors, that delays or prevents the performance of any obligation, under this Consent Decree despite Settling Work Defendants' best efforts to fulfill the obligation. The requirement that the Settling Work Defendants exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work or a failure to attain the Performance Standards.

55. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, the Settling Work Defendants shall notify orally EPA's Project Coordinator or, in his or her absence, EPA's Alternate Project Coordinator or, in the event both of EPA's designated representatives are unavailable, the Director of the Emergency and Remedial Response Division, EPA Region II, within 10 days of when Settling Work Defendants first knew that the event might cause a delay. Within 5 days thereafter, Settling Work Defendants shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; the Settling Work Defendants' rationale for attributing such delay to a force majeure event if they intend to assert such a claim; and a statement as to whether, in the opinion of the Settling Work Defendants, such event may cause or contribute to an endangerment to public health, welfare or the environment. The Settling Work Defendants shall include with any notice all documentation available to them supporting their claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Settling Work Defendants from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Settling Work Defendants shall be deemed to know of any circumstance of which Settling Work Defendants, any entity controlled by Settling Work Defendants, or Settling Work Defendants' contractors knew or should have known.

56. If EPA, after a reasonable opportunity for review and comment by the State, agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA, after a reasonable

opportunity for review and comment by the State, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA, after a reasonable opportunity for review and comment by the State, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify the Settling Work Defendants in writing of its decision. If EPA, after a reasonable opportunity for review and comment by the State, agrees that the delay is attributable to a force majeure event, EPA will notify the Settling Work Defendants in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

57. If the Settling Work Defendants elect to invoke the dispute resolution procedures set forth in Section XVIII (Dispute Resolution), they shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Settling Work Defendants shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Settling Work Defendants complied with the requirements of Paragraphs 54 and 55, above. If Settling Work Defendants carry this burden, the delay at issue shall be deemed not to be a violation by Settling Work Defendants of the affected obligation of this Consent Decree identified to EPA and the Court.

XVIII. DISPUTE RESOLUTION

58. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising between the United States or the State and the Settling Work Defendants under or with respect to this Consent Decree. However, the procedures set forth in this Section shall not apply (a) to actions by the United States to enforce obligations of the Settling Work Defendants that have not been disputed in accordance with this Section, or (b) to disputes between the Settling Defendants concerning this Consent Decree or the settlements reached between the Settling Work Defendants and the De Minimis Settling Defendants.

59. Any dispute between the United States and the Settling Work Defendants which arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between the parties to the dispute. The period for informal negotiations shall not exceed 30 days from the time the dispute arises, unless that time is modified by written agreement of the parties to the dispute. The dispute shall be considered to

have arisen when one party sends the other parties a written Notice of Dispute.

a. In the event that the United States and the Settling Work Defendants cannot resolve a dispute by informal negotiations under the preceding Paragraph, then the position advanced by EPA shall be considered binding unless, within 30 days after the conclusion of the informal negotiation period, Settling Work Defendants invoke the formal dispute resolution procedures of this Section, by serving on the United States a written Statement of Position on the matter in dispute, including, but not limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by the Settling Work Defendants. The Statement of Position shall specify the Settling Work Defendants' position as to whether formal dispute resolution should proceed under Paragraph 60 or Paragraph 61.

b. Within 60 days after receipt of Settling Work Defendants' Statement of Position, EPA will serve on Settling Work Defendants its Statement of Position, including, but not limited to, any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by EPA. EPA's Statement of Position shall include a statement as to whether formal dispute resolution should proceed under Paragraph 60 or 61. Within 30 days after receipt of EPA's Statement of Position, Settling Work Defendants may submit a Reply.

c. If there is disagreement between EPA and the Settling Work Defendants as to whether dispute resolution should proceed under Paragraph 60 or 61, the parties to the dispute shall follow the procedures set forth in the paragraph determined by EPA to be applicable. However, if the Settling Work Defendants ultimately appeal to the Court to resolve the dispute, the Court shall determine which paragraph is applicable in accordance with the standards of applicability set forth in Paragraphs 60 and 61.

60. Formal dispute resolution for disputes between EPA and Settling Work Defendants pertaining to the selection or adequacy of any response action and all other disputes that are accorded review on the administrative record under applicable principles of administrative law shall be conducted pursuant to the procedures set forth in this Paragraph. For purposes of this Paragraph, the adequacy of any response action includes, without limitation: (1) the adequacy or appropriateness of plans, procedures to implement plans, or any other items requiring approval by EPA under this Consent Decree; and (2) the adequacy of the performance of response actions taken pursuant to this Consent Decree. Nothing in this Consent Decree shall be construed to allow any dispute by Settling Work Defendants regarding the validity of the ROD's provisions.

a. An administrative record of the dispute shall be maintained by EPA and shall contain all Statements of Position, including supporting documentation, submitted pursuant to this

Section. Where appropriate, EPA may allow submission of supplemental statements of position by the parties to the dispute.

b. The Director of Emergency and Remedial Response Division, EPA Region II, will issue a final administrative decision resolving the dispute based on the administrative record described in Paragraph 60(a). This decision shall be binding upon the Settling Work Defendants, subject only to the right to seek judicial review pursuant to Paragraph 60(c) and (d).

c. Any administrative decision made by EPA pursuant to Paragraph 60(b) shall be reviewable by this Court, provided that a motion for judicial review of the decision is filed by the Settling Work Defendants with the Court and served on all Parties within 10 days of receipt of EPA's decision. The motion shall include a description of the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of this Consent Decree. The United States may file a response to Settling Work Defendants' motion.

d. In proceedings on any dispute governed by this Paragraph, Settling Work Defendants shall have the burden of demonstrating that the decision of the Emergency and Remedial Response Division Director is arbitrary and capricious or otherwise not in accordance with law. Judicial review of EPA's decision shall be on the administrative record compiled pursuant to Paragraph 60(a).

61. Formal dispute resolution for disputes between EPA and the Settling Work Defendants that neither pertain to the selection or adequacy of any response action nor are otherwise accorded review on the administrative record under applicable principles of administrative law, shall be governed by this Paragraph.

a. Following receipt of Settling Work Defendants' Statement of Position submitted pursuant to Paragraph 59, the Director of the Emergency and Remedial Response Division, EPA Region II, will issue a final decision resolving the dispute. The Emergency and Remedial Response Division Director's decision shall be binding on the Settling Work Defendants unless, within 10 days of receipt of the decision, the Settling Work Defendants file with the Court and serve on the parties a motion for judicial review of the decision setting forth the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of the Consent Decree. The United States may file a response to Settling Work Defendants' motion.

b. Notwithstanding Paragraph P of Section I (Background) of this Consent Decree, judicial review of any dispute governed by this Paragraph shall be governed by applicable principles of law.

62. a. In the event of a dispute only between the State and the Settling Work Defendants that the parties cannot resolve by informal negotiations, the Settling Work Defendants may institute the NJDEP internal process for resolving disputes pursuant to N.J.A.C. 7:26C-1.4. The provisions of this Paragraph shall be applied using the officials of NJDEP who are the functional equivalents of the officers listed in N.J.A.C. 7:26C-1.4 at the time the dispute arises. The officials of NJDEP shall use their best efforts to render decisions with respect to disputes brought to them for determination within a reasonable time under the circumstances. In the event that an official of NJDEP does not render a determination within 30 days of the date upon which the dispute is presented for determination by that official, the Settling Work Defendants may present the dispute to the official of NJDEP next in the chain of command.

b. Any administrative decision made by the Commissioner or his or her designee pursuant to Paragraph 62(a) shall be reviewable by this Court, provided that a motion for judicial review of the decision is filed by the Settling Work Defendants with the Court and served on all Parties to the dispute within 10 days of receipt of the State's decision. The motion shall include a description of the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of this Consent Decree. The State may file a response to the motion by the Settling Work Defendants. In proceedings on any dispute governed by this Paragraph, Settling Work Defendants shall have the burden of demonstrating that the decision of the Commissioner, or his or her designee, based on the record presented to him or her, is arbitrary and capricious or otherwise not in accordance with law.

63. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone or affect in any way any obligation of the Settling Work Defendants under this Consent Decree, not directly in dispute, unless EPA agrees or the Court orders otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 72. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that the Settling Work Defendants do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XIX (Stipulated Penalties).

XIX. STIPULATED PENALTIES

64. Settling Work Defendants shall be liable for stipulated penalties in the amounts set forth in Paragraph 65(a) to the United States for failure to comply with the requirements of this Consent Decree specified below, unless excused under Section XVII (Force

Majeure). "Compliance" by Settling Work Defendants shall include completion of the activities under this Consent Decree or any work plan or other plan approved under this Consent Decree identified below in accordance with all applicable requirements of law, this Consent Decree, the SOW, and any plans or other documents approved by EPA pursuant to this Consent Decree and within the specified time schedules established by and approved under this Consent Decree.

65. a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Subparagraph b:

Penalty Per Violation Per Day	Period of Noncompliance
$1,000	1st through 5th day
$1,500	6th through 15th day
$2,000	16th through 30th day
$7,000	31st through 45th day
$10,000	46th day and beyond

b. Compliance milestones or violations subject to stipulated penalties are as follows:

1. Submittal of the name of the Project Coordinator to EPA pursuant to Section XI of this Consent Decree;

2. Payment of Past Response Costs and Future Response Costs pursuant to Section XV of this Consent Decree;

3. Payment of Stipulated Penalties pursuant to Section XIX of this Consent Decree;

4. Provision of Financial Assurance pursuant to Section XII of this Consent Decree;

5. Compliance with all reporting requirements set forth in paragraphs 26 and 27 of this Consent Decree;

6. Implementation of Remedial Design, Remedial Construction, Operation and Maintenance of the Remedy in accordance with the SOW and this Consent Decree;

7. Implementation of any modification of the Work in accordance with any work plan submitted by Settling

Work Defendants and approved by EPA pursuant to Section VI of this Consent Decree;

8. Submission and, if necessary, revision and resubmission of the Remedial Action Work Plan;

9. Submission and, if necessary, revision and resubmission of the Operation and Maintenance and Post Remediation Monitoring Plan;

10. Submission and, if necessary, revision and resubmission of the Notice of Completion and Final Report for the Remedial Construction;

11. Submission and, if necessary, revision and resubmission of the Notice of Completion and Final Report for the Remedial Action; and

12. Submission and, if necessary, revision and resubmission of the Notice of Completion and Final Report for Post-Remediation Groundwater Monitoring.

66. Settling Work Defendants shall pay to the Plaintiff stipulated penalties in the amount of $1,000 per day for each day the Settling Work Defendants fail to meet any deadline, time limit, or scheduling milestone established in this Consent Decree and not specifically referred to in paragraph 65 of this Consent Decree.

67. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 79 of Section XX (Covenants by Plaintiff), Settling Work Defendants shall be liable for a stipulated penalty in the amount of $1 million.

68. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section X (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Settling Work Defendants of any deficiency; (2) with respect to a decision by the Director of the Emergency and Remedial Response Division, EPA Region II, under Paragraph 60(b) or 61(a) of Section XVIII (Dispute Resolution), during the period, if any, beginning on the 21st day after the date that Settling Work Defendants' reply to EPA's Statement of Position is received until the date that the Director issues a final decision regarding such dispute; or (3) with respect to judicial review by this Court of any dispute under Section XVIII (Dispute Resolution), during the period, if any, beginning on the 31st day after the Court's receipt of the final submission regarding the dispute until the date that the Court issues a final decision regarding such dispute. Nothing

herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Decree.

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

70. All penalties accruing under this Section shall be due and payable to the United States within 30 days of the Settling Work Defendants' receipt from EPA of a demand for payment of the penalties, unless Settling Work Defendants invoke the Dispute Resolution procedures under Section XVIII (Dispute Resolution). All payments to the United States under this Section shall indicate that the payment is for stipulated penalties, and shall be remitted via EFT, along with the following information, to EPA's Account with Mellon Bank, Pittsburgh, Pennsylvania, as follows:

i. Amount of payment

ii. Title of Mellon Bank account to receive the payment: EPA

iii. Account code for Mellon Bank account receiving the payment: 9108544

iv. Mellon Bank ABA Routing Number: 043000261

v. Name of Party making payment

vi. EPA Case Number: 02-98-0193

vii. Site/Spill Identifier No. 02C3

To ensure that a payment is properly recorded, a letter should be sent, within one week of the EFT, which references the date of the EFT, the payment amount, that the payment is for stipulated penalties, the name of the Site, the case number, and the name and address of the party making payment to the United States as specified in Section XXV (Notices and Submissions) and to:

Ronald Gherardi, Chief

Financial Management Branch

U.s. Environmental Protection Agency, Region II

290 Broadway, 29th Floor

New York, New York 10007-1866

71. The payment of penalties shall not alter in any way Settling Work Defendants' obligation to complete the performance of the Work required under this Consent Decree.

72. Penalties shall continue to accrue as provided in Paragraph 68 during any dispute resolution period, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to this Court, accrued penalties determined to be owing shall be paid to EPA within 15 days of the agreement or the receipt of EPA's decision or order;

b. If the dispute is appealed to this Court and the United States prevails in whole or in part, Settling Work Defendants shall pay all accrued penalties determined by the Court to be owed to EPA within 60 days of receipt of the Court's decision or order, except as provided in Subparagraph c. below;

c. If the District Court's decision is appealed by any Party, Settling Work Defendants shall pay all accrued penalties determined by the District Court to be owing to the United States into an interest-bearing escrow account within 60 days of receipt of the Court's decision or order. Penalties shall be paid into this account as they continue to accrue, at least every 60 days. Within 15 days of receipt of the final appellate court decision, the escrow agent shall pay the balance of the account to EPA or to Settling Work Defendants to the extent that they prevail.

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

b. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States to seek any other remedies or sanctions available by virtue of Settling Work Defendants' violation of this Decree or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA. Provided, however, that the United States shall not seek civil penalties pursuant to Section 122(l) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of the Consent Decree.

74. Notwithstanding any other provision of this Section, the United States may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree.

XX. COVENANTS BY PLAINTIFFS

A. Settling Work Defendants and Settling Federal Agencies

75. In consideration of the actions that will be performed and the payments that will be made by the Settling Work Defendants under the terms of the Consent Decree, and except as specifically provided in Paragraph 76 of this Section, the United States covenants not to sue or to take administrative action against Settling Work Defendants pursuant to Section 106 and 107(a) of CERCLA for the Interim Remedy, performance of the Work and for recovery of Past Response Costs and Future Response Costs of the United States, and the State covenants not to sue or to take administrative action against the Settling Work Defendants pursuant to Section 107 of CERCLA, 42 U.S.C. §9607, the Closure Act, the Spill Act, the SWMA, the WPCA, N.J.S.A. 23:5-28, the common law of nuisance, the common law of negligence, or strict liability for the Interim Remedy, performance of the Work, Past and Future Response Costs of the State, or State Natural Resources Damages relating to the Site. These covenants not to sue shall take effect upon the receipt by EPA and NJDEP of the payments required by Paragraphs 47 of Section XV (Reimbursement of Response Costs). These covenants not to sue are conditioned upon the satisfactory performance by Settling Work Defendants of their obligations under this Consent Decree. These covenants not to sue extend only to the Settling Work Defendants and do not extend to any other person.

75.1 In consideration of the payments that will be made by the Settling Federal Agencies under the terms of the Consent Decree, and except as specifically provided in Paragraph 76 of this Section, EPA covenants not to "sue or to" take administrative action against the Settling Federal Agencies pursuant to Sections 106 and 107 of CERCLA for the Interim Remedy, performance of the Work and for recovery of Past Response Costs and Future Response Costs of the United States, and the State covenants not to "sue or to" take administrative action against the Settling Federal Agencies for Past Response Costs and Future Response Costs of the State and for State Natural Resource Damages relating to the Site. These covenants shall take effect upon the receipt by EPA and NJDEP of the payments required by Paragraph 47.1 of Section XV (Reimbursement of Response Costs). These covenants are conditioned upon the satisfactory performance by Settling Federal Agencies of their obligations under this Consent Decree. These covenants extend only to the Settling Federal Agencies and do not extend to any other person.

76. General reservations of rights. The covenants set forth above do not pertain to any matters other than those expressly specified in Paragraphs 75 and 75.1. The United States and the State reserve, and this Consent Decree is without prejudice to, all rights against Settling Work Defendants, and EPA and the federal

natural resources trustees and the State reserve, and this Consent Decree is without prejudice to, all rights against the Settling Federal Agencies, with respect to all other matters, including but not limited to, the following:

(1) claims based on a failure by Settling Work Defendants and Settling Federal Agencies to meet a requirement of this Consent Decree;

(2) liability arising from the past, present, or future disposal, release, or threat of release of Waste Materials outside of the Site;

(3) liability for future disposal of Waste Material at the Site, other than as provided in the ROD, the Work, or otherwise ordered, approved or permitted by EPA;

(4) liability to the United States for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

(5) criminal liability;

(6) liability for violations of federal or state law which occur during or after implementation of the Remedial Action;

(7) liability of respondents for performance of all remaining requirements of EPA's March 9, 1992 Administrative Order, Index No. II-CERCLA-20104;

(8) liability for additional operable units at the Site or the final response action;

(9) liability for costs that the United States will incur related to the Site but are not within the definition of Future Response Costs.

B. De Minimis Settling Defendants

77. In consideration of the payments totaling at least $1,200,000 that will be made by the De Minimis Settling Defendants under the terms of the Consent Decree, and except as specifically provided in Paragraph 78 of this Section, the United States and the State covenant not to sue or take administrative action against the De Minimis Settling Defendants pursuant to Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606, 9607, relating to the Site, and the State covenants not to sue or to take administrative action against the De Minimis Settling Defendants pursuant to the Closure Act, the Spill Act, the SWMA, the WPCA, N.J.S.A. 23:5-28, the common law of nuisance, the common law of negligence, or strict liability with respect to the Site, and the State covenants not to sue or to take administrative action against the De Minimis Settling Defendants

for State Natural Resource Damages relating to the Site. These covenants shall take effect for each De Minimis Settling Defendant upon notification to the United States by the QSF Trust that the De Minimis Settling Defendant's payments have been received. With respect to each De Minimis Settling Defendant, individually, this covenant not to sue is conditioned upon: a) the satisfactory performance by each De Minimis Settling Defendant of all of its obligations under this Consent Decree; and b) the veracity of the information provided to EPA by the De Minimis Settling Defendant relating to the De Minimis Settling Defendant's involvement with the Site. The United States' covenant extends only to the De Minimis Settling Defendants and does not extend to any other person.

78. (a) General reservations of rights. The covenants set forth in Paragraph 77 above do not pertain to any matters other than those expressly specified in Paragraph 77. The United States and the State reserve, and this Consent Decree is without prejudice to, all rights against De Minimis Settling Defendants and EPA and the federal natural resources trustees and the State reserve, and this Consent Decree is without prejudice to, all rights against the De Minimis Settling Defendants with respect to all other matters, including but not limited to, the following:

(1) claims based on a failure by De Minimis Settling Defendants to meet a requirement of this Consent Decree;

(2) liability arising from future arrangement for disposal or treatment of a hazardous substance, pollutant or contaminant at the Site after the date of lodging of this Consent Decree;

(3) liability to the United States for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments; and

(4) criminal liability.

(b) Notwithstanding any other provision in this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings against any individual De Minimis Settling Defendant in this action or in a new action or to issue an administrative order to any individual De Minimis Settling Defendant seeking to compel that De Minimis Settling Defendant to perform response actions relating to the Site, and/or to reimburse the United States for additional costs of response, if information is discovered which indicates that such De Minimis Settling Defendant contributed hazardous substances to the Site in such greater amount or of such greater toxic or other hazardous effects that such De Minimis Settling Defendant no longer qualifies as a de minimis party at the Site because De Minimis Settling Defendant contributed greater than 1% of the hazardous

substances at the Site, or contributed hazardous substances which are significantly more toxic or are of significantly greater hazardous effect than other hazardous substances at the Site.

79. Work Takeover. In the event EPA determines that Settling Work Defendants have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portions of the Work as EPA determines necessary. Settling Work Defendants may invoke the procedures set forth in Section XVIII (Dispute Resolution), Paragraph 61, to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in perfcrming the Work pursuant to this Paragraph shall be considered Future Response Costs that Settling Work Defendants shall pay pursuant to Section XV (Reimbursement of Response Costs).

80. Notwithstanding any other provision of this Consent Decree, the United States retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANTS BY SETTLING DEFENDANTS AND SETTLING FEDERAL AGENCIES

81. Covenant Not to Sue by Settling Defendants. Subject to the reservations in Paragraphs 83 and 84, Settling Defendants hereby covenant not to sue and agree not to assert any claims or causes of action against the United States or the State with respect to the Work, past response actions, and Past and Future Response Costs as defined herein, and past and future response costs incurred or to be incurred by the Settling Defendants under this Consent Decree, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 107, 111, 112, 113 or any other provision of law;

b. any claims against the United States, including any department, agency or instrumentality of the United States under CERCLA Sections 107 or 113 related to the Site;

c. any claims arising out of response activities at the Site, including claims based on EPA's or the State's selection of response actions, oversight of response activities or approval of plans for such activities;

d. any claims for costs, fees or expenses incurred in this action or related to the Site, including claims under 28 U.S.C. § 2412 (Equal Access to Justice Act), as amended; and

e. any claim under the Constitution of the United States, the Tucker Act, 28 U.S.C. § 1491, or at common law, arising out of or relating to access to, institutional controls on or other restrictions on the use or enjoyment of, or response activities undertaken at the Site.

82. Covenant by Settling Federal Agencies. Settling Federal Agencies hereby agree not to assert any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Section 106(b)(2), 107, 111, 112, 113 or any other provision of law with respect to the Work, past response actions, and Past and Future Response Costs as defined herein or this Consent Decree. This covenant does not preclude demand for reimbursement from the Superfund of costs incurred by a Settling Federal Agency in the performance of its duties (other than pursuant to this Consent Decree) as lead or support agency under the National Contingency Plan (40 C.F.R. Part 300).

83. The Settling Defendants reserve, and this Consent Decree is without prejudice to: (a) claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, any such claim shall not include a claim for any damages caused, in whole or in part, by the act or omission of any person, including any contractor, who is not a federal employee as that term is defined in 28 U.S.C. § 2671; nor shall any such claim include a claim based on EPA's selection of response actions, or the oversight or approval of the Settling Defendants' plans or activities. The foregoing applies only to claims which are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA; and (b) contribution claims against the Settling Federal Agencies in the event any claim is asserted by the United States or the State against the Settling Defendants under the authority of or under Paragraphs 76(2)-(4) or 76(8)-(9) of Section XX (Covenants by Plaintiff), but only to the same extent and for the same matters, transactions, or occurrences as are raised in the claim of the United States or the State against Settling Defendants.

84. The Settling Defendants reserve, and this Consent Decree is without prejudice to, claims against the State for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful acts or omissions of any employee of the State while acting within the scope of his or her office or employment subject to all applicable defenses and immunities set forth in the New Jersey Tort Claims Act, N.J.S.A. 59:1-1 *et seq.* and the New Jersey Contractual Liability Act, N.J.S.A. 59:13-1 *et seq.*;

provided, however, that any such claim shall not include a claim for any damages based on the State's selection of response actions, or the oversight or approval of Settling Work Defendants' plans or activities.

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

86. Settling Defendants agree not to assert any claims and to waive all claims or causes of action that they may have for all matters relating to the Site, including for contribution, against any person where the person's liability to Settling Defendants with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if

(a) any materials contributed by such person to the Site constituting Municipal Solid Waste (MSW) or Municipal Sewage Sludge (MSS) did not exceed 0.2% of the total volume of waste at the Site; and

(b) any materials contributed by such person to the Site containing hazardous substances, but not constituting MSW or MSS, did not exceed the greater of (i) 0.002% of the total volume of waste at the Site, or (ii) 110 gallons of liquid materials or 200 pounds of solid materials.

This waiver shall not apply to any claim or cause of action against any person meeting the above criteria if EPA has determined that the materials contributed to the Site by such person contributed or could contribute significantly to the costs of response at the Site.

XXII. EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION

87. Except as provided in paragraph 86, nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree. The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this decree may have under applicable law. Each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto.

88. The Parties agree, and by entering this Consent Decree this Court finds, that the Settling Defendants and the Settling Federal Agencies are entitled, as of the effective date of this Consent Decree, to protection from contribution actions or claims as provided by CERCLA Section 113 (f) (2) , 42 U. S. C. § 9613 (f)

(2), and that the De Minimis Settling Defendants are entitled, as of the effective date of this Consent Decree, to protection from contribution actions or claims as provided by CERCLA Section 122(g)(5), 42 U.S.C.§ 9622(g)(5), for matters addressed in this Consent Decree. Such "matters addressed in this Consent Decree" are the Interim Remedy, the Remedial Design, the Remedial Action, the Work, Operation and Maintenance, Past Response Costs, and Future Response Costs. In addition, the term includes, as to the State, any claims by the State relating to the Site, under the SWMA, the Closure Act, the Spill Act, the WPCA, N.J.S.A. 23:5-28, the common law of nuisance and negligence and strict liability, and for State Natural Resource Damages, except for those claims reserved under Paragraphs 76 and 78.

89. The Settling Defendants agree that with respect to any suit or claim for contribution brought by them for matters related to this Consent Decree, they will notify the United States and the State in writing no later than 60 days prior to the initiation of such suit or claim.

90. The Settling Defendants also agree that with respect to any suit or claim for contribution brought against them for matters related to this Consent Decree, they will notify in writing the United States and the State within 10 days of service of the complaint on them. In addition, Settling Defendants shall notify the United States and the State within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial.

91. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Settling Defendants shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, the entire controversy doctrine, or other defenses based upon any contention that the claims raised by the United States or the State in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenants not to sue set forth in Section XX (Covenants By Plaintiffs). In particular, but not by way of limitation, the Court has determined, for purposes of the New Jersey entire controversy doctrine, that the United States and the State shall not assert claims related to liability for additional operable units or the final remedial action at the Site, at this stage of the litigation, which claims are hereby preserved.

XXIII. ACCESS TO INFORMATION

92. Settling Work Defendants shall provide to EPA and the State, upon request, at reasonable times, copies of all non-privileged documents and information within their possession or control or that of their contractors or agents relating to

activities at the Site or to the implementation of this Consent Decree, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other non-privileged documents or information related to the Work. Settling Work Defendants shall also make available to EPA, for purposes of investigation, information gathering, or testimony, upon reasonable notice and at reasonable times and places, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

93. a. Settling Work Defendants may assert business confidentiality claims covering part or all of the documents or information submitted to Plaintiffs under this Consent Decree to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA and the State, or if EPA has notified the applicable Settling Work Defendant that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA, the public may be given access to such documents or information in accordance with the requirements of 40 C.F.R. § 2.205, without further notice to Settling Defendants.

b. One or more Settling Work Defendants may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If any Settling Work Defendant asserts such a privilege in lieu of providing documents, the Settling Work Defendant shall provide the Plaintiffs with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the document, record, or information; and (6) the privilege asserted by the Settling Work Defendant. However, no documents, reports or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on the grounds that they are privileged.

94. 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 (other than the Construction Cost Estimate referred to in Paragraph VII.C.5 of the SOW), or any other documents or information evidencing conditions at or around the Site.

XXIV. RETENTION OF RECORDS

95. Until ten years after the Settling Work Defendants' receipt of EPA's notification pursuant to Paragraph 44(b) of Section

XIII (Certification of Completion), each of the Settling Work Defendants shall preserve and retain at least one copy of all records and documents now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or liability of any person for response actions conducted and to be conducted at the Site, regardless of any corporate retention policy to the contrary. Until ten years after the Settling Work Defendants' receipt of EPA's notification pursuant to Paragraph 44(b) of Section XIII (Certification of Completion), Settling Work Defendants shall also instruct their contractors and agents to preserve at least one copy of all documents, records, and information of whatever kind, nature or description relating to the performance of the Work to the extent these documents, records, and information is not retained by the Settling Work Defendants.

96. At the conclusion of this document retention period, Settling Work Defendants shall notify the United States and the State at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States or the State, Settling Work Defendants shall make any such records or documents available to EPA or the State. The Settling Work Defendants may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Settling Work Defendants assert such a privilege, they shall provide the Plaintiffs with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Settling Work Defendants. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

97. Each Settling Defendant hereby certifies individually that, to the best of its knowledge and belief, after thorough inquiry, it has not, with any intent to limit or avoid liability, altered, mutilated, discarded, destroyed or otherwise disposed of all copies of any records, documents or other information relating to its potential liability regarding the Site since notification of potential liability by the United States or the State or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information related to the Site, pursuant to Section 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

98. The United States acknowledges that each Settling Federal Agency (1) is subject to all applicable Federal record retention laws, regulations, and policies; and (2) has certified that it has fully complied with any and all EPA and State requests for information pursuant to Section 104(e) and 122(e) of CERCLA, 42 U.S.C. 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C.

6927.

XXV. NOTICES AND SUBMISSIONS

99. Whenever, under the terms of this Consent Decree unless otherwise agreed upon, written notice is required to be given or a report or other document is required to be sent by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing. All notices and submissions shall be considered effective upon receipt, unless otherwise provided. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree with respect to the United States, EPA, the State, NJDEP, the Settling Defendants and the Settling Work Defendants, respectively.

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ #90-11-3-06104 and

Chief, Environmental Defense Section
United States Department of Justice
Environment and Natural Resources Division
P.O. Box 23986
Washington, D.C. 20026-3986
Re: DJ #90-11-6-05175
and

As to EPA:
ATTN: Chemsol Site Remedial Project Manager
New Jersey Remediation Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region II
290 Broadway, 19th Floor
New York, New York 10007-1866

ATTN: Chemsol Site Attorney
New Jersey Superfund Branch
Office of Regional Counsel
U.S. Environmental Protection Agency, Region II
290 Broadway, 17th Floor
New York, New York 10007-1866

As to the State and NJDEP:

ATTN: Chemsol Site Manager
Bureau of Federal Case Management
Department of Environmental Protection
401 East State Street
P.O. Box 413
Trenton, New Jersey 08625

ATTN: Section Chief
Hazardous Site Litigation Section
Division of Law
P.O. Box 093
Trenton, New Jersey.

As to the Settling Defendants and the Settling Work Defendants:

Willard F. Potter
Settling Work Defendants' Project Coordinator
Senior Project Manager
de maximis, Inc.
186 Center Street, Suite 290
Clinton, New Jersey 08809

XXVI. EFFECTIVE DATE AND TERMINATION

100. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court, except as otherwise provided herein. When Settling Work Defendants believe that the Work required by this Consent Decree has been completed and the United States and the State have been reimbursed by the Settling Work Defendants for all amounts due under Section XV (Reimbursement of Response Costs), the Settling Work Defendants may petition the United States and the State for agreement to terminate this Consent Decree. If the United States and the State accept the petition, the United States, the State and the Settling Work Defendants shall jointly petition the Court for termination of this Consent Decree. If the United States or the State rejects the petition, the United States or the State, as the case may be, shall explain its reasons in writing, and the procedures of Section XVIII (Dispute Resolution) shall apply. Termination shall not affect the provisions of Section XX (Covenants by Plaintiffs), Section XXI (Covenants by Settling Defendants and Settling Federal Agencies), Section XXII (Effect of Settlement; Contribution Protection) and Section XXIV (Retention of Records).

XXVII. RETENTION OF JURISDICTION

101. This Court retains jurisdiction over both the subject matter of this Consent Decree and the United States, the State, the Settling Defendants and the QSF Trust for the duration of the performance of the terms and provisions of this Consent Decree for the purpose of enabling any of the Parties to apply to the Court at any time for such further order, direction, and relief as may be necessary or appropriate for the construction or modification of this Consent Decree, or to effectuate or enforce compliance with its terms, to resolve disputes in accordance with Section XVIII (Dispute Resolution) hereof, or to enforce the obligations of the De Minimis Settling Defendants to pay the Settling Work Defendants under this Consent Decree or to enforce the agreements among the Settling Work Defendants to satisfy their obligations pursuant to the terms to this Consent Decree.

XXVIII. APPENDICES

102. The following appendices are attached to and incorporated into this Consent Decree:

"Appendix A" is the Deed Notice.

"Appendix B" is the QSF Agreement.

"Appendix C" is the ROD.

"Appendix D" is the complete list of the Settling Defendants.

"Appendix E" is the complete list of the Settling Federal Agencies.

"Appendix F" is the map of the Site.

"Appendix G" is the SOW.

XXIX. COMMUNITY RELATIONS

103. Settling Work Defendants shall propose to EPA their participation in the community relations plan to be developed by Settling Work Defendants and approved by EPA. EPA will determine the appropriate role for the Settling Work Defendants under the Plan. Settling Work Defendants shall also cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, Settling Work Defendants shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site. The Settling Work Defendants shall not be precluded from undertaking their own community relations efforts if approved by EPA. This Paragraph shall not be interpreted to inhibit or affect the community relations efforts by the Settling Work Defendants; provided, however, that such efforts shall not be inconsistent with the NCP or any approved community

relations plan developed in accordance with this Section, and provided that EPA approves any community relations plan.

XXX. MODIFICATION

104. Schedules specified in this Consent Decree or in plans prepared and approved pursuant to this Consent Decree for completion of the Work may be modified by agreement of EPA and the Settling Work Defendants. All such modifications shall be made in writing. The permits or permit equivalents required for the Work may be modified in accordance with the procedures governing the modifications of such permits.

105. Except as provided in Paragraph 13 no material modifications shall be made to the SOW without written notification to and written approval of the United States, Settling Work Defendants, and the Court. Prior to providing its approval to any modification, the United States will provide the State with a reasonable opportunity to review and comment on the proposed modification. Modifications to the SOW that do not materially alter that document may be made by written agreement between EPA, after providing the State with a reasonable opportunity to review and comment on the proposed modification, and the Settling Work Defendants.

106. Nothing in this Decree shall be deemed to alter the Court's power to enforce, supervise or approve modifications to this Consent Decree.

XXXI. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

107. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) days for public notice and comment in accordance with Section 122(d)(2) of CERCLA, 42 U.S.C. § 9622 (d) (2), and 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. Settling Defendants consent to the entry of this Consent Decree without further notice.

108. If for any reason the Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of any Party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

XXXII. SIGNATORIES/SERVICE

109. Each undersigned representative of a Settling Defendant to this Consent Decree, the State and the Assistant Attorney General for Environment and Natural Resources of the Department of Justice certifies that he or she is fully authorized to enter into the terms

and conditions of this Consent Decree and to execute and legally bind such Party to this document.

110. Each Settling Defendant hereby agrees not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree unless the United States has notified the Settling Defendants in writing that it no longer supports entry of the Consent Decree.

111. Each Settling Defendant shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of that Party with respect to all matters arising under or relating to this Consent Decree. Settling Defendants hereby agree to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons.

SO ORDERED THIS DAY OF , 19__.

_____

United States District Judge

Signature page, the name, address, and telephone number of an agent who is authorized to accept service of process by mail on behalf of that Party with respect to all matters arising under or relating to this Consent Decree. Settling Defendants hereby agree to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons.

SO ORDERED THIS 21st DAY OF January, 2000 ~~19~~__.

United States District Judge
William H. Walls, USDJ

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR THE UNITED STATES OF AMERICA

Date: _____

_____
Lois J. Schiffer
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice
Washington, D.C. 20530

_____
Pamela A. Moreau
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, D.C. 20044-7611

_____
Michele L. Walter
Environmental Defense Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 23986
Washington, D.C. 20026-3986
(202) 514-3376

_____
Susan Cassell
Assistant United States Attorney
District of New Jersey
U.S. Department of Justice
970 Broad Street, Room 501
Newark, NJ 07102
(973) 645-2847

United States v. AlliedSignal Inc., et al.
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FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Date: 7/29/97

Jeanne M. Fox
Regional Administrator, Region II
U.S. Environmental Protection Agency
290 Broadway
New York, New York 10007-1866

Amelia M. Wagner
Assistant Regional Counsel
U.S. Environmental Protection Agency
Region II
290 Broadway, 17th Floor
New York, New York 10007-1866

United States v. AlliedSignal Inc., et al.
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FOR THE STATE OF NEW JERSEY

Date: 7/28/99

RONALD T. CORCORY
Assistant Director
Division of Responsible Party Site Remediation
New Jersey Department of Environmental Protection
401 East State Street
Trenton, New Jersey 08625

Date: 7/26/99

JAMES F. HALL
Assistant Commissioner
Natural and Historic Resources
New Jersey Department of Environmental Protection
401 E. State Street
Trenton, New Jersey 08625

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR AlliedSignal Inc.
Company Name

Date: June 25, 1999

Theodore A. Fischer
Director - Remediation & Evaluation Services
101 Columbia Road
Morristown, NJ 07962

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Heleen Schiller
Title: Legal Research Assistant
Address: 101 Columbia Road; Morristown, NJ 07962
Tel. Number: 973-455-3104

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR ASHLAND INC.
Company Name

Date: June 18, 1999

Sul

[Name -- Please Type] James A. Duquin
[Title -- Please Type] Vice President
[Address -- Please Type] 5200 Blazer Parkway
Dublin, Ohio 43017

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Stephen W. Leermakers
Title: Senior Litigation Counsel
Address: 5200 Blazer Parkway, Dublin, Ohio 43017
Tel. Number: 614-790-4261

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR BASF Corporation
Company Name

Date: June 28, 1999

Harry M. Baumgartner
[Name -- Please Type]
[Title -- Please Type] Counsel
[Address -- Please Type]

BASF Corporation
3000 Continental Drive - North
Mount Olive, NJ 07828 - 1234

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Thomas Y. Allman
Title: Senior Vice President and General Counsel
Address: BASF Corporation, 3000 Continental Dr. N, Mount Oliv
Tel. Number: (973) 426-3200 NJ 07828-1234

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR _____
Company Name
Becton Dickinson and Company

Date: June 30, 1999

[Name -- Please Type] Bridget M. Healy
[Title -- Please Type] Vice President & Secretar
[Address -- Please Type] 1 Becton Drive
Franklin Lakes, NJ 0741

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Bruce J. Hector, Esq.
Title: Associate General Counsel
Address: 1 Becton Drive, Franklin Lakes, NJ 07417
Tel. Number: 201-847-7107

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Benjamin Moore & Co.
Company Name

Date: June 28, 1999

[Name -- Please Type] John T. Rafferty, Esq.
[Title -- Please Type] General Counsel & Secretar
[Address -- Please Type] 51 Chestnut Ridge Road
Montvale, NJ 07645

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Karl J. Rohrbacher, Esq.
Title: Assistant General Counsel
Address: 51 Chestnut Ridge Road, Montvale, NJ 07645
Tel. Number: (201) 573-9600 Ext. 6227

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

Colleen K. Nissl by CKS

FOR Borden, Inc.
Company Name
Colleen K. Nissl, Esquire
Vice President & Asst. General Counsel
180 E. Broad Street
Columbus, OH 43215
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Date: June 25, 1999

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Richard A. Levao, Esquire
Title: Outside Counsel
Address: Shanley & Fisher, 131 Madison Ave., Morristown, NJ 07962-1979
Tel. Number: (973) 285-1000

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Ciba Specialty Chemicals Corporation
Company Name

Date: 6/18/99

Name -- Douglas J. Heffernan
Title -- Vice President, Remediation Services
Address -- 560 White Plains Road
Tarrytown, NY 10591

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: CSC The United States Corporation
Title: 1013 Center Road
Address: Wilmington, DE 19805-12?
Tel. Number: (800) 927-9800

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Colgate-Palmolive Company
Company Name

Date: July 9, 1999

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]
James Serafino
Vice President, Deputy General Counsel
300 Park Avenue
New York, NY 10022

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Michael Th. Bourque
Title: Senior Counsel
Address: 300 Park Avenue, New York, NY 10022
Tel. Number: (212) 310-2201

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR CON-LUX COATINGS, INC
Company Name

Date: _____

[Name -- Please Type] MARK W. BIEDRON
[Title -- Please Type] LIQUIDATING TRUSTEE
[Address -- Please Type] BOX 327 OLDWICK, NJ 08858

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: MARK W. BIEDRON
Title: LIQUIDATING TRUSTEE
Address: BOX 327 OLDWICK, NJ 08858
Tel. Number: 908 832 0693

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR NOVARTIS CORPORATION
Company Name

Date: JUNE 21, 1999

[Name -- Please Type] Robert L. Thompson, Jr.
[Title -- Please Type] Executive Vice President and General Counsel
[Address -- Please Type] 564 Morris Avenue
Summit, NJ 07901-1C27

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Corporation Service Co.
Title:
Address: 830 Bear Tavern Rd. W. Trenton, NJ 08628
Tel. Number: (609) 771-1800

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Curtiss-Wright Corporation
Company Name

Date: June 28, 1999

James V. Maher, Assistant Secretary
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

1200 Wall Street West
Lyndhurst, NJ 07071

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Brian D. O'Neill
Title: General Counsel
Address: 1200 Wall Street West, Lyndhurst, NJ 07071
Tel. Number: 201-460-8108

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Cytec Industries Inc
Company Name

Date: 6/29/99

R L Hillard

[Name -- Please Type] R.L. Hillard
[Title -- Please Type] Director - Environmental Servic
[Address -- Please Type] Cytec Industries Inc
5 Garret Mt Plaza
West Paterson, N.J.

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Thomas A. Waldman, Esq
Title: Attorney
Address: Cytec Industries Inc 5 Garret Mt Plaza W Paterson NJ
Tel. Number: (973) 357 3136

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR The Dow Chemical Company
Company Name

Date: June 28, 1999

Mark D. Tucker

Mark D. Tucker
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]
Counsel
2030 Dow Center
Midland, MI 48674

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Mark D. Tucker
Title: Counsel
Address: 2030 Dow Center, Midland, MI 48674
Tel. Number: 517-636-5051

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Du Pont Company
Company Name

Date: June 17, 1999

Bernard J. Reilly

[Name -- Please Type] Bernard J. Reilly
[Title -- Please Type] Corporate Counsel
[Address -- Please Type] Du Pont Legal - D7082
1007 Market Street
Wilmington, DE 19898

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Bernard Reilly
Title: Corporate Counsel
Address: Du Pont Legal - 1007 Market St Wilmington, DE 19898
Tel. Number: 302-774-5445

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Exxon Chemical Americas
Company Name

Date: June 21, 1999

R. F. Humphreys
Vice President
13501 Katy Freeway
Houston, TX 77079

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: James J. Doyle, Jr.
Title: Counsel
Address: 13501 Katy Freeway, Houston, TX 77079
Tel. Number: (281) 870-6137

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Fisher-Price, Inc.
Company Name

Date: 6/22/99

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]
Robert Normile, Vice President
333 Continental Blvd.,
El Segundo, CA 90245

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Robert Normile
Title: Vice President
Address: 333 Continental Blvd., El Segundo, CA 90245
Tel. Number: (310) 252-3615

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR FORD MOTOR COMPANY
Company Name

Date: June 25, 1999

Thomas J. DeZure
Assistant Secretary
Suite 600 PTE
One Parklane Blvd,
Dearborn, Michigan 48126

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Kathy J. Hofer
Title: Counsel
Address: 3 Parklane Blvd., Suite 1500 PTW, Dearborn, Mi. 4812
Tel. Number: (313) 594-1637

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR: GENERAL ELECTRIC COMPANY

Date: July 14, 1999

Jane W. Gardner
Manager & Counsel-Environmental Remediation Programs
3135 Easton Turnpike
Fairfield, CT 06431

Agent Authorized to Accept Service on Behalf of Above-Signed Party:

Name:	Andrew J. Thomas, Jr.
Title:	Counsel-Environmental Matters
Address:	3135 Easton Turnpike Fairfield, CT 06431
Tel. Number:	(203) 373-2268
Fax Number:	(203) 373-2683

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR General Motors Corporation
Company Name

Date: June 22, 1999

Don A. Schiemann

Don A. Schiemann, Attorney
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

General Motors Corporation
Legal Staff
MC 482-208-815
New Center One Bldg.
3031 W. Grand Blvd.
Detroit, MI 48202

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Theresa L. Cerwin
Title: Agent, Service of Process
Address: General Motors Corporation
Tel. Number: Legal Staff MC 482-208-815
New Center One Bldg.
3031 W. Grand Blvd.
Detroit, MI 48202
Tel: 313/974-1822

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR _____

Company Name GULTON INDUSTRIES INC.

John J. Byrne, Vice President

501 John James Audubon Parkway P.O. Box 810

Date: June 30, 1999 Amherst, New York 14228-0810

[Name -- Please Type]

[Title -- Please Type]

[Address -- Please Type]

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Deborah J. Chadsey, Esq.

Title: Lippes, Silverstein, Mathias & Wexler LLP

Address: Attorneys

Tel. Number: 700 Guaranty Building 28 Church St. Buffalo, NY 14202-3950

716-853-5100

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Henkel Corporation
Company Name

Date: June 28, 1999

Name: Juliette B. Richter
Title: Associate General Counsel and Risk Manager
Address: The Triad - Suite 200
2200 Renaissance Boulevard
Gulph Mills, PA 19406

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Juliette B.Richter
Title: Associate General Counsel & Risk Manager
Address: Henkel Corporation, The Triad-Suite 200, 2200 Renaissance Blvd. Gulph Mills, PA 19406
Tel. Number: (610) 270-8100

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

Hercules Incorporated

FOR BY _____

Company Name

Marshall W. Jones, Acting Vice President
Safety, Health, Environment and Regulatory Affairs

Date: June 17, 1999

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Hercules, Incorporated
Hercules Plaza
1313 North Market St., Wilmington, DE 19894-0001

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Richmond L. Williams
Title: Counsel
Address: Hercules Inc., Hercules Plaza, 1313 N. Market St., Wilm. DE 19894-0001
Tel. Number: (302) 594-7020

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Hoffmann-La Roche Inc.
Company Name

Date: July 9, 1999

Frederick C. Kentz III
[Name -- Please Type]
[Title -- Please Type] Vice President
[Address -- Please Type]

Hoffmann-La Roche Inc.
340 Kingsland Street
Nutley, New Jersey 07110

Approv'd As To Form
LAW DEPT.

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: John D. Alexander
Title: Assistant General Counsel
Address: Hoffmann-La Roche Inc., 340 Kingsland St., Nutley, NJ 07110
Tel. Number: 973-235-3447

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR HNA Holdings, Inc (f/k/a Hoechst Celanese Corp.)
Company Name

Date: June 23, 1999

Ed Collins

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Edmund A. Collins
Title: Vice President, General Counsel, + Secretary
Address: 86 Morris Avenue, Summit, NJ 07901
Tel. Number: 908 522 7243

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Indopco, Inc. d/b/a National Starch and Chemical Company
Company Name

Date: June 16, 1999

A.M. Samson, Jr.
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]
Associate General Counsel, Regulatory Affairs
10 Finderne Avenue, Bridgewater, NJ 08807

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: A.M. Samson, Jr.
Title: Assoc. General Counsel, Regulatory Affairs
Address: 10 Finderne Avenue, Bridgewater, NJ 08807
Tel. Number: 908-685-5198

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR IBM
Company Name

Date: 8/4/99

James K. Guerin

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: James K. Guerin
Title: Senior Counsel
Address: Route 100, PO Box 100, Somers, NY 10589
Tel. Number: 914-766-2470

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

International Flavors & Fragrances Inc.

FOR _____
Company Name

Stephen A. Block
Senior Vice President

Date: June 22, 1999

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

International Flavors & Fragrances Inc
521 WEST 57th STREET, NEW YORK, N.Y. 10019

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Linda Mack, Esq.
Title: Attorney
Address: Fox Rothschild O'Brien & Frankel LLP, 997 Lenox Drive, Bldg. 3
Tel. Number: 609-896-3600 or 609-895-3325 Lawrenceville, NJ 08648-2311

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Johnson & Johnson
Company Name

Date: June 29, 1999

[Name -- Please Type] Michael Ullmann
[Title -- Please Type] Secretary
[Address -- Please Type] One J&J Plaza
New Brunswick, NJ
08933

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: John N. Beidler
Title: Asst. General Counsel
Address: One J&J Plaza, New Brunswick, NJ 08933
Tel. Number: 732-524-2475

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Kimberly-Clark Corporation as successor to
Company Name Scott Paper Company

Date: 7-9-99 Kenneth A. Strassner

[Name -- Please Type] Kenneth A. Strassner
[Title -- Please Type] Vice President, Environme
[Address -- Please Type] & Energy
Kimberly-Clark Corporatio
1400 Holcomb Bridge Road
Roswell, Georgia 30076

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Marcia K. Cowan
Title: Counsel
Address: 1400 Holcomb Bridge Road, Roswell, GA 30076
Tel. Number: 770 587-7254

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Lucent Technologies
Company Name

Date: 7/1/97

[Name -- Please Type] Ronald DiCola
[Title -- Please Type] EH&S Director
[Address -- Please Type] 475 South Street
Room 2S082
Morristown, NJ 07962

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Gary D. Mitchell
Title: Corporate Counsel
Address: 475 South Street, Morristown, NJ 07962
Tel. Number: (973) 606-4098

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Mattel, Inc.
Company Name

Date: June 22, 1999

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Jill Burtis, Assistant Secretary
333 Continental Blvd.
El Segundo, CA 90245

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Robert Normile
Title: Senior Vice President
Address: 333 Continental Blvd./ El Segundo, CA 90245
Tel. Number: (310) 252-3615

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Mayco Oil & Chemical
Company Name

Date: July 7, 1999

By: Joseph F. Lagotteria
Attorney for Mayco Oil & Chemical
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Joseph F. Lagotteria, Esq.
~~Title~~: St. John & Wayne
Address: 2 Penn Plaza East
~~Tel. Number~~: Newark, NJ 07105
973-491-3576

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Merck & Co., Inc.
Company Name Merck & Co., Inc.

Date: June 30, 1999

Wendy Leggett, Esq.
[Name -- Please Type]
[Title -- Please Type] Senior Attorney
[Address -- Please Type] One Merck Drive
P.O. Box 100, Whitehouse Station, New Jersey 08889

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Wendy Leggett, Esq.
Title: Senior Attorney
Address: One Merck Drive, Whitehouse Station, NJ
Tel. Number: 908-423-7810

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Mobil Oil
Company Name

Date: 6/30/99

Cathy A. Zelaskowski
Acting Superfund Manager
3225 Gallows Road
Fairfax, VA 22037

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Kurt W. Fischer
Title: Superfund Response Consultant
Address: 3225 Gallows Road
Fairfax, VA 22037
Tel. Number: (703) 849-3620

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Monsanto Company/Solutia Inc.
Company Name
By: Solutia Inc., Attorney-in-Fact

Date: June 28, 1999 By: Max W. McCombs

[Name -- Please Type] Max W. McCombs
[Title -- Please Type] Director, Environmental, Safety & Health
[Address -- Please Type] 10300 Olive Blvd.
P.O. Box 66760
St. Louis, MO 63166-6760

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Corporate Trust Company
Title: Registered Agent
Address: 28 W. State St., Trenton, NJ 08608
Tel. Number: 609-538-1818

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Morton International, Inc.
Company Name

Albert E. Greene
Vice President
Engineering and Regulatory Affairs

Date: June 22, 1999

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]
100 North Riverside Plaza
Chiocgo, IL 60606

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Jeffrey C. Wyant
Title: Environmental Counsel - Morton International, Inc.
Address: 100 North Riverside Plaza, Chicago, IL 60606
Tel. Number: 312-807-2291

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR OLIN CORPORATION
Company Name

Date: 6/23/99

Curt M. Richards

Curt M. Richards, Corporate Director,
[Name -- Please Type] Environmental Health
[Title -- Please Type] & Safety
[Address -- Please Type]
PO Box 248
1186 Lower River Road, NW
Charleston, TN 37310

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: CT Corporation System c/o Edward R. Parker
Title: Registered Agent
Address: 5511 Staples Mill Road, Richmond, VA 23228
Tel. Number: 804-262-4042

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Pfizer, Inc.
Company Name

Date: 6/22/99

Paul S. Miller
Senior V.P., Corp.Counsel
235 East 42 Street
New York, NY 10017

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Peter Paden
Title: Attorney
Address: Robinson, Silverman, Pearce, Aronsohn & Berman LLP
1290 Ave. of the Americas
New York, NY 10104
Tel. Number: 212-541-2000

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR PPG Industries, Inc.
Company Name

Date: June 28, 1999

E. K. Pollock, Executive Vice President, Office of the Chief Executive
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]
One PPG Place
Pittsburgh, PA 15272

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: P. M. King
Title: Director, Environment, Health and Safety Stewardship
Address: One PPG Place, Pittsburgh, PA 15272
Tel. Number: (412) 434-3703

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal, Inc., relating to the Chemsol, Inc. Superfund Site.

Pratt & Whitney, Division of United Technologies Corporation

BY: _____

Claudia R. Coplein, Vice President EH&S
400 Main Street, MS101-12
E. Hartford, CT 06108
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Date: 7/8/99

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: [Please Type]
Title: Mark J. Zimmermann, Attorney
Address: Updike, Kelly & Spellacy, P.C., One State Street, Hartford, CT 06123-1
Tel. Number: (860) 548-2624

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR SEQUA CORPORATION (f/k/a SUN CHEMICAL CORPORATION
Company Name

Date: JULY 1, 1999

[Name -- Please Type] L P. PASCULLI
[Title -- Please Type] DIRECTOR, ENV. LAW
[Address -- Please Type]
3 UNIVERSITY PLAZA
HACKENSACK, NJ 07601

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Elletta L Duffy, Esq
Title: Outside Counsel
Address: 475 Wall St, Princeton, NJ 08540-1509
Tel. Number: (609) 430-9400

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR _____
Company Name
Tang Realty, Inc.

Date: 6-30-99

_____
Marvin H. Mahan, President
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Tang Realty, Inc.
Scotch Plains, NJ

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Michael K. Mullen, Esq.
Title: Schenck, Price, Smith & King, LLP
Address: 10 Washington Street
Tel. Number: Morristown, NJ 07963-0905
(973) 539-1000

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR TEXACO INC.
Company Name

Date: June 24, 1999

Roger K Hadley

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Roger K. Hadley
Manager, Environmental Project Management Services
1111 Bagby, Houston, TX 77002

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: R. Scott McCay
Title: Senior Attorney
Address: P. O. Box 4596, Houston, TX 77210-4596
Tel. Number: 713-752-6011

1

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Reichhold Inc. (f/k/a Reichhold Chemicals, Inc.
Company Name

Date: June 29, 1999

Daniel E. Uyesato

Daniel E. Uyesato, Esq.
Assistant General Counsel
P.O. Box 13582
Research Triangle Pk, NC 27709

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: David P. Flynn, Esq.
Title:
Address: Phillips, Lytle, et al., 3400 HSBC Center, Buffalo NY 14203
Tel. Number: 716-847-5473

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR Rohm and Haas Company
Company Name

Date: June 24,1999

Audrey C. Friedel, Of Counsel
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]
100 Independence Mall West
Philadelphia PA 19106

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Audrey C. Friedel
Title: Of Counsel
Address: 100 Independence Mall West, Philadelphia PA 19106
Tel. Number: 215-592-6995

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

LEGAL REVIEW
JS

FOR Schering Corporation
Company Name

Date: 7/8/99

[Name -- Please Type] John E. Nine
[Title -- Please Type] Vice President
[Address -- Please Type] 2000 Galloping Hill Ro
Kenilworth, NJ 07033

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: David Paulin
Title: Senior Counsel
Address: 2000 Galloping Hill Rd., Kenilworth, NJ 07033
Tel. Number: (908) 298-5797

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR SHELL OIL COMPANY
Company Name

Date: 6-21-99

Kent W Rogers

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: KENT W. ROGERS
Title: MANAGER REMEDIATION
Address: 910 LOUISIANA ST. RM. 1430, HOUSTON, TX 77252-2463
Tel. Number: 713-241-6429

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR UNION CARBIDE CORPORATION
Company Name

Date: June 25, 1999

R. J. Cottle
Vice President, Health,
Safety and Environment
39 Old Ridgebury Road
Danbury, CT 06817-0001

[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]

RF

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Roger Florio
Title: Environmental Counsel
Address: Union Carbide Corporation, 39 Old Ridgebury Road, Danbury, CT 06817-0001
Tel. Number: 203-794-6014

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR USX Corporation
Company Name

Date: June 25, 1999

[Name -- Please Type] William J. McKim
[Title -- Please Type] Assistant General Counsel
[Address -- Please Type] 600 Grant St., Rm. 150
Pittsburgh PA 15219-27

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: Miles Stipanovich, Jr.
Title: General Attorney - Real Estate
Address: 600 Grant Street, Rm. 1500, Pittsburgh PA 15219-2749
Tel. Number: (412) 433-2813

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. _____, relating to the Chemsol, Inc. Superfund Site.

FOR W. R. GRACE & CO. and HATCO CORPORATION
Company Name

Date: July 1, 1999

[Name - David M. Cleary
[Title Sr. Environmental Counsel
[Address 6401 Poplar Avenue - Suite 301
Memphis, TN 38119

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: David M. Cleary
Title: Sr. Environmental Counsel
Address: 6401 Poplar Avenue - Suite 301
Memphis, TN 38119
Tel. Number: 901 820-2039

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. AlliedSignal Inc., et al., relating to the Chemsol, Inc. Superfund Site.

FOR WYETH-AYERST PHARMACEUTICALS INC.
Company Name

Date: 6-25-99

JOHN M. ALIVERNINI, ESQ., Assistant Secretary
[Name -- Please Type]
[Title -- Please Type]
[Address -- Please Type]
170-1 Radnor-Chester Road
St. Davids, PA 19087

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name: John M. Alivernini, Esq.
Title: Senior Corporate Counsel
Address: Wyeth-Ayerst Pharmaceuticals Inc., 170-1 Radnor-Chester Road, St. Davids, PA 19087
Tel. Number: (610) 902-2612

A

Prepared by:

_____

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

COVENANTS, RESTRICTIONS AND NEGATIVE EASEMENTS

The following Covenants, Restrictions and Negative Easements are conveyed and given by TANG REALTY, INC., a New Jersey corporation, the grantor under this Indenture ("**Grantor**"), to those parties listed on **Schedule I** attached hereto and made a part hereof (individually a "**Grantee**" and collectively, the "**Grantees**"), as of the ___ day of _____, 1999.

WHEREAS, Grantor is the owner in fee simple of a certain parcel of real property designated as Lots 1A and 1B, Block 229A on the tax map of the Township of Piscataway, Middlesex County, New Jersey, as more particularly described on **Exhibit "A"** attached hereto and made a part hereof, together with all buildings and improvements that are or may hereafter be constructed thereon and rights appurtenant and adjacent thereto (the "**Premises**");

WHEREAS, the Chemsol, Inc. Superfund Site (the "**Site**") is located on the Premises and the United States Environmental Protection Agency ("**EPA**") has issued a Record of Decision selecting the remedy for the Site on September 18, 1998 (the "**ROD**");

WHEREAS, Grantor and Grantees have entered into a consent decree dated as of _____, 1999 (the "**Consent Decree**") with the United States and the State of New Jersey (the "**State**") requiring Grantees to perform certain studies, investigations, remedial actions and monitoring activities on the Premises as more particularly described in the ROD and the Consent Decree (the "**Work**");

WHEREAS, a material inducement for Grantees, EPA and the State to agree to allow Grantor to enter into the Consent Decree was the agreement of Grantor to impose the covenants, restrictions and negative easements set forth in the following paragraphs and to execute, acknowledge and record this instrument in the land records of Middlesex County, New Jersey, so as to evidence Grantor's conveyance and Grantees' acceptance of the covenants, restrictions and negative easements and Grantor's agreement that Grantor, Grantor's successors and/or assigns and the Premises shall hereinafter be bound; and

NOW, THEREFORE, in consideration of the mutual agreement of the parties, the entry into the Consent Decree by EPA, the State and the Grantees and for other good and valuable consideration, the receipt and adequacy of which are hereby conclusively acknowledged, the parties hereby agree, Grantor hereby conveys and Grantees hereby accept the following covenants, restrictions and negative easements:

1. Grantor, for itself, its successors and/or assigns and all future grantees or holders of any interest in the Premises agrees that the Premises shall be permitted to be used only for the limited use as parkland or for industrial or retail purposes and no portion of the Premises shall be used for residential or commercial purposes or any other purpose and no use shall be made of the groundwater (perched or otherwise) under the Premises for purposes of drinking water, manufacturing, irrigation or any other purpose and no excavation shall be permitted at the Premises except and to the extent deemed necessary or useful by Grantees to perform the Work ("**Prohibited Purposes**"), and these restrictions shall be covenants running with the Premises. By recording of this instrument Grantor also hereby grants to Grantees and to their successors and assigns, a perpetual easement permitting Grantees, their successors and assigns and all future grantees or holders of any interest in the Premises the ability to enforce the restrictions set forth herein including the prohibition of using the Premises, in whole or in part, for any of the Prohibited Purposes. This easement shall include the right to immediately take such action including, but not limited to, action at law or in equity, as may be appropriate or useful in enforcing the easements rights conferred upon and granted to Grantees and their successors and assigns by this instrument, including the right to obtain injunctive relief allowing any Grantee or its successors or assigns to enter upon the Premises, with workers and equipment, to (i) raze any structure or appurtenance that is wholly or partially devoted to such Prohibited Purposes, or (ii) take such action as may be necessary or appropriate to prevent the groundwater (perched or otherwise) from being used for drinking water, manufacturing, irrigation or to prevent unauthorized excavation at the Premises or any other Prohibited Purpose.

2. This instrument including the covenants, restrictions and negative easements, created, granted and/or conveyed herein, shall be binding upon Grantor, its successors and assigns and any holder of any interest in or claim to the Premises and shall inure to the benefit of Grantees and Grantees' successors and assigns. Grantor and Grantee have included the covenants, restrictions and negative easements in this instrument knowing and intending that it shall be recorded in the land records of Middlesex County, New Jersey, as being a part of the land records. The Negative Easements contained in this instrument shall burden the Premises in perpetuity and the rights of Grantees under said easements shall be freely transferable by Grantees in whole or in part. The covenants and restrictions and other provisions contained in this instrument shall also be deemed to be covenants running with the Premises and shall be deemed to be newly made upon each subsequent conveyance or encumbrance of the Premises with a term equal to the longest term then available under applicable law.

3. Grantor, for itself, its successors and assigns and all future grantees or holders of any interest in the Premises has hereby caused this instrument creating, granting and/or imposing the covenants, restrictions and negative easements to be executed and acknowledged by a person duly authorized to bind Grantor, its successors and assigns and all future grantees and holders of any interest in the Premises, in order to acknowledge and evidence the creation, grant and/or imposition of the covenants, restrictions and negative easements in this instrument encumbering the Premises.

4. Grantor acknowledges and agrees that the Work to be performed at the Premises may include remediation which shall be to the Non-Residential Soil Cleanup Criteria or Restricted Use Criteria for soils, as proposed by the New Jersey Department of Environmental Protection (the "**NJDEP**") or to such lesser or less restrictive standards as may then be used or permitted by EPA or NJDEP in the remediation of the soil and/or groundwater contamination at the Premises, including but not limited to, the use of engineering and/or institutional controls whenever possible (the "**Remediation Standards**"). Grantor agrees to execute or, by this instrument, to require any current record owner of all or any portion of the Premises, to execute such document(s) as may be requested by Grantee, EPA and/or NJDEP in connection with the Remediation Standards in connection with any soil and/or groundwater contamination which may remain at the Premises in connection with the Work, which document(s) may include but not be limited to the imposition of a deed notice in the form attached hereto as **Exhibit "B"** or in such other form as Grantee, EPA and/or NJDEP may request.

The foregoing covenants and restrictions are hereby granted by Grantor to Grantees and to Grantees' successors and assigns and the foregoing shall be deemed to be covenants that shall run with the title to the Premises and shall be deemed to be remade and re-granted each time title to the Premises is transferred or encumbered, with a term, in all cases equal to the longest period then available under applicable law. The foregoing Negative Easements shall be deemed to be perpetual easements that shall be freely transferable by Grantees.

ATTEST:

By: Michael K. Mullen
Name: MICHAEL K. MULLEN
Title: ATTORNEY-AT-LAW

TANG REALTY, INC.

By: Marvin H. Mahan
Name: Marvin H. Mahan
Title: President

STATE OF New Jersey)
) ss.
COUNTY OF Union)

I CERTIFY as follows:

1. On April 16, 1999, Marvin H. Mahan personally appeared before me;

2. I was satisfied that this person is the person who executed this instrument as the President of Tang Realty, Inc., the corporation named in the attached instrument; and

3. This person stated that he was authorized to execute the instrument on behalf of Tang Realty, Inc. and that he executed the instrument as the act of such corporation.

(Notary) ATTORNEY-AT-LAW
STATE OF NEW JERSEY

Grantees hereby accept for themselves and their successors and assigns the foregoing covenants, restrictions and negative easements. Grantees also hereby accept the creation and grant by Grantor of the covenants, restrictions and negative easements which shall be deemed to be initially made and granted by Grantor to Grantee by the recording of this instrument.

ATTEST:

FOR: _____
Company Name

By:_____
Name:
Title:

By:_____
Name:
Title:

STATE OF)
) ss.
COUNTY OF)

I CERTIFY as follows:

1. On _____, 1999, _____ personally appeared before me;

2. I was satisfied that this person is the person who executed this instrument as the _____ (title) of _____, a Grantee named in the attached instrument; and

3. This person stated that he/she was authorized to execute the instrument on behalf of _____ and that he/she executed the instrument as the act of such corporation.

EXHIBIT A

All that certain lot, tract or parcel of land and premises, hereinafter particularly described, situate, lying and being in the Township of Piscataway, in the County of Middlesex and State of New Jersey.

BEGINNING at a point in the northerly right-of-way line of the Port Reading Railroad, said point being the intersection of property about to be conveyed and the easterly side line of the development known as New Market Terrace, Section 3, situated in the Township of Piscataway, Middlesex County, New Jersey, by F.A. Dunham, Incorporated, on file in the Middlesex County Clerk's Office, and from said beginning point running thence (1) along the northerly side line of the Port Reading Railroad right-of-way south seventy-nine degrees fifty-five minutes east (S. 79° 55' E.) one thousand seven hundred three (1,703) feet, more or less, to a point in line of lands of Charles Smith; thence (2) along the westerly property line of Charles Smith northerly one thousand (1,000) feet, more or less, to the southeasterly corner of lands recently granted to Melsen E. Lausten; thence (3) along the southerly side line of Lausten's property parallel to, and one thousand (1,000) feet distant at right angles, from the northerly side line of the Port Reading Railroad right-of-way north seventy-nine degrees fifty-five minutes west (N. 79° 55' W.) one thousand seven hundred seventy (1,770) feet, more or less, to a point in the easterly side line of the development known as New Market Terrace, Section 3, aforesaid; thence (4) on the easterly line of New Market Terrace, south one degree nineteen minutes west (S. 1° 19' W.) one thousand ten (1,010) feet, more or less, to the point and place of BEGINNING.

Being the same premises described in that certain deed between Fannie Steinberg, a widow, devisee under the Last Will and Testament of David Steinberg, to Marvin H. Mahan dated July 29, 1952 and recorded July 29, 1952 in the Middlesex County Clerk's office in Deed Book 1632, page 56 *et seq.*

Being also known and designated as Lots 1A and 1B in Block 229A on the official tax map of the Township of Piscataway, County of Middlesex, State of New Jersey.

EXHIBIT B

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY

Prepared by:

_____
(Signature)

_____
(Print name below signature)

Recorded by:

_____
(Signature, Officer of County Recording Office)

_____
(Print name below signature)

DEED NOTICE

This Deed Notice is made as of the _____ day of _____, 1999, by Tang Realty, Inc., a Corporation of the State of New Jersey, having an address at 1703 East Second Street, Scotch Plains, New Jersey 07076, (together with its successors and assigns, collectively "Owner").

W I T N E S S E T H:

WHEREAS, Owner is the owner in fee simple of certain real property (the "Property") designated as Lots 1A and 1B, Block 229A, on the tax map of the Township of Piscataway, Middlesex County, more particularly described on Exhibit A attached hereto and made a part hereof; and

WHEREAS, the Chemsol, Inc. Superfund Site (the "Site") is located on the Property and the United States Environmental

Protection Agency ("EPA") has issued a Record of Decision for the Site on September 18, 1998; and

WHEREAS, the lead program during the remediation was _____, and the program identification number was _____; and

WHEREAS, the New Jersey Department of Environmental Protection ("Department") approved a remedial action on _____, for Case No. ____ concerning the Property in which the Department has approved the use of institutional controls and/or engineering controls in accordance with N.J.S.A. 58:10B-13; and;

WHEREAS, this Deed Notice itself is not intended to create any interest in real estate in favor of the Department, nor to create a lien or encumbrance against the Property, but merely is intended to provide record or deed notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a condition of using institutional and/or engineering controls; and

WHEREAS, the areas described on Exhibit B attached hereto and made a part hereof (the "Affected Areas") contain contaminants above the applicable remediation standards that would allow for the unrestricted use of the Property; and

WHEREAS, the type, concentration and specific location of the contaminants are described on one or more diagrams, maps, and/or tables on Exhibit B attached hereto and made a part hereof; and

WHEREAS, a narrative description of all institutional controls and/or engineering controls and associated monitoring and maintenance activities is provided in Exhibit C attached hereto and made a part hereof; and

WHEREAS, for good and valuable consideration the receipt of which is hereby acknowledged, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, and to restrict certain activities at the Property, as set forth below; and

WHEREAS, Owner intends to notify all interested parties that such regulatory and statutory restrictions shall be binding upon and enforceable against Owner and Owner's successors and

assigns while any such successors and assigns own the Property and/or operate at the Property.

NOW, THEREFORE, Owner agrees to the conditions and restrictions listed below and hereby notifies all interested parties, owners, lessees and operators that the applicable regulations and statutes require of each such person while owning, leasing or operating the Property as follows:

1. Restricted Uses. Owner, and all operators of all or any portion of the Affected Areas, shall not allow any of the following uses of the following portions of the Affected Area:

Portion of the Affected Area	Restricted Use
The Affected Area as identified in Exhibit B.	The use shall be restricted [non-residential uses only and] pursuant to Paragraphs 2 and 3.

2. Emergencies. In the event of an emergency which presents a significant risk to human health, safety, or the environment, the application of Paragraph 1 above may be unilaterally suspended, by Owner, provided that the Owner:

i. Immediately notifies the Department of the emergency;

ii. Limits both the actual disturbance and the time needed for the disturbance to the minimum reasonably necessary to adequately respond to the emergency;

iii. Implements all measures necessary to limit actual or potential, present or future risk of exposure to the residual contamination to humans or the environment; and

iv. Restores the Affected Areas to the pre-emergency conditions to the extent reasonably possible, and provides a report to the Department of such emergency and restoration efforts within ninety (90) calendar days after the end of the emergency.

3. Alterations, Improvements, and Disturbances.

(a) Except as provided in Paragraph 2 above, no owner or operator shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Affected Areas which disturbs any engineering control or which creates an unacceptable risk of exposure of humans or the environment to contamination in the Affected Areas without first obtaining the express written consent of the Department. Nothing herein shall constitute a waiver of the Owner's or operator's obligation to comply with all applicable laws and regulations.

(b) Notwithstanding subparagraph 3(a) above, the Department's consent is not required for any alteration, improvement, or disturbance provided the Owner or operator;

i. Provides for restoration of any disturbance of an engineering control to pre-disturbance conditions within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance; and

ii. Does not allow any exposure level above those noted under Restricted Uses, provided that all applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance.

4. Access. While this Deed Notice is in effect, Owner agrees to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued effectiveness of the institutional or engineering controls and to conduct additional remediation to ensure the protection of the public health and safety and the environment.

5. Notice to Lessees and Other Holders of Property Interests. Owner shall cause all leases, grants, and other written transfers of interest in the Affected Areas to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph 5 shall be construed as limiting any obligation of Owner to provide any

notice required by any law, regulation, or order of any governmental authority.

6. Enforcement of Violations. The restrictions provided herein may be enforceable by the Department against any person who violates this Deed Notice. A violation of this Deed Notice shall not affect the status of the ownership of or title to the Property. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11u and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11g.

7. Severability. If any court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable, such provision shall be deemed to have been modified automatically to conform to the requirements for the validity and enforceability as determined by such court. In the event that the provision invalidated is of such a nature that it cannot be so modified, the provision shall be deemed deleted from this instrument as though it had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

8. Successors and Assigns. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns while each is an owner or operator of the Property, and the Department.

9. Requirement of Notification. Owner shall notify any person who intends to excavate on the Property of the nature and location of any contamination existing on the Property and of any conditions or measures necessary to prevent exposure to contaminants.

10. Termination and Modification.

(a) This Deed Notice shall terminate only upon filing of an instrument, executed by the Department, in the office of the Clerk of Middlesex County, New Jersey, expressly terminating this Deed Notice.

(b) Any person may request in writing at any time that the Department modify or terminate this Deed Notice or initiate termination proceedings based on, for example, a proposal that the Property does not pose an unacceptable risk to public health and

safety or the environment. Within ninety (90) calendar days after receiving such a request the Department will either:

i. Approve the request and have the Owner:

Record with the office of the county recording officer a notice executed by the Department that the use of the Property is no longer restricted and the Deed Notice is terminated or record a modified Deed Notice delineating the new restrictions; and

Provide written notice to each municipality in which the Property is located, with a copy to the Department, of the removal or change of the restrictions contained herein; or

ii. issue a written notification of intent to deny the request pursuant to (c) below.

(c) The Department will set forth in a notice of intent to deny a request to modify or terminate this Deed Notice the basis for its decision. The party that submitted the request to the Department can respond to the intent to deny by providing new or additional information or data. The Department will review any such new or additional information or data and issue a final decision to grant or deny the request within sixty (60) calendar days after the Department's receipt of the new or additional information or data.

IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

TANG REALTY, INC.

Name: MICHAEL K. MULLEN
Title: ATTORNEY-AT-LAW

By: Marvin H. Mahan
Name: Marvin H. Mahan
Title: President

STATE OF NEW JERSEY, COUNTY OF _____ SS.:

I CERTIFY that on _____, 1999, Marvin H. Mahan personally came before me and this person acknowledged under oath, to my satisfaction, that:

(a) this person signed, sealed and delivered the attached document as President of Tang Realty, Inc., the corporation named in this document;

(b) the proper corporate seal was affixed; and

(c) this document was signed and made by the corporation as its voluntary act and deed by virtue of authority from its Board of Directors.

_____
ATTORNEY-AT-LAW
STATE OF NEW JERSEY

EXHIBIT A

All that certain lot, tract or parcel of land and premises, hereinafter particularly described, situate, lying and being in the Township of Piscataway, in the County of Middlesex and State of New Jersey.

BEGINNING at a point in the northerly right-of-way line of the Port Reading Railroad, said point being the intersection of property about to be conveyed and the easterly side line of the development known as New Market Terrace, Section 3, situated in the Township of Piscataway, Middlesex County, New Jersey, by F.A. Dunham, Incorporated, on file in the Middlesex County Clerk's Office, and from said beginning point running thence (1) along the northerly side line of the Port Reading Railroad right-of-way south seventy-nine degrees fifty-five minutes east (S. 79° 55' E.) one thousand seven hundred three (1,703) feet, more or less, to a point in line of lands of Charles Smith; thence (2) along the westerly property line of Charles Smith northerly one thousand (1,000) feet, more or less, to the southeasterly corner of lands recently granted to Melsen E. Lausten; thence (3) along the southerly side line of Lausten's property parallel to, and one thousand (1,000) feet distant at right angles, from the northerly side line of the Port Reading

Railroad right-of-way north seventy-nine degrees fifty-five minutes west (N. 79° 55' W.) one thousand seven hundred seventy (1,770) feet, more or less, to a point in the easterly side line of the development known as New Market Terrace, Section 3, aforesaid; thence (4) on the easterly line of New Market Terrace, south one degree nineteen minutes west (S. 1° 19' W.) one thousand ten (1,010) feet, more or less, to the point and place of BEGINNING.

Being the same premises described in that certain deed between Fannie Steinberg, a widow, devisee under the Last Will and Testament of David Steinberg, to Marvin H. Mahan dated July 29, 1952 and recorded July 29, 1952 in the Middlesex County Clerk's office in Deed Book 1632, page 56 *et seq*.

Being also known and designated as Lots 1A and 1B in Block 229A on the official tax map of the Township of Piscataway, County of Middlesex, State of New Jersey.

SCHEDULE I

AlliedSignal Inc.
Ashland Inc.
BASF Corporation
Becton, Dickinson and Company
Benjamin Moore & Co.
Borden, Inc.
Ciba Specialty Chemicals
Colgate-Palmolive Company
Con-Lux Coatings, Inc.
Curtiss-Wright Corporation
Cytec Industries
The Dow Chemical Company
E. I. du Pont de Nemours and Company
Elf Atochem North America, Inc.
Exxon Chemical Americas
Fisher-Price, Inc.
Ford Motor Company
General Electric Company
General Motors Company
Gulton Industries
Henkel Corporation
Hercules Incorporated
HNA Holdings, Inc.
Hoffmann-LaRoche Inc.
International Business Machines Corporation
Indopco, Inc. d/b/a National Starch and Chemical Company
International Flavors & Fragrances Inc.
Johnson & Johnson
Lucent Technologies Inc.
Mattel, Inc.
Mayco Oil & Chemical
Merck & Co., Inc.
Mobil Business Resources Corp.
Morton International, Inc.
Novartis Corporation
Olin Corporation
Pfizer Inc.
PPG Industries, Inc.
Reichhold, Inc.
Rohm and Haas Company
Schering Corporation
Sequa Corporation
Shell Oil Company
Solutia, Inc.
Texaco Inc.
Union Carbide Corporation
USX Corporation
Wyeth-Ayerst Pharmaceuticals Inc.

B

ANDRENS OFFICE PRODUCTS CAPITOL HEIGHTS, MD (R)

CHEMSOL SUPERFUND SITE
QUALIFIED SETTLEMENT FUND TRUST AGREEMENT

CHEMSOL SUPERFUND SITE
QUALIFIED SETTLEMENT FUND TRUST AGREEMENT

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CHEMSOL SUPERFUND SITE
QUALIFIED SETTLEMENT FUND TRUST AGREEMENT

This Trust Agreement ("Agreement") is made as of June 1, 1999, by and between the Grantors identified in Appendix A hereto whose authorized representatives have executed this Agreement (the "Initial Grantors") and the Trustee(s) identified in Appendix B hereto whose authorized representative has executed this Agreement (the "Trustee" or "Trustees"). Additional parties may become Grantors of the Chemsol Superfund Site Qualified Settlement Fund Trust established by this Agreement by having an authorized representative execute the Signature Page of this Agreement (the "Subsequent Grantors"); and

WHEREAS, the Initial Grantors are defendants named in two actions pending or to be filed in the United States District Court for the District of New Jersey (the "Court"), captioned "United States v. AlliedSignal Inc., et al." and "State of New Jersey v. AlliedSignal Inc., et al." (collectively, the "Actions") in which (a) the United States and the State of New Jersey (the "State") seek the recovery from the defendants of certain costs and the performance of certain actions at or in connection with the Chemsol, Inc. Superfund Site in Piscataway Township, Middlesex County, New Jersey (the "Site") under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §9601 et seq. ("CERCLA"), among other authorities, and (b) the State seeks the recovery from the defendants of natural resource damages; and

WHEREAS, the Initial Grantors have denied liability to the United States and the State for the claims asserted against them in the Actions or with respect to the Site; and

WHEREAS, the Actions are to be consolidated for the entry of a Consent Decree which, among other things, will resolve the claims asserted by the United States and the State in the Actions and provide the Settling Defendants named in the Consent Decree, including the Initial Grantors, with certain contribution protection; and

WHEREAS, under the Consent Decree, the Initial Grantors whose names are listed on Appendix C to this Trust Agreement are to be designated as Settling Work Defendants and will fulfill their obligations under the Consent Decree pursuant to a Revised Site Participation and Cost Sharing Agreement, dated as of June 1, 1999 (the "Site Participation Agreement"), and the Initial Grantors whose names are listed on Appendix D to this Trust Agreement are to be designated as De Minimis Settling Defendants and will fulfill their obligations under the Consent Decree by settling with the Settling Work Defendants pursuant to a De Minimis Settlement Agreement, dated as of June 1, 1999 (the "De Minimis Settlement Agreement"); and

WHEREAS, the Initial Grantors may assert claims for contribution against parties who are not signatories to the Consent Decree, some or all of whom may resolve those claims in the future and become Subsequent Grantors; and

WHEREAS, the Grantors wish to establish this trust for the primary purpose of facilitating the payments required under the Consent Decree, and the Grantors intend this trust to qualify as a Qualified Settlement Fund ("QSF") under Section 468B of the Internal Revenue Code of 1986 ("Code") and the Code Regulations thereunder, as all of such Code and Code Regulation sections are now constituted and as may hereafter be amended from time to time; and

WHEREAS, the Grantors anticipate that this trust will qualify as a QSF either (a) at such time as all the requirements of Code Regulation Section 1.468B-1(c) are met, or (b) under Code Regulation Section 1.468B-1(j)(2). The Grantors anticipate that all the requirements of Code Regulation 1.468B-1(c) will be satisfied because (1) the Grantors anticipate that the QSF will be approved by and be subject to the continuing jurisdiction of the Court, (2) the QSF has been established to resolve CERCLA claims that have resulted from events that have occurred related to the Site, and following the transfers to the QSF by the De Minimis Settling Defendants, their only remaining liability to the Environmental Protection Agency, if any, will be a remote, future obligation to provide services or property, and (3) this trust is a trust under State law.

NOW, THEREFORE, the Trustee hereby agrees it will hold, manage, invest and reinvest the funds contributed to this QSF, and any income earned thereon, consistent with this Agreement, the Consent Decree, the Site Participation Agreement and the De Minimis Settlement Agreement, together with any other property hereafter conveyed, assigned, transferred or paid to it, as Trustee, in Trust, subject to the terms, provisions and conditions hereinafter set forth.

1. **Definitions**:

As used in this Agreement:

1.1. "Actions" shall mean the civil actions pending or to be filed in the Court, captioned "United States v. AlliedSignal Inc., et al." and "State of New Jersey v. AlliedSignal Inc., et al.," relating to the Site.

1.2. "Agreement" shall mean this Chemsol Superfund Site Qualified Settlement Fund Trust Agreement, dated as of June 1, 1999.

1.3. "Consent Decree" shall mean the decree entered or to be entered by the Court in the Actions.

1.4 "Contractor" shall mean a qualified person or entity selected by the Settling Work Defendants, or by the Executive Committee, if one is appointed pursuant to the Site Participation Agreement, and engaged by the Trustee pursuant to the Site Participation Agreement for the purpose of performing some or all of the Work.

1.5. "Court" shall mean the United States District Court for the District of New Jersey.

1.6. "De Minimis Settlement Agreement" shall mean the agreement between the Settling Work Defendants and the De Minimis Settling Defendants, dated as of June 1, 1999.

1.7. "Executive Committee" shall mean the committee designated as such pursuant to the Site Participation Agreement.

1.8. "Grantors" shall mean the Initial Grantors and any Subsequent Grantors.

1.9. "Initial Grantors" shall mean the Grantors whose names are listed on Appendix A to this Agreement.

1.10 "Site Participation Agreement" shall mean the Revised Site Participation and Cost Sharing Agreement, entered into among the Settling Work Defendants, dated as of June 1, 1999.

1.11. "Subsequent Grantors" shall mean any Grantors other than the Initial Grantors.

1.12. "Trustee" shall mean the person or persons or entity or entities whose name or names are listed on Appendix B to this Agreement, including any successors under this Agreement.

1.13. The following terms shall have the meanings provided for them in the Consent Decree:

a. "CERCLA"

b. "Code"

c. "Code Regulations"

d. "De Minimis Settling Defendants"

e. "DEP" or "Department"

f. "EPA"

g. "ERT"

h. "QSF"

i. "ROD"

j. "Settling Defendants"

k. "Settling Work Defendants"

l. "Site"

m. "SOW"

n. "State"

o. "Work"

2. **Name and Purpose of the Trust.**

This Trust shall be known as the Chemsol Superfund Site Qualified Settlement Fund Trust or the QSF. The purpose of the QSF is to obtain, hold, invest and disburse funds, and income earned thereon, necessary to satisfy the obligations of the Grantors primarily for payments to be made for reimbursement of response costs, and secondarily, the fund the Work as provided in the Consent Decree. In fulfilling this purpose, in no event shall any payments be made hereunder to the ERT, of which some of the Grantors of this Agreement may also be grantors, and in no event shall payments intended by the Grantors to be paid to such ERT be deposited herein. To fulfill this purpose, the Trustee shall thoroughly familiarize itself with the terms of the Consent Decree and the Site Participation Agreement, and will take all actions within its powers necessary to ensure that the Consent Decree and the Site Participation Agreement are fully effectuated, including, without limitation, with respect to the performance of the Work.

3. **Contributions to the QSF.**

3.1. **Initial Payments by Grantors**. The Grantors have agreed to contribute to the QSF. The De Minimis Settling Defendants will contribute any amounts shown to be due from them as set forth in the De Minimis Settlement Agreement. Upon making such contributions.

the liabilities of the De Minimis Settling Defendants to the QSF shall be extinguished. The Settling Work Defendants will contribute the amounts set forth in the Site Participation Agreement and shall make additional contributions to the QSF in accordance with this Agreement.

3.2. **Additional Contributions.** Notwithstanding any other provision of this Agreement, if the Trustee, or if an Executive Committee is established, the Executive Committee, determines that an additional contribution is required by the Settling Work Defendants to ensure the completion of the payments required to be made or the uninterrupted progress and timely completion of the Work required by the Consent Decree, the Trustee or, if an Executive Committee is established, the Executive Committee shall certify the amount of such additional contribution to the Trustee, and then the Trustee shall promptly demand in writing that the Settling Work Defendants pay such amount. If an Executive Committee is established, a written demand upon the Executive Committee shall constitute a demand upon the Settling Work Defendants. The Settling Work Defendants shall make the necessary payments within thirty (30) days after receipt of such notice, or upon such shorter time as certified by the Executive Committee.

The Settling Work Defendants remain obligated to ensure that the QSF is sufficient to complete the payments required by the Consent Decree, and to maintain sufficient assets to satisfy the purpose of this QSF as set forth in Sections 2 and 3 herein. The Settling Work Defendants hereby agree to satisfy in a timely manner all future demands upon them made in accordance with this Section 3.2.

3.3. **Shortfall.** In the event that any Settling Work Defendant fails to make any additional contribution in a timely fashion in accordance with the Site Participation Agreement, the Trustee shall promptly demand that the remaining Settling Work Defendants pay such shortfall. If an Executive Committee is established pursuant to the Site Participation Agreement, demand upon the Executive Committee shall constitute demand upon the Settling Work Defendants. The remaining Settling Work Defendants shall pay the amount of the shortfall to the ERT within thirty (30) days after receipt of the demand, or such shorter period as may be specified in the demand.

3.4. **Nature of Contributions by Grantors.** All contributions to the Trustee for the QSF shall be made in immediately available funds. All such contributions, together with the earnings thereon, shall be held as a trust fund for the payment of the costs and expenses to be incurred by the Trustee as herein provided. Contributions made to the QSF shall not be construed as fines, penalties or monetary sanctions.

3.5. **No Transferability of Interest.** The interest of the Grantors herein, and their obligation to provide funds under this section, is not transferable, except to a successor corporation or corporations, and any such transferee corporation shall assume the obligations of the transferring Grantor by executing such documents as the Trustee may require.

4. **Dispositive Provisions.**

4.1. **Payment of Income and Principal.** During the term of this QSF, the Trustee shall pay or apply such part (or all) of the income and principal of the QSF as it deems advisable in order to defray the approved costs incurred at the direction of the Settling Work Defendants, or any Executive Committee, or their or its designees, in making the

payments required to be made and in performing the Work in accordance with the terms of this Agreement and the Consent Decree. In this regard, the Trustee shall make all payments and pay all bills and invoices approved for payment in writing by the Settling Work Defendants, or by any Executive Committee, or their or its designees. Bills and invoices to be paid by the Trustee after approval by the Settling Work Defendants, or by any Executive Committee, may include, but are not limited to, bills from Contractors and bills for oversight or administration costs incurred with respect to the Site by or on behalf of the Settling Work Defendants or for which the Settling Work Defendants become obligated under the Consent Decree.

4.2. **No Authority to Conduct Business**. The purpose of the QSF is limited to the matters set forth in Sections 2 and 3 hereof, and this Agreement shall not be construed to confer upon the Trustee any authority to carry on any business or activity for profit or to divide the gains therefrom among the Grantors.

4.3. **Termination of the QSF**. This Trust shall terminate upon termination of the Consent Decree, or upon distribution of the QSF pursuant to Section 4.4 hereof, or exhaustion of the income and principal hereof.

4.4. **Distribution of QSF Upon Termination**. Upon termination of this Trust, the Trustee shall liquidate the assets of the QSF and thereupon distribute any remaining trust property, including all accrued, accumulated, and undistributed net income, to the Settling Work Defendants in proportion to their respective contributions to the Trust during the term of the Trust. If any Settling Work Defendant shall have defaulted with respect to its obligations hereunder and shall remain in default at the time of termination

hereunder, or if any Settling Work Defendant, or its successor, cannot be located within thirty (30) days after the termination date after diligent effort, the share of such defaulting or missing Settling Work Defendant shall be deemed to be forfeited, and the Trustee shall distribute such forfeited share to the remaining Settling Work Defendants in proportion to their respective contributions to the QSF during the term of this Trust. In no event shall any distribution upon termination be made to the ERT.

4.5. **Alterations, Amendments and Revocation.** This Agreement may be altered, amended, or revoked from time to time by an instrument in writing executed by the Trustee and by a majority of the Voting Power of the Settling Work Defendants as provided in the Site Participation Agreement; provided, however, that no such alteration, amendment or revocation may conflict with or modify in any respect the obligations of the Settling Defendants under the Consent Decree or the obligations of the Settling Work Defendants under the Site Participation Agreement, and provided further (a) that if required by the Consent Decree, any alteration, amendment, or revocation shall be subject to approval by EPA or DEP, as appropriate, pursuant to the terms of the Consent Decree, and (b) that Section 12 hereof shall not be revoked and shall not be altered or amended to limit the effect thereof with respect to acts or omissions taken or made up to thirty (30) days after such alteration or amendment.

5. **Trustee Management.**

The Trustee shall invest and reinvest the principal and income of the QSF and keep the QSF invested in one or more Money Market Accounts, such as a Government Fund and/or Treasury Bills, which shall be treated as a single fund without distinction between

principal and income. For purposes of this paragraph, "Money Market Account" shall mean a no-load money fund whose objectives are current income consistent with liquidity and low-risk, the maintenance of a portfolio of high quality, short-term money market instruments, and maintenance of a constant $1.00 net asset value per share. All investments shall be made so as to provide at all times sufficient liquidity to meet the anticipated cash needs of the QSF. In investing, reinvesting, exchanging, selling and managing the QSF, the Trustee shall discharge its duties with respect to the QSF solely in the interest of the accomplishment of the purposes and objectives of this Agreement. The Trustee, with the prior approval of the Settling Work Defendants pursuant to Sections 6.4 and 14, or if an Executive Committee is established, with the prior approval of the Executive Committee, may engage the services of an investment advisor or manager, may rely on the advice of such advisor or manager, and may delegate investment decision-making authority to such advisor or manager with respect to management of the QSF. The Trustee shall not be personally liable for any action or inaction taken in good faith reliance on the advice of such advisor or manager, nor for delegation in good faith of investment decision-making authority to such advisor or manager. The Trustee shall keep or arrange to be kept an accounting of all contributions to and disbursements from the QSF.

6. **Express Powers of Trustee.**

Without in any way limiting the power and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered as hereinafter set forth:

6.1. **Payment of Expenses of Administration.** To incur and pay any and all charges, taxes and expenses upon or connected with the QSF in the discharge of its fiduciary obligations under this Agreement. All such payments shall be made using the assets of the QSF.

6.2. **Retention of Property**. To hold and retain all or any part of the QSF in the form in which the same may be at the time of the receipt by the Trustee, as long as it shall deem advisable, notwithstanding that the same may not be authorized by the laws of any state or rules of any court for the investment of trust funds, and without any liability for any loss of principal or income by reason of such retention.

6.3. **Preservation of Principal**. Notwithstanding any other provision in this Agreement, to at all times hold, manage, invest, and reinvest the assets of the QSF in a manner designed to preserve the accrued income and principal of the QSF for the purposes of the QSF.

6.4. **Retention of Investment Advisor and Other Consultants.** To engage the services of (and pay compensation to) an investment advisor, accountants, agents, managers, Common Counsel, or other consultants with respect to the management of investments of the QSF, the management of the QSF, or any other matters.

6.5. **Execution of Documents of Transfer**. To make, execute, acknowledge and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted.

6.6. **Extension of Obligations and Negotiations of Claims.** Upon obtaining approval of or direction from the Settling Work Defendants pursuant to Section 14, or if an Executive Committee shall be established, upon obtaining approval of or direction from the

Executive Committee, to renew or extend the time of payments of any obligation payable to or by the QSF for such periods of time and upon such terms as the Trustee may determine, and, upon obtaining approval of or direction from the Settling Work Defendants pursuant to Section 14, or, if an Executive Committee shall be established, upon obtaining approval of or direction from the Executive Committee, to compromise or otherwise adjust all claims in favor of or against the QSF.

6.7. **Litigation.** Upon obtaining approval of the Settling Work Defendants pursuant to Section 14, or if an Executive Committee shall be established, upon obtaining approval of or direction from the Executive Committee, to institute and defend litigation in the name of the QSF on behalf of or in the name of some or all of the Grantors.

6.8. **Execution of Contracts and Agreements.** At the direction of the Settling Work Defendants pursuant to Section 14, or, if an Executive Committee shall be established, at the direction of the Executive Committee, to make, execute, acknowledge and deliver any and all contracts or agreements on behalf of the Trust.

6.9. **Discretion in Exercise of Powers.** To do any other acts which it deems proper to effectuate the purpose hereof and to exercise the powers specifically conferred upon it by this Agreement.

7. <u>Governance of the Trustees</u>.

7.1. **Majority**. Action may be taken, except as otherwise provided herein, by a majority of the Trustees then in office at any meeting of the Trustees at which a quorum is present. At any meeting of the Trustees, a majority of the Trustees then in office shall constitute a quorum for the transaction of business, or if only one such Trustee is then serving, such

Trustee shall constitute a quorum. Less than a quorum may adjourn any meeting from time to time, and the meeting may be held as adjourned without further notice.

7.2. **Meetings.** Any action may be taken by the Trustees without a meeting if all the Trustees then in office consent to the action in writing and such written consents are filed with the records of the Trustees. Meetings of the Trustees may be held by telephone conference call.

7.3. **Voting.** Any action of the Trustees required to approve an amendment of this Agreement or the termination of this Agreement as provided herein shall require the affirmative vote and signatures of a majority of the Trustees then in office, or if only one Trustee is then serving, by such Trustee.

7.4. **Expenditures.** If more than one (1) Trustee is in office, any expenditure from the QSF of any amount greater than $1,000 for any single transaction shall require the signature of two (2) Trustees.

8. **Advice of Counsel.**

The Trustees may from time to time consult with counsel, who may be counsel to any of the Grantors, with respect to any question arising as to compliance with this Agreement or with the Consent Decree, or with the ROD, the SOW or the Site Participation Agreement. The Trustees shall be fully protected, to the extent permitted by law, in acting in reliance upon the advice of counsel.

9. **Trustee Compensation.**

No individual serving as a Trustee shall receive any compensation for such Trustee's services as a Trustee under this Agreement; provided, however, that any Trustee may be reimbursed for expenses, including travel expenses, reasonably required and incurred by such Trustee in the performance of the Trustee's duties as Trustee. Unless otherwise agreed in writing prior to acceptance of appointment, any corporate Trustee acting hereunder shall be compensated in accordance with its published schedule of fees in effect from time to time during the period over which its services are performed.

10. **Successor Trustees.**

10.1. **Vacancy Caused by Resignation or Removal.** Any Trustee may resign at any time by delivering a resignation in writing to the Settling Work Defendants or, if an Executive Committee shall be established, to the Executive Committee. The Settling Work Defendants, or the Executive Committee, if one shall be established, may remove any Trustee by delivering notice of such removal in writing to such Trustee. Any such resignation or removal shall take effect within thirty (30) days of delivery of the notice of resignation or removal, or upon the acceptance of appointment in writing by a successor Trustee, whichever is earlier.

10.2. **Appointment of Successor Trustees.** Any vacancy in the office of Trustee created by death, resignation or removal by the Settling Work Defendants, or by the Executive Committee, if one shall be established, shall be filled by the Settling Work Defendants, or by the Executive Committee, if one shall be established, by an appointment in writing of a successor Trustee. In the event that any such vacancy in the office of Trustee is not filled by the Settling Work Defendants, or by the Executive Committee, if one shall be

established, within fourteen (14) days after the receipt by the Settling Work Defendants, or by the Executive Committee, if one shall be established, of a written request by EPA to do so, such vacancy may be filled by an appointment of a successor Trustee by a court of competent jurisdiction at the request of the EPA Regional Administrator, Region II. In no event shall any successor trustee appointed hereunder be a "related person" as defined in Section 1.468B-1(d)(2) of the Code Regulations.

10.3. **Acceptance of Appointment by Successor Trustees**. Acceptance of appointment as a successor Trustee shall be in writing and shall become effective upon receipt by the Settling Work Defendants, or if an Executive Committee shall be established, by the Executive Committee, of notice of such acceptance. Upon the acceptance of appointment of any successor Trustee, title to the QSF shall thereupon be vested in said successor Trustee, jointly with the remaining Trustees, if any, without the necessity of any conveyance or instrument. Each successor Trustee shall have all the rights, powers, duties, authority, and privileges as if initially named as a Trustee hereunder.

10.4. **Preservation of Record of Changes to Trustees.** A copy of each instrument of resignation, removal, appointment and acceptance of appointment shall be attached to an executed counterpart of this Agreement in the custody of the Settling Work Defendants, or if an Executive Committee shall be established, in the custody of the Executive Committee.

11. **Instructions to the Trustees**.

Notwithstanding anything herein to the contrary, the Trustees are hereby directed to do the following in addition to other duties set forth in other provisions of this Agreement:

11.1. **Quarterly and Annual Reports**. Have prepared quarterly and annual financial reports during the term of the Trust, describing the manner in which all of the assets of the QSF are then invested and the current market value of such assets, as well as the obligations, income, and expenses of the QSF. Copies of such reports shall be transmitted by the Trustee in writing to the Settling Work Defendants, or if an Executive Committee shall be established, to the Executive Committee.

11.2. **Counsel**. Advise, consult and confer with and otherwise inform the Settling Work Defendants, or if an Executive Committee shall be established, the Executive Committee, upon any request by the Settling Work Defendants or the Executive Committee, if one shall be established, with respect to matters arising out of this Agreement, administration of the QSF, or any other matter which the Trustees, in their discretion, deem appropriate to bring to the attention of the Settling Work Defendants or the Executive Committee.

11.3. **Records**. Maintain records of all actions taken by the Trustees with respect to matters arising out of this Agreement or administration of the QSF. Copies of said records shall be provided to the Settling Work Defendants, or if an Executive Committee shall be established, to the Executive Committee, upon request, and upon termination of this QSF, said records shall be transmitted, together with all other records of the Trustees, to the Settling Work Defendants or to the Executive Committee, if one shall be established. The Trustees shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any of the Settling Work Defendants, or of any member of the Executive Committee, if one shall be established, has occurred.

12. **Indemnity.**

12.1. **Indemnity**. Each Trustee, whether initially named or appointed as a successor Trustee, acts as a Trustee only and not personally; and in respect of any contract, obligation or liability made or incurred by the Trustees, or any of them hereunder in good faith, all persons shall look solely to the QSF and not the Trustees personally or any of the Settling Work Defendants. Neither the Trustees nor the Settling Work Defendants shall incur any liability, personal or corporate, of any nature in connection with any act or omission, made in good faith, of the Trustees or the Settling Work Defendants in the administration of the QSF or otherwise pursuant to this Agreement. The Trustees initially named, appointed as successor Trustees by the Settling Work Defendants, or by the Executive Committee, if one shall be established, or appointed by a court, shall be indemnified and held harmless by the QSF, and, to the extent that indemnification cannot be obtained from the QSF, jointly and severally by the Settling Work Defendants. This indemnification and hold harmless provision shall cover all expenses reasonably incurred by such Trustee in defense of the aforementioned acts or omissions of the Trustees or the Settling Work Defendants. Except for the payment of all expenses reasonably incurred, this indemnification shall not apply to any liability arising from a criminal proceeding where the Trustee(s) had reasonable cause to believe that the conduct in question was unlawful.

12.2. **Survival**. This section shall survive the termination of the QSF.

13. **Interests Not Assignable or Subject to Claims of Creditors.**

The interest of any Grantor in the QSF shall not be subject to anticipation or assignment nor subject to the claims of any creditor of any Grantor and any interest reserved to any Grantor shall be made available to such party only upon termination of this QSF as provided herein.

14. **Approval by Grantors.**

Any matter which is subject to the approval of the Settling Work Defendants as indicated in this Agreement shall be obtained by means of a vote held among all of the Settling Work Defendants.

14.1 **Notice of Vote.** Any Settling Work Defendant or Trustee wishing to put a matter to a vote consistent with this Agreement shall give written notice to all Settling Work Defendants and the Trustees. A "written notice" shall consist of a writing sent by facsimile or regular mail to each Settling Work Defendant's Designated Representative for Receipt of Notice, as indicated on the signature page hereto, which contains: (a) the date fixed for return of all votes (which shall be fixed at least fifteen (15) days from the date notice was sent); (b) a concise statement of the matter to be voted upon; (c) a ballot which clearly provides for both affirmative or negative votes; and (d) the facsimile and mailing address to which Settling Work Defendants' votes are to be transmitted.

14.2 **Majority Approval.** A matter brought to a vote pursuant to paragraph 14.1 shall be deemed "approved" if a majority (more than 50%) of the Voting Power of the Settling Work Defendants, votes affirmatively to approve the matter. The Voting Power of the

Settling Work Defendants shall be in proportion to their respective contributions to the QSF as of the time the vote is taken.

15. **Choice of Law**.

This Agreement shall be administered, construed, and enforced according to the laws of the State of New Jersey, except to the extent that federal law shall apply to questions arising under CERCLA, or the National Contingency Plan, 40 C.F.R. Part 300, promulgated thereunder.

16. **Interpretation**.

As used in this Agreement, words in the singular include the plural and words in the plural include the singular, and the masculine and neuter genders shall be deemed to include the masculine, feminine and neuter. The description heading for each Section and Subsection of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement. It is agreed that neither the act of entering into this Agreement nor any contribution to the QSF nor any action taken under this Agreement shall be deemed to constitute an admission of any liability or fault on the part of the Trustees, any of the Grantors, or any of them, with respect to the Site or otherwise, nor does it continue a commitment or agreement, either express or implied, by any or all of them to undertake any further activities outside the scope of this Agreement.

17. **Separate Documents**.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

WITNESS the execution hereof of the Trustee as of the date first above written.

By: _____ TRUSTEE
(Name of Person executing Agreement on behalf of Trustee)

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: AlliedSignal Inc.

Signature: Theodore A Fischer

Name of Signer: Theodore A. Fischer

Title of Signer: Director - Remediation & Evaluation Services

Company Taxpayer Identification Number: 22-2640650

Date: June 25, 1999

Designated Representative for Receipt of Notice:

Name: Heleen Schiller

Address: 101 Columbia Road

Morristown, NJ 07962

Telephone Number: (973) 455-3104

Facsimile Number: (973) 455-5904

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Benjamin Moore & Co.

Signature: John T. Rafferty

Name of Signer: John T. Rafferty, Esq.

Title of Signer: General Counsel & Secretary

Company Taxpayer Identification Number: 13-5256230

Date: June 28, 1999

Designated Representative for Receipt of Notice:

Name: Karl J. Rohrbacher, Esq.

Address: 51 Chestnut Ridge Road

Montvale, NJ 07645

Telephone Number: (201) 573-9600

Facsimile Number: (201) 573-5688

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Borden, Inc.

Signature: Colleen K. Nissl

Name of Signer: Colleen K. Nissl, Esquire

Title of Signer: Vice President & Assistant General Counsel

Company Taxpayer Identification Number: 13-0511250

Date: June 25, 1999

Designated Representative for Receipt of Notice:

Name: Richard A. Levao, Esquire

Address: Shanley & Fisher

131 Madison Avenue

Morristown, New Jersey 07962-1979

Telephone Number: (973) 285-1000

Facsimile Number: (973) 539-6960

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Colgate-Palmolive Company

Signature: James H Serafino

Name of Signer: James Serafino

Title of Signer: Vice President, Deputy General Counsel

Company Taxpayer Identification Number: 13-1815595

Date: July 9, 1999

Designated Representative for Receipt of Notice:

Name: Michael Th. Bourque

Address: Colgate-Palmolive Company

300 Park Avenue

New York, NY 10022

Telephone Number: (212) 310-2201

Facsimile Number: (212) 310-2371

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Curtiss-Wright Corp

Signature: James V. Maher

Name of Signer: JAMES V. MAHER

Title of Signer: Assistant Secretary

Company Taxpayer Identification Number: 13-0612970

Date: 6/28/99

Designated Representative for Receipt of Notice:

Name: James V. Maher

Address: 1200 Wall Stt West, Suite 521

Lyndhurst, N.J. 07071

Telephone Number: (201) 896-8601

Facsimile Number: (201) 438-5680

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Cytec Industries Inc

Signature: R.L. Hilliard

Name of Signer: R.L. Hilliard

Title of Signer: Dir. Env. Services

Company Taxpayer Identification Number: 22-3268660

Date: 6/29/99

Designated Representative for Receipt of Notice:

Name: Thomas A. Waldman Esq

Address: Cytec Industries Inc.
5 Garret Mt Plaza
West Paterson, N.J

Telephone Number: (973) 357 3136

Facsimile Number: (973) 357 3058

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Du Pont Company

Signature: Bernard J Reilly

Name of Signer: Bernard J. Reilly

Title of Signer: Corporate Counsel

Company Taxpayer Identification Number: 51-0014090

Date: June 17, 1999

Designated Representative for Receipt of Notice:

Name: Bernard Reilly

Address: DuPont Legal - Rm D7082
1007 Market St
Wilmington, DE 19898

Telephone Number: (302) 774-5445

Facsimile Number: (____) -4812

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Exxon Chemical Americas

Signature: _____ J.O.

Name of Signer: R. F. Humphreys

Title of Signer: Vice President

Company Taxpayer Identification Number: 13-5409005

Date: June 21, 1999

Designated Representative for Receipt of Notice:

Name: James J. Doyle, Jr.

Address: 13501 Katy Freeway

Houston, TX 77079

Telephone Number: (281) 870-6137

Facsimile Number: (281) 588-4606

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Ford Motor Company

Signature: _____

Name of Signer: Thomas J. DeZure

Title of Signer: Assistant Secretary

Company Taxpayer Identification Number: _____

Date: June 25, 1999

Designated Representative for Receipt of Notice:

Name: Kathy J. Hofer

Address: Suite 1500 PTW
Three Parklane Blvd.
Dearborn, MI 48126

Telephone Number: (313) 594-1687

Facsimile Number: (313) 390-3083

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Subsequent Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: General Electric Co.

Signature: [signature]

Name of Signer: Leonard Shen

Title of Signer: Counsel-Environmental Remediation & Compliance

Company Taxpayer Identification Number: 14-0689340

Date: August 5, 1999

Designated Representative for Receipt of Notice:

Name: Andrew J. Thomas, Jr.

Address: General Electric Co.

3135 Easton Turnpike

Fairfield, CT 06431

Telephone Number: (203) 373-2268

Facsimile Number: (203) 373-2683

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: General Motors Corporation

Signature: Don A. Schiemann

Name of Signer: Don A. Schiemann

Title of Signer: Attorney

Company Taxpayer Identification Number: 38-0572515

Date: June 22, 1999

Designated Representative for Receipt of Notice:

Name: Linda L. Bentley, Legal Assistant

Address: General Motors Corporation
Legal Staff
New Center One Bldg.
MC 482-208-815
3031 W. Grand Blvd.
Detroit, MI 48202

Telephone Number: (313)974-1838

Facsimile Number: (313)974-0911

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Gulton Industries, Inc.

Signature: _____

Name of Signer: John J. Byrne

Title of Signer: Vice President

Company Taxpayer Identification Number: 231733979

Date: June 29, 1999

Designated Representative for Receipt of Notice:

Name: Deborah J. Chadsey, Esq.

Address: Lippes, Silverstein, Mathias & Wexler LLP

700 Guaranty Building 28 Church Street

Buffalo, New York 14202-3950

Telephone Number: (716) 853-5100

Facsimile Number: (716) 853-5199

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Hercules Incorporated

Signature: Jan M. King

Name of Signer: JAN M. KING

Title of Signer: VICE PRESIDENT & TREASURER

Company Taxpayer Identification Number: 51-0023450

Date: 6/23/99

Designated Representative for Receipt of Notice:

Name: Richmond L. Williams, Counsel

Address: Hercules Incorporated
Hercules Plaza

1313 North Market Street

Wilmington, DE 19894-0001

Telephone Number: (302) 594-7020

Facsimile Number: (302) 594-7038

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: HNA HOLDINGS, INC.

Signature: Ed Collins

Name of Signer: Edmund A. Collins

Title of Signer: Vice President, General Counsel, + Secretary

Company Taxpayer Identification Number: 13-5568434

Date: June 23, 1999

Designated Representative for Receipt of Notice:

Name: Edmund A. Collins

Address: 86 Morris Avenue

Summit, NJ 07901

Telephone Number: (908) 522-7243

Facsimile Number: (908) 522-7241

Chemsol Superfund Site Environmental Remediation Trust Agreement

Signature Page

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Hoffmann-La Roche Inc.

Signature: _____

Appr'd As To LAW DEPT. By _____

Name of Signer: Frederick C. Kentz III

Title of Signer: Vice President

Company Taxpayer Identification Number: 22-0994270

Date: July 9, 1999

Designated Representative for Receipt of Notice:

Name: John D. Alexander

Address: Hoffmann-La Roche Inc.
340 Kingsland Street
Nutley, New Jersey 07110

Telephone Number: (973) 235-3447

Facsimile Number: (973) 235-3500

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Lucent Technologies

Signature: Ronald DiCola

Name of Signer: Ronald DiCola

Title of Signer: EH&S Director

Company Taxpayer Identification Number: 22-3408857

Date: 7/1/99

Designated Representative for Receipt of Notice:

Name: Gary D. Mitchell

Address: 475 South Street, 2S061

Morristown, NJ 07962

Telephone Number: (973) 606-4098

Facsimile Number: (973) 606-3345

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Merck & Co., Inc.

Signature: Wendy Leggett

Name of Signer: Wendy Leggett, Esq.

Title of Signer: Senior Attorney

Company Taxpayer Identification Number: 22-1109110

Date: June 30, 1999

Designated Representative for Receipt of Notice:

Name: Wendy Leggett,,Esq.

Address: One Merck Drive, P.O. Box 100, Whitehouse Station, New Jersey 08889

Telephone Number: (908) 423-7810

Facsimile Number: (908) 423-1322

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: MOBIL OIL

Signature: Cathy A. Zglaskowski

Name of Signer: CATHY A. ZGLASKOWSKI

Title of Signer: ACTING SUPERFUND MANAGER

Company Taxpayer Identification Number: _____

Date: 6/30/99

Designated Representative for Receipt of Notice:

Name: KURT W. FISCHER

Address: 3225 GALLOWS RD

FAIRFAX, VA 22037

Telephone Number: (703) 849-3620

Facsimile Number: (703) 849-5920

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Monsanto Company/Solutia Inc.
By: Solutia Inc., Attorney-in-Fact

Signature: [signature]

Name of Signer: Michael R. Foresman

Title of Signer: President, Solutia Management Company, Inc.

Company Taxpayer Identification Number: 43-1781797

Date: June 28, 1999

Designated Representative for Receipt of Notice:

Name:	Craig Branchfield	Colleen Michuda ~~Thompson Coburn~~
Address:	10300 Olive Blvd. - F2EA P.O. Box 66760	One Mercantile Center
	St. Louis, MO 63166-6760	St. Louis, MO 63101-1693
Telephone Number:	(314) 674-1729	314-552-6563
Facsimile Number:	(314) 674-6262	314-552-7563

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Pfizer, Inc.

Signature:

Name of Signer: Paul S. Miller

Title of Signer: Senior V.P., Corporate Counsel

Company Taxpayer Identification Number: 13-5315170

Date: 6/22/99

Designated Representative for Receipt of Notice:

Name: Peter Paden, Esq.

Address: Robinson Silverman Pearce Aronsohn & Berman LLP

1290 Avenue of the Americas, New York, NY 10104

Telephone Number: (212) 541-2000

Facsimile Number: (212) 541-4630

Chemsol, Inc. Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Pratt & Whitney, Division of United Technologies Corporation

Name of Signer: Claudia R. Coplein

Signature of Signer: Claudia R. Coplein

Title of Signer: Vice President EH&S

Company Taxpayer Identification Number: _____

Date: 7/8/99

Designated Representative for Receipt of Notice:

Name: Mark J. Zimmermann, Esq.

Address: Updike, Kelly & Spellacy, P.C., One State Street,

Hartford, CT 06123-1277

Telephone Number: (860) 548-2624

Facsimile Number: (860) 548-2680

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Rohm and Haas Company

Signature: Audrey C. Friedel

Name of Signer: Audrey C. Friedel

Title of Signer: Of Counsel

Company Taxpayer Identification Number: 23-1028370

Date: June 24, 1999

Designated Representative for Receipt of Notice:

Name: Audrey C. Friedel

Address: Rohm and Haas Company

100 Independence Mall West

Philadelphia PA 19106

Telephone Number: (215) 592-6995

Facsimile Number: (215) 592-3310

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Schering Corporation

LEGAL RE

Signature: [signature]

Name of Signer: John E. Nine

Title of Signer: Vice President

Company Taxpayer Identification Number: 22-1261880

Date: July 8, 1999

Designated Representative for Receipt of Notice:

Name: David Paulin

Address: 2000 Galloping Hill Road

Kenilworth, NJ 07033

Telephone Number: (908) 298-5797

Facsimile Number: (908) 298-6751

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Subsequent Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: SHELL OIL COMPANY

Signature: Kent W Rogers

Name of Signer: KENT W. ROGERS

Title of Signer: MANAGER REMEDIATION

Company Taxpayer Identification Number: 13-1299890

Date: 6-21-99

Designated Representative for Receipt of Notice:

Name: KENT W. ROGERS

Address: 910 LOUISIANA ST. RM. 1430, HOUSTON, TX 77252-2463

Telephone Number: (713) 241-6429

Facsimile Number: (713) 241-7373

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: TEXACO INC.

Signature: Roger K Hadley

Name of Signer: Roger K. Hadley

Title of Signer: Manager, Environmental Project Management Services

Company Taxpayer Identification Number: 74-1383447

Date: June 24, 1999

Designated Representative for Receipt of Notice:

Name: R. Scott McCay

Address: 1111 Bagby, #2700 P. O. Box 4596

Houston, TX 77002 Houston, TX 77210-4596

Telephone Number: (713) 752-6011

Facsimile Number: (713) 752-4762

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: UNION CARBIDE CORPORATION

RF Signature: _____

Name of Signer: R. J. Cottle

Title of Signer: Vice President, Health, Safety & Environment

Company Taxpayer Identification Number: 13-1421730

Date: June 25, 1999

Designated Representative for Receipt of Notice:

Name: Roger Florio

Address: Union Carbide Corporation
39 Old Ridgebury Road
Danbury, CT 06817-0001

Telephone Number: (203) 794-6014

Facsimile Number: (203) 794-6269

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Wyeth-Ayerst Pharmaceuticals Inc.

Signature: _____

Name of Signer: John M. Alivernini, Esq.

Title of Signer: Assistant Secretary

Company Taxpayer Identification Number: 14-1396954

Date: 6-25-99

Designated Representative for Receipt of Notice:

Name: John M. Alivernini, Esq.

Address: 170-1 Radnor-Chester Road, Legal Department

St. Davids, PA 19087

Telephone Number: (610) 902-2620

Facsimile Number: (610) 964-3811

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Subsequent Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: ASHLAND INC.

Signature: for James G. Duquin

Name of Signer: James A. Duquin

Title of Signer: Vice President

Company Taxpayer Identification Number: 61-0122250

Date: June 18, 1999

Designated Representative for Receipt of Notice:

Name: Stephen W. Leermakers

Address: 5200 Blazer Parkway

Dublin, Ohio 43017

Telephone Number: (614) 790-4261

Facsimile Number: (614) 790-4268

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: BASF Corporation

Signature: Harry M. Baumgartner

Name of Signer: Harry M. Baumgartner

Title of Signer: Counsel

Company Taxpayer Identification Number: 16-1090809

Date: June 28, 1999

Designated Representative for Receipt of Notice:

Name: Thomas Y. Allman, Senior Vice President and General Counsel

Address: BASF Corporation
3000 Continental Drive - North
Mount Olive, NJ 07828-1234

Telephone Number: (973) 426-3200

Facsimile Number: (973) 426-3213

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Becton Dickinson and Company

Signature: Bridget M. Healy

Name of Signer: Bridget M. Healy

Title of Signer: Vice President and Secretary

Company Taxpayer Identification Number: 22-0760120

Date: June 30, 1999

Designated Representative for Receipt of Notice:

Name: Bruce J. Hector, Associate General Counsel

Address: Becton Dickinson and Company
1 Becton Drive
Franklin Lakes, New Jersey 07417

Telephone Number: (201) 847-7107

Facsimile Number: (201) 848-9228

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Ciba Specialty Chemicals Corporation

Signature: _____

Name of Signer: Douglas J. Hefferin

Title of Signer: Vice President, Remediation Services

Company Taxpayer Identification Number: 13-3904291

Date: 6/18/99

Designated Representative for Receipt of Notice:

Name: Kenneth Dupuis

Address: Ciba Specialty Chemicals Corporation

Route 37 West

Toms River, NJ 08753

Telephone Number: (732) 914-2810

Facsimile Number: (732) 914-2909

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: CON-LUX COATINGS, INC.

Signature: Mark W. Biedron

Name of Signer: MARK W. BIEDRON

Title of Signer: LIQUIDATING TRUSTEE

Company Taxpayer Identification Number: _____

Date: 6/18/98

Designated Representative for Receipt of Notice:

Name: MARK W. BIEDRON

Address: BOX 327

OLDWICK, NJ 08858

Telephone Number: (908) 832 0693

Facsimile Number: (908) 832 0461

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Subsequent Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: CON-LUX COATINGS, INC

Signature: Mark W Biedron

Name of Signer: MARK W. BIEDRON

Title of Signer: LIQUIDATING TRUSTEE

Company Taxpayer Identification Number: _____

Date: 6/28/98

Designated Representative for Receipt of Notice:

Name: MARK W. BIEDRON

Address: BOX 327

OLDWICK, NJ 08858

Telephone Number: (908) 832 0693

Facsimile Number: (908) 832 0461

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: The Dow Chemical Company

Signature: Mark D. Tucker

Name of Signer: Mark D. Tucker

Title of Signer: Counsel

Company Taxpayer Identification Number: _____

Date: June 28, 1999

Designated Representative for Receipt of Notice:

Name: Tracy Goad Walter

Address: 2030 Dow Center

Midland, MI 48674

Telephone Number: (517) 636-7872

Facsimile Number: (517) 638-9564

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Fisher-Price, Inc.

Signature:

Name of Signer: Robert Normile

Title of Signer: Vice President

Company Taxpayer Identification Number: 95-4506271

Date: June 22, 1999

Designated Representative for Receipt of Notice:

Name: Robert Normile

Address: 333 Continental Blvd.

El Segundo, CA 90245

Telephone Number: (310) 252-3615

Facsimile Number: (310) 252-2567

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Henkel Corporation

Signature: Juliette Richter

Name of Signer: Juliette B. Richter

Title of Signer: Associate General Counsel and Risk Manager

Company Taxpayer Identification Number: 41 0957894

Date: June 28,1999

Designated Representative for Receipt of Notice:

Name: Juliette B. Richter, Esquire

Address: Henkel Corporation
The Triad - Suite 200
2200 Renaissance Boulevard
Gulph Mills, PA 19406

Telephone Number: (610) 270-8100

Facsimile Number: (610) 270-8193

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Subsequent Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: IBM

Signature:

Name of Signer: James K. Guerin

Title of Signer: Senior Counsel

Company Taxpayer Identification Number: 13-0871985

Date: 8/4/99

Designated Representative for Receipt of Notice:

Name: James K. Guerin

Address: Route 100, PO Box 100, Somers, NY 10589

Telephone Number: (914) 766-2470

Facsimile Number: (914) 766-2837

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Indopco, Inc. d/b/a National Starch and Chemical Company

Signature:

Name of Signer: A.M. Samson, Jr.

Title of Signer: Associate General Counsel, Regulatory Affairs

Company Taxpayer Identification Number: 13-1522451

Date: 6/17/99

Designated Representative for Receipt of Notice:

Name: Alexander M. Samson, Jr.

Address: National Starch and Chemical Company

10 Finderne Avenue, Bridgewater, NJ 08807

Telephone Number: (908) 685-5198

Facsimile Number: (908) 707-3706

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: International Flavors & Fragrances Inc.

Signature: Stephen A. Block

Name of Signer: Stephen A. Block

Title of Signer: Senior Vice President

Company Taxpayer Identification Number: #13-1432060

Date: June 17, 1999

Designated Representative for Receipt of Notice:

Name: Linda Mack, Esq.

Address: Fox Rothschild O'Brien & Frankel LLP

997 Lenox Drive, Building Three

Lawrenceville, New Jersey 08648-2311

Telephone Number: (609) 896-3600 or 609-895-3325

Facsimile Number: (609) 896-1469

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Johnson & Johnson

Signature: [signature]

Name of Signer: Michael Ullmann

Title of Signer: Secretary

Company Taxpayer Identification Number: 22-1024240

Date: June 29, 1999

Designated Representative for Receipt of Notice:

Name: John N. Beidler

Address: One Johnson & Johnson Plaza

New Brunswick, NJ 08933

Telephone Number: (732) 524-2475

Facsimile Number: (732) 524-2788

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Kimberly-Clark Corporation as successor to Scott Paper Company

Signature: Kenneth A Strassner

Name of Signer: Kenneth A. Strassner

Title of Signer: Vice President, Environment & Energy

Company Taxpayer Identification Number: 23 106-5080 for Kimberly-Clark Tissue Company as successor to Scott Paper Company

Date: 7-9-99

Designated Representative for Receipt of Notice:

Name: Marcia K. Cowan, Kimberly-Clark Corporation

Address: 1400 Holcomb Bridge Road, Roswell, GA 30076

Telephone Number: (770) 587-7254

Facsimile Number: (770) 587-7327

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Mattel, Inc.

Signature: Jill Burtis

Name of Signer: Jill Burtis

Title of Signer: ASsistant Secretary

Company Taxpayer Identification Number: 95-1567322

Date: June 22, 1999

Designated Representative for Receipt of Notice:

Name: Robert Normile

Address: Mattel, Inc.

333 Continental Blvd.

El Segundo, CA 90245

Telephone Number: (310) 252-3615

Facsimile Number: (310) 252-2567

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Mayco Oil & Chemical

Signature: Joseph F Lagrotteria

Name of Signer: Joseph F. Lagrotteria

Title of Signer: Attorney for Mayco Oil + Chemical

Company Taxpayer Identification Number: _____

Date: 7/7/99

Designated Representative for Receipt of Notice:

Name: Joseph F. Lagrotteria

Address: St. John + Wayne

2 Penn Plaza East

Newark, NJ 07105

Telephone Number: (973) 491-3516

Facsimile Number: (973) 491-3555

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Morton International, Inc.

Signature: _____

Name of Signer: *Albert E, Greene*

Title of Signer: *Vice President Engineering and Regulatory Affairs*

Company Taxpayer Identification Number: 36-4140798

Date: June 22, 1999

Designated Representative for Receipt of Notice:

Name: Jeffrey C. Wyant, Environmental Counsel

Address: Morton International, Inc.
100 North Riverside Plaza
Chicago, IL 60606

Telephone Number: (312) 807-2291

Facsimile Number: (312) 807-2100

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: NOVARTIS CORPORATION

Signature: Robert L. Thompson Jr.

Name of Signer: ROBERT L. THOMPSON

Title of Signer: EXECUTIVE VICE PRESIDENT & GENERAL COUNSEL

Company Taxpayer Identification Number: 13-1834433

Date: JUNE 21, 1999

Designated Representative for Receipt of Notice:

Name: Corporation Service Company

Address: 830 Bear Tavern Road

W. Trenton, NJ 08628

Telephone Number: (609) 771-1800

Facsimile Number: (609) 771-0523

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: OLIN CORPORATION

Signature: Curt M. Richards

Name of Signer: Curt M. Richards

Title of Signer: Corporate Director, Environmental Health & Safety

Company Taxpayer Identification Number: 13-1872319

Date: 6/23/99

Designated Representative for Receipt of Notice:

Name: James E. Young, Senior Environmental Specialist

Address: Olin Corporation

PO Box 248, 1186 Lower River Road, NW

Charleston, TN 37310

Telephone Number: (423)336-4064

Facsimile Number: (423)336-4166

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: PPG Industries, Inc.

Signature:

Name of Signer: E. K. Pollock

Title of Signer: Executive Vice President, Office of the Chief Executive

Company Taxpayer Identification Number: 25-0730780

Date: June 28, 1999

Designated Representative for Receipt of Notice:

Name: P. M. King

Address: PPG Industries, Inc.

One PPG Place

Pittsburgh, PA 15272

Telephone Number: (412) 434-3703

Facsimile Number: (412) 434-2014

(4)

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Subsequent Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Reichhold Inc. (f/k/a Reichhold Chemicals, Inc.)

Signature: Daniel E. Uyesato

Name of Signer: Daniel E. Uyesato, Esq.

Title of Signer: Assistant General Counsel

Company Taxpayer Identification Number: 13-1764826

Date: June 29, 1999

Designated Representative for Receipt of Notice:

Name: David P. Flynn, Esq.

Address: Phillips, Lytle, Hitchcock, Blaine & Huber LLP
3400 HSBC Center
Buffalo, New York 14203

Telephone Number: (716) 847-5473

Facsimile Number: (716) 852-6100

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: Sequa Corporation (on behalf of Sun Chemical Co.)

Signature: L. P. Pasculli

Name of Signer: L. P. PASCULLI

Title of Signer: DIRECTOR, ENVIRONMENTAL LAW

Company Taxpayer Identification Number: 13-1885030

Date: JULY 1, 1999

Designated Representative for Receipt of Notice:

Name: Eletha L. Duffy, Esq.

Address: 475 Wall St

Princeton, NJ 08540-1509

Telephone Number: (609) 430-9400

Facsimile Number: (609) 430-9401

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: USX Corporation

Signature: William J. McKim

Name of Signer: William J. McKim

Title of Signer: Assistant General Counsel

Company Taxpayer Identification Number: 25-0996816

Date: June 25, 1999

Designated Representative for Receipt of Notice:

Name: Miles Stipanovich, Jr.

Address: U.S. Steel Law Department

600 Grant Street Room 1500

Pittsburgh, PA 15219-2749

Telephone Number: (412) 433-2813

Facsimile Number: (412) 433-2811

Chemsol Superfund Site Qualified Settlement Fund Trust Agreement

Signature Page for Initial Grantor

WITNESS the execution of this Agreement by the undersigned Company by its authorized representatives.

Name of Company: W. R. GRACE & CO. and HATCO CORPORATION

Signature: _____

Name of Signer: David M. Cleary

Title of Signer: Senior Environmental Counsel

Company Taxpayer Identification Number: 13-5114230

Date: July 7, 1999

Designated Representative for Receipt of Notice:

Name: _____

Address _____

_____

_____

Telephone Number (_____)_____

Facsimile Number: (_____)_____

APPENDIX A

AlliedSignal Inc.
Ashland Inc.
Benjamin Moore & Co.
BASF Corporation
Becton, Dickinson and Company
Borden, Inc.
Ciba Specialty Chemicals Corporation
Colgate-Palmolive Company
Con-Lux Coatings, Inc.
Curtiss-Wright Corporation
Cytec Industries Inc.
The Dow Chemical Company
E. I. du Pont de Nemours and Company
Elf Atochem North America, Inc.
Exxon Chemical Americas
Fisher-Price, Inc.
Ford Motor Company
General Electric Company
General Motors Corporation
Gulton Industries
Henkel Corporation
Hercules Incorporated
HNA Holdings, Inc.
Hoffmann-LaRoche Inc.
Indopco, Inc. d/b/a National Starch and Chemical Company
International Business Machines Corporation
International Flavors & Fragrances Inc.
Johnson & Johnson
Lucent Technologies Inc.
Mattel, Inc.
Mayco Oil & Chemical
Merck & Co., Inc.
Mobil Business Resources Corp.

APPENDIX A (cont'd)

Morton International, Inc.
Novartis Corporation
Olin Corporation
Pfizer Inc.
PPG Industries, Inc.
Reichhold, Inc.
Rohm and Haas Company
Schering Corporation
Sequa Corporation
Shell Oil Company
Solutia Inc.
Texaco Inc.
United Air Lines, Inc.
Union Carbide Corporation
USX Corporation
Wyeth-Ayerst Pharmaceuticals Inc.

APPENDIX B

William H. Hyatt, Jr., Esq.

APPENDIX C

AlliedSignal Inc.
Benjamin Moore & Co.
Borden, Inc.
Colgate-Palmolive Company
Curtiss-Wright Corporation
Cytec Industries Inc.
E.I. du Pont de Nemours and Company
Exxon Chemical Americas
Ford Motor Company
General Electric Company
General Motors Corporation
Gulton Industries
Hercules Incorporated
HNA Holdings, Inc.
Hoffmann-LaRoche Inc.
International Business Machines Corporation
Lucent Technologies Inc.
Merck & Co., Inc.
Mobil Business Resources Corp.
Pfizer Inc.
Pratt & Whitney, Division of United Technologies Corporation
Rohm and Haas Company
Schering Corporation
Shell Oil Company
Solutia Inc.
Texaco Inc.
Union Carbide Corporation
Wyeth-Ayerst Pharmaceuticals Inc.

APPENDIX D

Ashland Inc.
BASF Corporation
Becton, Dickinson and Company
Ciba Specialty Chemicals Corporation
Con-Lux Coatings, Inc.
The Dow Chemical Company
Fisher-Price, Inc.
Henkel Corporation
Indopco, Inc. d/b/a National Starch and Chemical Company
International Flavors & Fragrances Inc.
Johnson & Johnson
Kimberly-Clark Corporation
Mattel, Inc.
Mayco Oil & Chemical
Morton International, Inc.
Novartis Corporation
Olin Corporation
PPG Industries, Inc.
Reichhold, Inc.
Sequa Corporation
USX Corporation
W.R. Grace & Co.

C

RECORD OF DECISION

Chemsol, Inc. Superfund Site

Piscataway, Middlesex County, New Jersey

United States Environmental Protection Agency
Region II
New York, New York
September 1998

DECLARATION FOR THE RECORD OF DECISION

SITE NAME AND LOCATION

Chemsol, Inc. Superfund Site
Piscataway, Middlesex County, New Jersey

STATEMENT OF BASIS AND PURPOSE

This Record of Decision (ROD) documents the U.S. Environmental Protection Agency's selection of a second remedial action to address soil and groundwater contamination at the Chemsol Site (the "Site"), in accordance with the requirements of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA) [42 U.S.C. §9601-9675], and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan, as amended, 40 CFR Part 300. This decision document explains the factual and legal basis for selecting the remedy for this second operable unit of the Site.

The New Jersey Department of Environmental Protection (NJDEP) has been consulted on the planned remedial action in accordance with CERCLA §121(f) [42 U.S.C. §9621(f)]. NJDEP is not in agreement with EPA's soil cleanup goals but does not object to the groundwater component of the remedy, (see Appendix IV). The information supporting this remedial action is contained in the Administrative Record for the Site, the index of which can be found in Appendix III to this document.

ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from the Chemsol Site, if not addressed by implementing the response action selected in this ROD, may present an imminent and substantial endangerment to public health, welfare, or the environment.

DESCRIPTION OF THE SELECTED REMEDY

The selected remedy is the second of three operable units planned for the Chemsol Site. The major components of the selected remedy include:

Soil

- Excavation and off-site disposal of approximately 18,500 cubic yards of soil contaminated with polychlorinated biphenyls (PCBs) above 1 part per million (ppm) and lead above 400 ppm. The excavated areas will be backfilled with clean imported fill from an off-site location, covered with topsoil, then seeded with grass.

- Disposal of the excavated soils at an appropriate off-site disposal facility, depending on waste characteristics.

Groundwater

- Installation and pumping of approximately five additional extraction wells to contain contaminated groundwater on-site.

- Continued treatment of extracted groundwater through the existing groundwater treatment facility. The treated groundwater may continue to be released to the Middlesex County Utilities Authority (MCUA). If discharge to the MCUA becomes infeasible, treated groundwater will undergo additional on-site biological treatment, prior to being released on-site to Stream 1A.

- Performance of an additional groundwater investigation to determine the extent to which contaminated groundwater is leaving the property boundaries.

Surface Water and Sediments

- Monitoring of sediments and surface water to determine whether remediation of Lot 1B will result in lower PCB levels in the on-site streams, Stream 1A and 1B, over time.

DECLARATION OF STATUTORY DETERMINATIONS

The selected remedy meets the requirements for remedial actions set forth in CERCLA §121 in that it: (1) is protective of human health and the environment; (2) complies with Federal and State requirements that are legally applicable or relevant and appropriate to the extent practicable given the unpredictable nature of groundwater hydrogeology in fractured bedrock; (3) is cost-effective; (4) utilizes alternative treatment (or resource recovery) technologies to the maximum extent practicable; and (5) satisfies the statutory preference for remedies that employ treatment to reduce the toxicity, mobility, or volume of the hazardous substances, pollutants or contaminants at the Site.

As part of this Record of Decision, EPA conducted a review of remedies selected at the Site consistent with CERCLA, Section 122(c), the National Contingency Plan, Section 300.430(f)(4)(ii) and OSWER Directives 9355.7-02 (1991), 2a(1994) and 3a (1995). EPA conducted a Type 1a review which is applicable to a site at which the remedial response is ongoing. I certify that the remedies selected for this Site remain protective of human health and the environment.

Because this remedy may result in hazardous substances remaining on the Site above health-based levels, a review will be conducted within five years after the initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

Jeanne M. Fox
Regional Administrator

9/18/98
Date

RECORD OF DECISION FACT SHEET
EPA REGION II

Site:

Site name: Chemsol, Inc. Site

Site location: Piscataway, Middlesex County, New Jersey

HRS score: 42.69

Listed on the NPL: September 1, 1983

Record of Decision:

Date signed: September 18, 1998

Selected remedy: Soil Alternative 3 - Excavation and off-site disposal of contaminated soil.
Groundwater Alternative 5 - Installation and pumping of additional wells to treat and contain contaminated groundwater within the property boundaries.

Capital cost: Soil Alternative 3 - $5,573,000
Groundwater Alternative 5 - $390,189

Anticipated Construction Completion: September 2002

O & M cost: Soil Alternative 3 - $0
Groundwater Alternative 5 - $670,892

Present-worth cost: Soil Alternative 3 - $5,573,000
Groundwater Alternative 5 - $10,699,000

Lead:

Site is currently fund and PRP lead - EPA is the lead agency

Primary Contact: Nigel Robinson, Remedial Project Manager, (212) 637-4394

Secondary Contact: Lisa Jackson, Chief, Central New Jersey Remediation Section, (212) 637-4380

Waste:

Waste type: Volatile organics, semi-volatile organics, PCBs, pesticides, metals

Waste origin: Hazardous waste

Contaminated medium: Soil and Groundwater

RECORD OF DECISION

DECISION SUMMARY

Chemsol Site

Piscataway, Middlesex County, New Jersey

United States Environmental Protection Agency
Region II
New York, New York
September 1998

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SITE NAME, LOCATION AND DESCRIPTION

Site History

Chemsol, Inc. (Chemsol or Site) is located on a 40 acre tract of land at the end of Fleming Street, Piscataway, Middlesex County, New Jersey. The Site is comprised of two areas: an undeveloped parcel known as Lot 1A and a cleared area referred to as Lot 1B. Two small intermittent streams (Stream 1A and Stream 1B) and a small trench, known as the Northern Ditch, drain northward across the Site into a marshy wetland area located near the northeastern property boundary (see Figures 1 and 2).

Land use in the vicinity of the Site is a mixture of commercial, industrial, and residential uses. The Port Reading Railroad is directly south of the Site. Single family residences are located immediately to the west and northwest of the Site. An apartment complex with greater than 1,100 units is located to the north. Industrial and retail/wholesale businesses are located to the south and east of the Site.

Approximately 180 private wells at residential and commercial addresses were reported by the local health departments to be potentially active (i.e., not sealed) within a radius of two miles of the Site. Twenty-two of these wells are located at a distance less than ½ mile from the Site. The nearest public water supply well is over two miles away in the Spring Lake area of South Plainfield. No federally listed or proposed threatened or endangered species were found at the Site.

SITE HISTORY AND ENFORCEMENT ACTIVITIES

Chemsol operated as a solvent recovery and waste reprocessing facility in the 1950's through approximately 1964. Historically, the Site experienced numerous accidents, fires and explosions resulting from the storage, use or processing of flammable materials. In September 1958, a still exploded. In June 1964, a fire started when a 50-gallon drum of hexane exploded and in June 1962, a fire started when a pile of approximately 500,000 pounds of wax was ignited. In October 1964, a reaction between aluminum chloride and water generated hydrogen chloride gas resulting in the evacuation of the adjacent residential areas. Following this accident, Piscataway Township ordered the facility to cease operations. In 1978, the property was rezoned from industrial to residential. The Site is currently owned by Tang Realty Corporation. In September 1983, the Chemsol Site was formally placed on the National Priorities List (NPL) making it eligible for federal funds for investigation of the extent of contamination and for cleanup activities.

From 1983 to 1990, the New Jersey Department of Environmental Protection (NJDEP) directed Tang Realty, under various enforcement actions, to perform a series of Site investigations related to groundwater and soil contamination. Approximately 40 groundwater monitoring wells were installed on or in the vicinity of the Site by contractors for Tang Realty. Sampling results from these monitoring wells indicated that groundwater was contaminated with various volatile organic compounds (VOCs)

including trichloroethylene, chloroform, chloroethane, toluene, carbon tetrachloride and methylene chloride. Furthermore, sampling and analyses of the soils (performed between 1980 and 1987) revealed the presence of polychlorinated biphenyls (PCBs) and other organic compounds.

In the summer of 1988, Tang Realty removed approximately 3,700 cubic yards of PCB-contaminated soils for off-site disposal. During the soils excavation, several thousand small (less than 1 gallon) containers of unknown substances were discovered. These unknown substances were stored in a trailer on-site. As a part of a U.S. Environmental Protection Agency (EPA) removal action undertaken in 1990 and 1991, these unknown substances were analyzed, grouped with other compatible Site wastes, and transported off-site. Approximately 10,000 pounds of crushed lab pack bottles, 13,500 pounds of hazardous waste solids, 615 gallons of hazardous waste liquids and 150 pounds of sulfur trioxide were disposed of off-site during the removal action. This removal action was completed in October 1991 by EPA.

In the fall of 1990, EPA and the NJDEP agreed that EPA should fund the remainder of the investigatory work. Subsequently, EPA initiated a Remedial Investigation and Feasibility Study (RI/FS) in order to assess the nature and extent of contamination at the Site and to evaluate remedial alternatives. EPA determined that the RI/FS would be performed in two phases. The first phase consisted of development of a Focused Feasibility Study (FFS) to evaluate the usefulness of an interim remedy to restrict off-site migration of contaminated groundwater. The second phase was to determine the nature and extent of contamination at the Site.

As part of the FFS, EPA sampled 22 on-site monitoring wells. The results of the FFS indicated that groundwater at the Site exists in a perched water zone (at depths of less than five feet), and also in the upper bedrock aquifer (to depths of at least 130 feet). Sampling results revealed that groundwater was highly contaminated with a wide variety of hazardous substances, including volatile organics, semi-volatile organics, as well as pesticides and inorganic compounds.

Based on the results of the FFS, EPA selected an interim remedy for the Chemsol Site in a Record of Decision (ROD) that was signed on September 20, 1991. The objective of this interim remedy was to restrict the migration of the contaminated groundwater until a more comprehensive Site-wide remedy could be selected and implemented. The interim remedy consisted of pumping groundwater from well C-1, a former monitoring well installed by Tang Realty's contractors found to be highly contaminated with VOCs. The pumped groundwater from C-1 would then be treated on-site through an air stripper, after which it would be filtered, followed by treatment by activated carbon and biological treatment. After treatment, the water was to be discharged to the on-site stream.

On March 9, 1992, EPA issued a Unilateral Administrative Order (UAO) to Tang Realty, Schering Corporation, Union Carbide Corporation and Morton International, Inc. (the Respondents) for performance of the interim remedy. Schering Corporation, Union Carbide Corporation and Morton International, Inc. were identified by EPA as potentially responsible for the contamination at the Site by having sent their waste to the Chemsol Site for reprocessing. Tang Realty was identified as the owner of the property.

In November 1993, the Respondents requested that the interim remedy be modified so that water from the treatment system could be discharged into the sewer system that leads to the Middlesex County Utilities Authority (MCUA), instead of into an on-site surface water body (Stream 1A), as specified in the ROD. As a result, in July 1994, EPA issued an Explanation of Significant Differences which modified the interim remedy to allow for discharge of treated groundwater to the sewer system. However, EPA also required that the Respondents design and build the biological portion of the treatment system so that, in the future, if the treated groundwater could not be sent to MCUA, the biological system could be brought quickly online to allow for direct discharge of treated groundwater to Stream 1A on-site.

Construction of the groundwater treatment plant was completed by the Respondents in June 1994 and the plant was brought into operation in September 1994. The well has been pumped at varying rates, averaging approximately 25 gallons per minute. The results of monthly monitoring indicate that the interim remedy has been effective in restricting the migration of highly contaminated groundwater from the Site. The second phase RI/FS for the Site was completed in June 1997.

<u>Enforcement Activities</u>

EPA initiated a Potentially Responsible Party (PRP) search by issuing Request for Information and Notice Letters in September 1990. Additional letters were issued in December 1991 and February 1992. Due to the need to restrict contaminated groundwater from migrating off the Site, an interim remedy was selected in a Record of Decision issued by EPA on September 20, 1991. A UAO was issued to four companies to design and construct the interim remedy. During the course of the performance of this UAO, EPA was notified that a PRP group had been formed and was assisting the UAO Respondents in financing the interim remedy. The UAO Respondents continue to operate the interim remedy, extraction and treatment system.

HIGHLIGHTS OF COMMUNITY PARTICIPATION

The second phase RI/FS report, the Proposed Plan and supporting documentation were made available to the public in the administrative record file at the Superfund Document Center in EPA Region II, 290 Broadway, New York, New York and the information repository at the Kennedy Library, 500 Hoes Lane, Piscataway New Jersey. The notice of availability for the above-referenced documents was published in the

Home News and Tribune on August 11, 1997. The public comment period which related to these documents was held from August 11, 1997 to September 10, 1997 and later extended to October 10, 1997.

On August 27, 1997, EPA conducted a public meeting at the Piscataway Municipal Complex. The purpose of this meeting was to inform local officials and interested citizens about the Superfund process, to review planned remedial activities at the Site, to discuss the Proposed Plan and receive comments on the Proposed Plan, and to respond to questions from area residents and other interested parties. Responses to the comments received at the public meeting and in writing during the public comment period are included in the Responsiveness Summary (see Appendix V).

SCOPE AND ROLE OF THIS OPERABLE UNIT

This action is the second operable unit or phase taken to address the Site. The first operable unit consisted of an interim groundwater containment system which is currently operational at the Site. This action will address contaminated groundwater and soil within the Chemsol property boundaries. A third operable unit is planned to investigate the extent of groundwater contamination outside the property boundaries and to determine if any further groundwater remediation is necessary.

SUMMARY OF SITE CHARACTERISTICS

The second phase of the RI field work commenced in October 1992. The purpose of the RI was to accomplish the following: identify the nature and extent of contaminant source areas; define contamination of ground water, soils, surface water and sediment; characterize Site hydrogeology; and determine the risk to human health and the environment posed by the Site. The work was conducted by CDM Federal Programs Corporation under contract to EPA.

The results of the RI can be summarized as follows.

Soil Investigation

A soil sampling program was designed based on historical Site usage, aerial photographs and the findings of previous investigations. Samples were taken using an extensive grid system. Group A samples were collected at 200 foot grid spacing in Lot 1B and 400 foot grid spacing in Lot 1A. These samples were analyzed for a full range of organic and inorganic contaminants. Group B samples were collected from Lot 1B at 100 foot grid spacing and field screened for PCBs. Group C samples were collected

from biased sampling locations based on aerial photographs and previous investigations and on a 50 foot grid spacing around those Group B samples which showed PCBs in their field screening results. In addition, samples from Lot 1B were analyzed using the Toxicity Characteristic Leaching Procedure (TCLP), a test which is used to determine whether a material is a hazardous waste, as defined by the Resource Conservation and Recovery Act (RCRA). Samples passing the TCLP test can be disposed at a facility which accepts non-hazardous waste, a so-called Subtitle D facility under RCRA. Subsurface soil samples were also taken from 102 locations across the Site.

The results of the RI show that the surface and subsurface soils in Lot 1A and Lot 1B contain various contaminants. The contaminants found were: VOCs, including carbon tetrachloride, trichloroethane, trichloroethene, tetrachloroethene, toluene, ethylbenzene, and xylenes; semi-volatile organic compounds (SVOCs), including polyaromatic hydrocarbons, phthalates, pesticides (such as aldrin, dieldrin, and DDE) and PCBs; and inorganics, including manganese and lead. The range of concentrations of certain contaminants detected in surface and subsurface soil is presented in Table 1. All the soil samples that were analyzed for TCLP, passed the TCLP test. Based on these data, EPA believes that all soils at the Site will pass the TCLP test.

Of the contaminants found, PCBs contributed the most to the risks at the Site (see the section entitled "Summary of Site Risk," below). The majority of PCB and lead contamination occurs in surface soils (0-2 feet depth), with the exception of one location where PCBs are found at a depth of 6 feet, near boring 76 (see Figure 3). The VOCs were found to be co-located with the PCBs and lead; therefore, any actions taken to address PCBs and lead would also address the VOCs.

Groundwater Investigation

As a part of the RI, additional groundwater monitoring wells were installed. Two rounds of groundwater sampling were performed during the RI. Samples were collected and analyzed from the 49 wells on the Site. EPA was initially unsuccessful in obtaining voluntary cooperation to install monitoring wells on properties adjacent to the Chemsol property. EPA continues to pursue this matter in order to facilitate further investigation of groundwater migration from the Site.

The geologic formation which underlies the Site is commonly referred to as the Brunswick formation and lies generally 3 to 14 feet below the ground surface. The Brunswick formation in general contains areas of red shale, gray shales and siltstones. A gray shale layer acts to preclude groundwater flow in some areas and separates the bedrock into an upper zone which is located above the gray shale, and a so-called "deep gray unit" bedrock zone. The Brunswick formation is overlain by a thin layer of overburden which consists of unconsolidated sand, silt, clay and cobble deposits and fill. This overburden was determined to be typically 3 to 6 feet thick at the Site.

Groundwater flow at the Site is complex. There is perched groundwater present in some areas of the overburden. However, the primary groundwater flow is through interconnected fractures in the bedrock. Due to the unpredictable nature and distribution of these fractures, the precise direction of flow and the rate of groundwater flow can be difficult to predict. In general, groundwater in the upper zone, above the gray shale, flows to the south. Below the gray shale, groundwater generally flows to the north. Near the southern boundary of the Site, groundwater is influenced by off-site commercial pumping activities to the south.

With regard to chemical contamination, the RI confirmed that well C-1 was by far the most contaminated of all on-site monitoring wells. The results also confirmed that VOCs are the primary contaminants in groundwater. The major VOC contaminants include benzene, carbon tetrachloride, chloroform, 1,2,-dichloroethane, 1,2-dichloroethene, tetrachloroethene, toluene and trichloroethene. The bedrock aquifer is contaminated far in excess of EPA's Safe Drinking Water Act maximum contaminant levels (MCLs) which are the federal regulatory standards for drinking water. The analytical results also indicate that MCLs for aluminum, iron and manganese have been exceeded in many wells at the Site. Although many pesticides were detected in the groundwater, no MCLs were exceeded. In the second round of sampling, PCBs slightly in excess of MCLs were found in two wells, C-1 and TW-4 (see Table 2).

Groundwater contamination is present in the bedrock aquifer at both the northern and southern boundaries of the Site. Evaluation of the hydrogeological data indicates that contaminated groundwater continues to migrate off-site. However, due to the influences of groundwater pumping from off-site sources and the limited amount of off-site groundwater sampling data, there remains uncertainty as to the extent of this migration. Additional off-site sampling is required to further define the extent and source of off-site contamination.

In addition to sampling activities, EPA's consultant used mathematical modeling to help determine the optimum pumping plan which would best capture contaminated groundwater and minimize the amount of contaminated groundwater which leaves the Site. The modeling showed that, by pumping five additional wells, the contamination could be contained on-site except possibly for the deep bedrock groundwater in the northwest corner of the Site.

In addition, during the RI, EPA conducted an assessment to determine whether contamination previously detected in the Nova-Ukraine section of Piscataway was related to the Chemsol Site. The Nova -Ukraine is a housing development whose nearest part is located approximately 900 feet south-southeast of the Chemsol Site. Residential wells in this development had been sampled several times since 1980 by various government agencies and private consultants. Due to concentrations of VOCs in the wells, NJDEP delineated an Interim Groundwater Impact Area for a portion of the Nova-Ukraine area. This delineation made residents eligible for financial assistance to connect to a public water supply. All but four residences elected to be connected to a

public water supply. Based on the results of the RI, EPA does not believe that the groundwater contamination of residential wells in the Nova-Ukraine area is related to the Chemsol Site.

Surface Water and Sediment Investigation

The ground elevation at the Site is generally lower than the adjacent area. Surface water runoff is towards the Site during rain events. There are several wetland areas, one drainage ditch, and two streams present at the Site. During sampling for the FFS in 1991, Stream 1A was sampled and determined to be free of contamination from the Site. During the RI, two rounds of sampling were conducted in Stream 1B. Twelve sampling locations were selected. At each location, one surface water sample and two sediment samples were collected.

Surface water sampling has indicated that the Chemsol Site is contributing low levels of contamination including VOCs, pesticides and organics to Stream 1B (Table 3). However, low levels of pesticides and inorganics also appear to be entering the Site from off-site sources. Levels of several contaminants exceeded State Water Quality Criteria. As noted in the previous section, the area surrounding the Site contains many industrial/commercial establishments. Sediment sampling conducted in conjunction with the surface water sampling indicates the presence of VOCs, SVOCs, pesticides, PCBs and metals (Table 4).

SUMMARY OF SITE RISKS

Based upon the results of the RI, a baseline risk assessment was conducted to estimate the risks associated with current and future Site conditions. The baseline risk assessment estimates the human health and ecological risk which could result from the contamination at the Site if no remedial action were taken.

Human Health Risk Assessment

To perform a Human Health Risk Assessment, the reasonable maximum human exposure is evaluated. A four-step process is then utilized for assessing site-related human health risks for a reasonable maximum exposure scenario: *Hazard Identification*– identifies the chemicals of potential concern at the Site based on several factors such as toxicity, frequency of occurrence, and concentration. *Exposure Assessment*– estimates the magnitude of actual and/or potential human exposures, the frequency and duration of these exposures, and the pathways (e.g., ingesting contaminated well-water) by which humans are potentially exposed. *Toxicity Assessment*– determines the types of adverse health effects associated with chemical exposures, and the relationship between magnitude of exposure (dose) and severity of

adverse effects (response). *Risk Characterization*– summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative (e.g., one-in-a-million excess cancer risk) assessment of site-related risks.

The baseline risk assessment began with selecting chemicals of potential concern which would be representative of the contamination found in various media (surface soil, subsurface soil, surface water, sediment, and groundwater) at the Site (See Table 5 - Chemicals of Potential Concern). Due to the large number of chemicals detected at the Site, only those chemicals which were thought to pose the highest risk (based on factors such as frequency of detection and concentration detected) were retained as chemicals of potential concern. The chemicals of potential concern include: benzo(a)pyrene, pesticides, PCBs and inorganics in surface soil; 1,1,2,2-tetrachloroethane, pesticides, PCBs, and inorganics in subsurface soils; VOCs and SVOCs in surface water; and, polyaromatic hydrocarbons, PCBs, and inorganics in sediment. Several of the contaminants of concern listed above are known or suspected of causing cancer in animals and/or humans or of causing non-cancer health effects in the liver, kidney, respiratory tract, and the central nervous system.

In the exposure assessment, the potential exposure for human exposure to the chemicals of concerns, in terms of the type, magnitude, frequency, and duration of exposure, is estimated. The assessment is made for potentially exposed populations at or near the property considering both the current situation and potential future conditions. Please see Table 6 for a listing of potential exposure pathways.

An important factor which drives the risk assessment is the assumed future use of the Site. Based on discussions with the town and the fact that the Site is now zoned for residential, rather than industrial use, EPA assumed that the most probable future use of the Site would be for residential or recreational purposes. The Town expressed a preference for recreational use as the property is one of the last parcels of open land available in the Township. The current land uses at this Site have the potential to impact nearby residents (adults and children) and possible trespassers onto the Site. In the future, it is possible that potential human receptors would include residents (adults and children), Site workers (employees), and construction workers.

Pathways of exposure evaluated for the Site include: 1) sediment and soil ingestion; 2) dermal contact with soil and sediment; 3) ingestion of contaminated groundwater and surface water; 4) dermal contact with surface water; and, 5) inhalation of VOCs and particulates during showering. Because EPA assumed a future residential/recreational land use of the Site, the list of possible human receptors identified in the exposure assessment included trespassers, residents (adults and children), Site workers (employees), and construction workers. Exposure intakes (doses) were calculated for each receptor for all pathways considered.

Potential carcinogenic risks are evaluated using the cancer slope factors developed by EPA for the contaminants of concern. Cancer slope factors (Sfs) have been developed by EPA's Carcinogenic Risk Assessment Verification Endeavor for estimating excess lifetime cancer risks associated with exposure to potentially carcinogenic chemicals (See Table 7). Sfs, which are expressed in units of [mg/kg-day] [-1] are, multiplied by the estimated intake of a potential carcinogen, in mg/kg-day, to generate an upper-bound estimate of the excess lifetime cancer risk associated with exposure to the compound at that intake level. The term "upper bound" reflects a conservative estimate of the risks calculated from the SF. Use of this approach makes the underestimation of the risk highly unlikely.

EPA's acceptable cancer risk range is 10^{-4} to 10^{-6} which can be interpreted to mean that an individual may have a 1 in 10,000 to 1 in 1,000,000 increased chance of developing cancer as a result of Site-related exposure to a carcinogen over a 70-year lifetime under the specific exposure conditions at the Site. The State of New Jersey's acceptable risk standard is one in one million (10^{-6}).

EPA found that contaminants in the surface soil at the Site posed an unacceptable total cancer risk of 2.2×10^{-3} (i.e., 2.2 in a thousand) to potential future residents through ingestion and dermal contact. In addition, ingestion and inhalation (during showering) of contaminants in groundwater also posed unacceptable cancer risks (maximum of 2.4×10^{-2}) (i.e., 2.4 in a hundred) to potential future residents. For Site workers only the groundwater ingestion pathway was evaluated. The contaminants found in the groundwater posed unacceptable cancer risks of 5.4×10^{-3} (i.e., 5.4 in a thousand) to Site workers. Benzene, carbon tetrachloride, vinyl chloride, chloroform, 1,1-dichloroethene, trichloroethene, 1,2-dichloroethane, and PCBs are the predominant contributors to the estimated cancer risk in groundwater. The other receptors/exposure routes including ingestion or direct contact with subsurface soil, and dermal contact with surface water and sediment) have estimated cancer risk within or below EPA's acceptable risk range.

Noncarcinogenic risks were assessed using a hazard index (HI) approach, (see Table 8) based on a comparison of expected contaminant intakes and safe levels of intake (Reference Doses). Reference doses (RfDs) have been developed by EPA for indicating the potential for adverse health effects (see Table 9). RfDs, which are expressed in units of milligrams per kilogram per day (mg/kg-day), are estimates of daily exposure levels for humans which are thought to be safe over a lifetime (including sensitive individuals). Estimated intakes of chemicals from environmental media (e.g., the amount of a chemical ingested from contaminated drinking water) are compared to the RfD to derive the hazard quotient for the contaminant in the particular medium (i.e., the hazard quotient equals the chronic daily intake divided by the RfD). The HI is obtained by adding the hazard quotients for all compounds within a particular medium that impact a particular receptor population. An HI greater than 1.0 indicates that the potential exists for noncarcinogenic health effects to occur as a result of site-related

exposures. The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media. With regard to non-cancer effects, based on the calculated HIs, EPA found that several potential exposure pathways could have unacceptable health effects including: ingestion of surface soil by children (HI=6.2) (see Table 8); ingestion of disturbed surface soil along the current effluent discharge line by children (HI=3.7); inhalation of particulates along the current effluent discharge line by children (HI=1.5); ingestion of contaminated groundwater by adults and children (HI = 340 for adults and 800 for children); and, ingestion of contaminated groundwater by Site workers and construction workers (HI = 120 for Site workers and 17 for construction workers). No noncancer effects were associated with subsurface soils, surface water and sediment.

In summary, the Human Health Risk Assessment concluded that exposure to surface soil and ground water, if not addressed by the preferred alternative or one of the other active measures considered, may present a current or potential threat to public health or welfare. In contrast, exposure to subsurface soils, sediments, and surface water was determined not to pose a significant threat to human health.

Ecological Risk Assessment

A qualitative and/or semi-quantitative appraisal of the actual or potential effects of a hazardous waste site on plants and animals, constitutes an ecological risk assessment. A four-step process is utilized for assessing site-related ecological risks: *Problem Formulation* - a qualitative evaluation of contaminant release, migration, and fate; identification of contaminants of concern, receptors, exposure pathways, and known ecological effects of the contaminants; and selection of endpoints for further study. *Exposure Assessment* - a quantitative evaluation of contaminant release, migration, and fate; characterization of exposure pathways and receptors; and measurement or estimation of exposure point concentrations. *Ecological Effects Assessment* - literature reviews, field studies, and toxicity tests, linking contaminant concentrations to effects on ecological receptors. *Risk Characterization* - measurement or estimation of both current and future adverse effects.

The environmental evaluation focused on how the contaminants would affect the Site's natural resources. Natural resources include existing flora and fauna at the Site, surface water, wetlands and sensitive species or habitats. A wetlands delineation performed on-site determined that wetlands cover approximately 22 acres in Lot 1A and 3 acres in Lot 1B. Uplands in Lot 1A are wooded. No federally or State listed or proposed threatened or endangered flora or fauna are known to occur at or near the Site. However, white-tailed deer, woodchucks, rabbits, frogs, turtles and birds are known to inhabit the Site.

Sources of exposures to ecological receptors considered for this ecological assessment include surface soil (generally collected from 0 to 2 feet below ground surface), surface sediment (generally collected from 0-6 inches), and surface water. Data from subsurface soils (soils under pavements or from depths greater than 2 feet) were not evaluated. These depths are greater than those considered likely for potential contact with burrowing animals or roots of vegetation. Subsurface sediments (sediments from depths greater than 6 inches) also were not evaluated since fish and micro invertebrates are not likely to be exposed to contaminants at greater depths. Similarly, groundwater data were not used in this ecological assessment because it is unlikely that ecological receptors can contact contaminants associated with groundwater. Exposure may occur through: 1) ingestion of contaminated food items; 2) ingestion of contaminated surface water; 3) incidental ingestion of contaminated media (i.e., soil, sediment, or water ingested during grooming, eating, burrowing, etc.); 4) inhalation of contaminants; and, 5) adsorption upon contact with contaminated media.

Site surface soils were evaluated to assess terrestrial ecological risk from food chain transfer effects. Mathematical modeling was conducted to estimate exposure doses to representative mammalian and avian receptors (short-tailed shrew, American robin, and red-tailed hawk). A hazard quotient (HQ) approach was used to compare the calculated doses to reference toxicity values; a value exceeding unity (HQ > 1.0) indicates the potential for adverse ecological effects. The chemicals of concern selected for this evaluation included: toluene, carbon tetrachloride, 1,1,1-trichloroethene, chlorobenzene, xylenes, naphthalene, PCBs, pesticides, lead, and mercury.

Based on the terrestrial risk evaluation, the potential for adverse ecological effects exists for Lot 1A and Lot 1B. On Lot 1B, many of the contaminants greatly exceeded their respective reference toxicity values and require remediation. Lot 1B is also highly physically disturbed by development. On Lot 1A, the potential risk is from only a few contaminants that slightly exceed their respective reference toxicity values. Lot 1A exists in a relatively undisturbed state and is considered a locally valued habitat (i.e., predominantly forested wetland). Remedial action to address the potential risk assessed for Lot 1A would likely result in significant habitat disturbance or destruction. Therefore, it was determined that active remediation is not warranted in Lot 1A at this time to address terrestrial risk.

The assessment of aquatic risk evaluated the ecological significance of sediment contamination in Stream 1B and the associated ditch by comparing contaminant concentrations to ecologically-based screening values (D. Persaud, et al. August 1993. "Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario." Ontario Ministry of Environment and Energy). Ecological risks in these sediments, while indicated, are considered minimal. Additionally, these areas may not represent actual sources of contamination, but may represent the presence of a migration pathway from the more heavily contaminated Lot 1B. Thus, while remediation

of the Stream 1B and the ditch is not warranted at this time, they will be monitored to assess the affect of the remedial action in Lot 1B on contaminant levels.

The assessment of aquatic risk also evaluated the potential risk from surface water in Stream 1B. The potential risk is considered similar to the potential risk from sediment in that, while several contaminants exceed NJ State Surface Water Quality, the contaminants may be migrating from more heavily contaminated areas of the Site. Therefore, surface water is also included in the stream monitoring.

Uncertainties

The procedures and estimates used to assess risks, as in all such assessments, are subject to a wide variety of uncertainties. In general, the main sources of uncertainty include:

- environmental chemistry sampling and analysis
- environmental parameter measurement
- fate and transport modeling
- exposure parameter estimation
- toxicological data

Uncertainty in environmental sampling arises in part from the potentially uneven distribution of chemicals in the media sampled. Consequently, there is significant uncertainty as to the actual levels present. Environmental chemistry analysis error can stem from several sources including the errors inherent in the analytical methods and characteristics of the matrix being sampled.

Uncertainties in the exposure assessment are related to estimates of how often an individual would actually come in contact with the chemicals of concern, the period of time over which such exposure would occur, and in the models used to estimate the concentrations of the chemicals of concern at the point of exposure. Uncertainties in toxicological data occur in extrapolating both from animals to humans and from high to low doses of exposure, as well as from the difficulties in assessing the toxicity of a mixture of chemicals. These uncertainties are addressed by making conservative assumptions concerning risk and exposure parameters throughout the assessment. As a result, the baseline risk assessment provides upper bound estimates of the risks to populations near the Site, and it is highly unlikely to underestimate those actual risks related to the Site.

More specific information concerning public health risks, including a quantitative evaluation of the degree of risk associated with various exposure pathways, is presented in the RI report.

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this ROD, may present an imminent and substantial endangerment to public health, welfare, or the environment.

REMEDIAL ACTION OBJECTIVES

Remedial action objectives are specific goals to protect human health and the environment. These objectives are based on available information and standards such as applicable or relevant and appropriate requirements (ARARs) and risk-based levels established in the Risk Assessment.

The following objectives were established for the Chemsol Site:

(1) Restoring the soil at the Site to levels which would allow for residential/recreational use (without restrictions);

(2) augment the existing groundwater system to contain that portion of contaminated groundwater that is unlikely to be technically practicable to fully restore and restore the remaining affected groundwater to State and federal drinking water standards;

(3) remove and treat as much contamination as possible from the fractured bedrock;

(4) prevent human exposure to contaminated groundwater;

(5) prevent human exposure to surface soils contaminated with PCB concentrations above 1 part per million (ppm) and lead concentrations above 400 ppm; and

(6) eliminating, to the greatest extent practicable, continuing sources of contamination to the groundwater.

Soil cleanup levels for PCBs at the Site are based on the toxicity reassessment developed by EPA since the original 1990 EPA "Guidance on Remedial Actions for Superfund Sites with PCB Contamination". For residential land use, an action level of 1 ppm is specified for PCBs. The 400 ppm lead cleanup level is based on EPA's 1994 "Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities." VOCs in soil were found to be co-located with the PCBs and lead; therefore EPA did not develop separate cleanup levels for VOCs in soil. EPA estimates that there are approximately 18,500 cubic yards of soil that contain PCBs at levels above 1 ppm and/or lead at levels above 400 ppm.

The State of New Jersey has developed State-wide soil cleanup criteria for several of the contaminants found at the Chemsol Site, including several VOCs, SVOCs, lead (400 ppm) and PCBs (0.49 ppm). Based on the data collected to date, in meeting EPA's cleanup levels for PCBs and lead cited previously, EPA believes the remedy will also achieve the State of New Jersey residential direct contact and impact to groundwater soil cleanup criteria. For instance, VOC and PCB contamination is concentrated in the areas around borings 74 and 76 and extends as deep as 6 feet in these locations. As these locations are excavated to achieve the 1 ppm action level for PCBs, it appears

based on current data, that NJDEP's cleanup criteria of 0.49 ppm for PCB and its VOCs criteria may be achieved through the use of NJDEP's compliance averaging procedure.

The ultimate goal of the Superfund Program approach to groundwater remediation as stated in the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR part 300) is to return usable groundwater to their beneficial uses within a time frame that is reasonable. Therefore, for the Chemsol Site, the final groundwater remediation goals will be federal MCLs and State groundwater quality standards. Due to the complex geology and the possible presence of non-aqueous phase liquids at this Site, EPA believes that it may not be technically practicable to fully restore some portion of the contaminated on-site groundwater to federal and State standards. By law, any areas of contaminated groundwater which cannot be restored to meet federal and/or State groundwater standards require a waiver of such standards on the basis of technical impracticability. As will be discussed in subsequent sections, if after implementation of the remedy, it proves to be technically impracticable to meet groundwater quality standards, EPA will waive such standards for that portion of the plume that is found to be technically impracticable to remediate. Such a waiver would be documented in an Explanation of Significant Differences (ESD). A Classification Exception Area (CEA) would be established for the Site until such time that it can be shown that State groundwater quality standards are not exceeded. Performance data from any groundwater system selected for the Site would be used to determine the parameters and locations (both vertically and horizontally) which may require a technical impracticability waiver.

DESCRIPTION OF REMEDIAL ACTION ALTERNATIVES

CERCLA §121(b)(1), [42 U.S.C. §9621(b)(1)] mandates that a remedial action must be protective of human health and the environment, cost-effective, and utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. Section 121(b)(1) also establishes a preference for remedial actions which employ, as a principal element, treatment which permanently and significantly reduces the volume, toxicity, or mobility of the hazardous substances, pollutants and contaminants at a site. CERCLA §121(d), [42 U.S.C. §9621(d)], further specifies that a remedial action must attain a level or standard of control of the hazardous substances, pollutants, and contaminants, which at least attains ARARs under federal and state laws, unless a waiver can be justified pursuant to CERCLA §121(d)(4),[42 U.S.C. §9621(d)(4)].

EPA's FS evaluated, in detail, four remedial alternatives for addressing soil contamination at the Site and three remedial alternatives for addressing groundwater contamination. Cost and construction time, among other criteria, were evaluated for each remedial alternative. The time to implement a remedial alternative reflects the estimated time required to construct the remedy. The estimates do not include the time to possibly negotiate with the potentially responsible parties, prepare design documents, or procure contracts.

The remedial alternatives are:

SOIL

Alternative S-1: No Further Action

Estimated Capital Costs:$388,660
Estimated Annual O&M Costs (30 years):$0
Estimated Total Present Worth Value:$388,660
Estimated Implementation Period:3-6 months

The Superfund process requires that the "no-action" alternative be considered as a baseline for comparison with other alternatives. Under Alternative S-1, EPA would take no action at the Site. However, the No-Action alternative includes, as with the other soil alternatives, a single sampling event for drummed waste and soil stockpiled at the Site, along with their transportation and off-site disposal. The drummed wastes were generated from the various investigations performed at the Site and the stockpiled soils were generated from construction activities performed at the Site. Since contaminants would remain on-site, institutional controls (e.g., a deed restriction) would be placed on the property that would restrict future use of the Site. Because this alternative would result in contaminants remaining on-site above health based levels, a review would be conducted within five years from initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

Alternative S-2A: Capping with Soil

Estimated Capital Costs:$1,855,850
Estimated Annual O&M Costs (30 years):$2,000
Estimated Total Present Worth Value: $1,894,000
Estimated Implementation Period:3-6 months

Alternative S-2A includes the construction of a single layer (18 inches thick) soil cap covering 12 acres of the property which are contaminated above the soil cleanup levels. It would also require institutional controls to ensure that no intrusive activities would be performed on the capped area in the future since such activities would affect the cap's integrity. This alternative would allow for many recreational uses of the property, such as a park or playground, among others. A single sampling event of drummed waste and stockpiled soil along with their transportation and off-site disposal would be performed. Because this alternative would result in contaminants remaining on-site above health based levels, a review would be conducted within five years from the initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

Alternative S-3: Excavation and Off-Site Disposal

Estimated Capital Costs: $5,573,001
Estimated Annual O&M Costs (30 years):$0
Estimated Total Present Worth Value:$5,573,000
Estimated Implementation Period:6-12 months

Alternative S-3 includes excavation and off-site disposal of all surface soils contaminated with PCBs and lead that are above EPA's cleanup levels. Approximately 18,500 cubic yards of soil with PCB levels greater than 1 part per million and lead levels greater than 400 parts per million will be trucked off-site and disposed of at a licensed and approved RCRA/TSCA (Toxic Substances Control Act) facility. The excavated areas would be backfilled with imported clean fill from an off-site location, and covered with topsoil and seeded with grass. The excavation and off-site disposal of the contaminated soils will allow for residential or recreational use of the Site in the future. As with Alternative S-1, this alternative includes a single sampling event of drummed waste and stockpiled soil prior to disposal off-site. Since this alternative would result in the removal of soils above EPA's cleanup levels no contaminants would remain in on-site soils above health-based levels and, therefore, five year reviews of the remedy would not be necessary.

Alternative S-4A: Excavation and On-Site Low Temperature Thermal Desorption of PCB-Contaminated Soil with Disposal of Lead Contaminated Soil.

<u>Option-A [On-Site Solidification of Lead Contaminated Soil]</u>
Estimated Capital Costs: $11,963,134
Estimated Annual O&M Costs (30 years):$0
Estimated Total Present Worth Value:$11,963,134
Estimated Implementation Period:3-6 months

For Option A, all surface soil contaminated with PCBs above 1 part per million (18,500 cubic yards) would be excavated. The excavated soil would be treated on-site by low temperature thermal desorption (LTTD) to remove PCBs and VOCs. The LTTD unit would be operated in compliance with the Clean Air Act (CAA), RCRA, and all applicable State regulations. The treated soil would then be backfilled to the excavated areas, topsoil would be placed on the treated soils and the area seeded. As with the other soil Alternatives, Alternative S-4A includes a single sampling event of drummed waste and stockpiled soil prior to disposal off-site.

The lead contaminated soils would be solidified/stabilized on-site by mixing with Portland cement. The area on-site where this contaminated soil is placed would be protected from future intrusions. Because this alternative would result in contaminants remaining

on-site above health based levels, a review would be conducted within five years from initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

Option-B [Off-Site Disposal of Lead Contaminated Soil]
Estimated Capital Costs:$12,241,639
Estimated Annual O&M Costs(30 years):$0
Estimated Total Present Worth Value:$12,242,000
Estimated Implementation Period:6-9 months

As in Option A, all surface soil contaminated with PCBs above 1 part per million (18,500 cubic yards) would be excavated. The excavated soil would be treated on-site by low temperature thermal desorption (LTTD) to remove PCBs and VOCs. The LTTD unit would be operated in compliance with the CAA, RCRA, and all applicable State regulations. The treated soil would then be backfilled to the excavated areas, topsoil would be placed on the treated soils and seeded. As with the other soil Alternatives, Alternative S-4B includes a single sampling event of drummed waste and stockpiled soil prior to disposal off-site.

Under Option B, the lead-contaminated soil would be excavated and transported off-site for disposal at a licensed and approved RCRA disposal facility. The excavated areas would be backfilled with clean fill, and seeded. Since this alternative would result in the removal of soils above EPA's cleanup levels no contaminants would remain in on-site soils above health-based levels and, therefore, five year reviews of the remedy would not be necessary.

GROUNDWATER

Alternative GW-1: No Action with Monitoring

Estimated Capital Costs:$0
Estimated Annual O&M Costs(30 years): $59,336
Estimated Total Present Worth Value:$912,000
Estimated Implementation Period:0 months

The Superfund program requires that a "No-Action" alternative be considered as a baseline for comparison with other alternatives. Under this alternative, EPA would cease actions at the Site to treat the contaminated groundwater and to restrict the off-site migration of contaminated groundwater. However, the No-Action alternative does include long-term monitoring. Because this alternative would result in contaminants remaining on-site above health based levels, a review would be conducted within five years from initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

Alternative GW-2(A and B): Continue Existing Interim Action - Extract Groundwater from Well C-1

Option - A
Estimated Capital Costs:$ 45,097
Estimated Annual O&M Costs(30 years):$452,738
Estimated Total Present Worth Value:$7,000,300
Estimated Implementation Period:0 months

Under Option-A of this alternative, the current extraction of the groundwater from well C-1 would continue. The extracted groundwater first passes through an air stripper, after which it is filtered, followed by activated carbon adsorption. The treated water is then discharged to the Middlesex County Utilities Authority (MCUA) Publicly Owned Treatment Works (POTW). The treatment process generates a small quantity of non-bio-solids waste annually. The capital cost of $45,097 includes costs for replacing the existing pipeline (which carries water from well C-1 to the treatment plant) with an underground pipeline in order not to restrict the future uses of the property. This pumping is expected to continue until MCLs and State groundwater quality standards are reached in the plume. Because this alternative would result in contaminants remaining on-site above health based levels, a review would be conducted within five years from initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment. Also, a CEA would be established for the Site until such time that it can be shown that State groundwater quality standards are not exceeded.

Option - B
Estimated Capital Costs:$45,097
Estimated Annual O&M Costs(30 years):$726,336
Estimated Total Present Worth Value:$11,209,000
Estimated Implementation Period:3 months

In addition to the treatment described in Option-A, a biological treatment phase would be added for Option-B. This would be done by starting up the existing (currently unused) biological treatment plant. This phase is a contingency in the event that in the future, treated groundwater cannot be sent to MCUA. The biological treatment will provide additional treatment so the groundwater will achieve federal and State surface water quality standards which would allow for discharge to Stream 1A. The capital cost of $45,097 includes costs for replacing the existing pipeline (which carries water from well C-1 to the treatment plant) with an underground pipeline in order not to restrict the future uses of the property. Because this alternative would result in contaminants remaining on-site above health based levels, a review would be conducted within five years from initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment. Also, a CEA would be established for the Site until such time that it can be shown that State groundwater quality standards are not exceeded.

Alternative GW-5(A and B): Extract Groundwater from Additional Wells - Use Existing Treatment Processes Air Stripping/Aerobic Mixed Growth Biotreatment/Filtration/Activated Carbon Adsorption

Option - A
Estimated Capital Costs:$390,189
Estimated Annual O&M Costs(30 years):$670,892
Estimated Total Present Worth Value: $10,699,000
Estimated Implementation Period:3 months

Option-A of this alternative is almost identical to Alternative GW-2A. They differ in that, in addition to well C-1, groundwater would be pumped from other on-site wells. EPA cost estimates are based on pumping five additional wells. However, the number of wells to be pumped will be determined during the remedial design. Pumping from these additional wells will allow for more effective on-site containment of the plume, and also allow for groundwater extraction from other contaminated areas on-site. As in Alternative GW-2A, the treated groundwater would be discharged to MCUA POTW. The capital cost of $390,189 includes costs for replacing the existing pipeline (which carries water from well C-1 to the treatment plant) with an underground pipeline in order not to restrict the future uses of the property as well as costs associated with installation of additional extracting wells. Because this alternative would result in contaminants remaining on-site above health based levels, a review would be conducted within five years from initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment. Also, a CEA would be established for the Site until such time that it can be shown that State groundwater quality standards are not exceeded.

Option - B
Estimated Capital Costs:$390,189
Estimated Annual O&M Costs(30 years):$766,336
Estimated Total Present Worth Value:$12,169,000
Estimated Implementation Period:3 months

A biological treatment phase would be added for Option-B. This would be done by starting up the existing (currently unused) biological treatment plant. Use of the biological treatment phase would allow for discharge to Stream 1A in compliance with federal and State standards. The capital cost of $390,189 includes costs for replacing the existing pipeline (which carries water from well C-1 to the treatment plant) with an underground pipeline in order not to restrict the future uses of the property as well as costs associated with installation of additional extraction wells. Because this alternative would result in contaminants remaining on-site above health based levels, a review would be conducted within five years from initiation of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment. Also, a CEA would be established for the Site until such time that it can be shown that State groundwater quality standards are not exceeded.

SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES

In selecting a remedy, EPA considered the factors set out in CERCLA §121, 42 U.S.C. §9621, by conducting a detailed analysis of the viable remedial alternatives pursuant to the NCP, 40 CFR §300.430(e)(9) and OSWER Directive 9355.3-01. The detailed analysis consisted of an assessment of the individual alternatives against each of nine evaluation criteria and a comparative analysis focusing upon the relative performance of each alternative against those criteria.

The following "threshold" criteria are the most important and must be satisfied by any alternative in order to be eligible for selection:

1. *Overall protection of human health and the environment* addresses whether or not a remedy provides adequate protection and describes how risks posed through each exposure pathway (based on a reasonable maximum exposure scenario) are eliminated, reduced, or controlled through treatment, engineering controls, or institutional controls.

2. *Compliance with ARARs* addresses whether or not a remedy would meet all of the applicable (legally enforceable), or relevant and appropriate (pertaining to situations sufficiently similar to those encountered at a Superfund site such that their use is well suited to the site) requirements of federal and state environmental statutes and requirements or provide grounds for invoking a waiver.

The following "primary balancing" criteria are used to make comparisons and to identify the major trade-offs between alternatives:

3. *Long-term effectiveness and permanence* refers to the ability of a remedy to maintain reliable protection of human health and the environment over time, once cleanup goals have been met. It also addresses the magnitude and effectiveness of the measures that may be required to manage the risk posed by treatment residuals and/or untreated wastes.

4. *Reduction of toxicity, mobility, or volume through treatment* refers to a remedial technology's expected ability to reduce the toxicity, mobility, or volume of hazardous substances, pollutants or contaminants at the site.

5. *Short-term effectiveness* addresses the period of time needed to achieve protection and any adverse impacts on human health and the environment that may be posed during the construction and implementation periods until cleanup goals are achieved.

6. *Implementability* refers to the technical and administrative feasibility of a remedy, including the availability of materials and services needed.

7. *Cost* includes estimated capital and operation and maintenance costs, and the present-worth costs.

The following "modifying" criteria are considered fully after the formal public comment period on the Proposed Plan is complete:

8. *State acceptance* indicates whether, based on its review of the RI/FS reports and the Proposed Plan, the State supports, opposes, and/or has identified any reservations with the selected alternative.

9. *Community acceptance* refers to the public's general response to the alternatives described in the Proposed Plan and the RI/FS reports. Factors of community acceptance to be discussed include support, reservation, and opposition by the community.

A comparative analysis of the remedial alternatives based upon the evaluation criteria noted above follows:

Overall Protection of Human Health and the Environment

Soil

Alternative S-1, No Action, would not be protective of human health and the environment because the Site would remain in its current condition. The soils would continue to pose a threat to potential future residents, trespassers, potential ecological receptors and the environment. Therefore, Alternative S-1 has been eliminated from consideration and will not be discussed further.

Alternative S-2A relies on containment and institutional controls to provide protection over time. Deed restrictions would have to be enforced to ensure that the cap is not breached in the future in order for this alternative to be protective.

Upon completion of Alternative S-3 and Alternative S-4(A and B), the potential risks to human health and the environment from organic and inorganic contaminants would be minimized if not eliminated through off-site removal or treatment of contaminants in the surface soils to protective levels.

Groundwater

Alternative GW-1, No Action, would not be protective of human health and the environment because the groundwater would continue to migrate off-site continuing to pose a potential threat to users. Therefore, Alternative GW-1 has been eliminated from consideration and will not be discussed further.

Alternatives GW-2 (A and B) and GW-5 (A and B) would be protective of human health by controlling the migration of contaminated groundwater through pumping and by removing contaminants through treatment of pumped groundwater. GW-5 (A and B) captures and removes more contamination than GW-2 (A and B).

Compliance with ARARs

Soil

There are no chemical specific ARARs for soil. However, the State has developed State-wide soil cleanup criteria that while not legally applicable, were considered by EPA in selecting cleanup levels for the Site. If implemented, Alternatives S-3 and S-4(A and B) would meet location-specific and action-specific Federal and State ARARs for the contamination in the soils. The major ARARs for Alternative S-3 are Federal and State Resource Conservation and Recovery Act (RCRA) requirements which control the transportation and disposal of hazardous waste. For example, the soil excavated under Alternative S-3 would be disposed at a facility which is licensed under RCRA to accept hazardous waste. Alternatives S-4(A and B) would involve the use of an on-site treatment technology which would be subject to RCRA treatment regulations and Clean Air Act requirements regarding emissions from the treatment system. Air emissions will require air permit equivalences from the State of New Jersey. In addition, because a portion of the Site is classified as wetlands, all alternatives (soil and/or groundwater) would need to comply with Section 404 of the Clean Water Act and federal Executive Order 11990 which requires federal agencies to take actions to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. A wetland restoration and monitoring plan will be prepared as a part of the remedial design plan to address potential impact to the wetlands, such as groundwater drawdown.

Groundwater

Alternatives GW-2 (A and B) and GW-5(A and B) would meet the chemical-specific ARARs for the treated water before discharge. These include New Jersey Pollutant Discharge Elimination System requirements for discharges to surface water. In addition, air emissions from the treatment plant would need to comply with Federal and State emissions standards. Alternatives GW-2(A and B) and GW-5(A and B) produce a non-hazardous filter cake. Also, a CEA would be established for the Site until such time that it can be shown that State groundwater quality standards are not exceeded.

Alternative GW-5(A and B) is more likely to achieve State and federal water quality standards in the aquifers than is GW-2, because GW-5(A and B) would utilize several wells to extract contaminated groundwater from the aquifer whereas GW-2 would utilize only one extraction well. The additional extraction will provide greater capture of

contaminants and therefore increase the likelihood of achieving State and federal water quality standards. It is possible that it will be technically impracticable to restore all portions of the aquifers to meet State and federal standards. Any areas of contaminated groundwater which cannot be restored to meet State and/or federal groundwater quality standards require a waiver of such standards on the basis of technical impracticability. If after implementation of the remedy, it proves to be technically impracticable to meet water quality standards, EPA would waive such standards. Performance data from any groundwater system selected for the Site would be used to determine the parameters and locations (both vertically and horizontally) which may require a technical impracticability waiver.

Remedial activities for groundwater at the Site may disturb or impact wetlands. Impacts may include groundwater drawdown or alteration of the hydrologic characteristic of the area, as well as improvement or installation of wells. These potential impacts will be considered in the remedial design report.

Long-Term Effectiveness and Permanence

Soil

Alternatives S-4(A and B) provide the highest degree of long-term effectiveness and permanence since the waste would be treated to permanently remove organic contaminants. Alternative S-3 provides a high degree of long-term effectiveness by removing waste from the Site but does not provide a high degree of permanence since waste would not be destroyed but only contained off-site.

Under Alternative S-2A, contaminated soils would remain on-site and, therefore, this remedy would provide the least amount of long-term effectiveness and permanence. In addition, institutional controls would need to be employed and enforced in order to ensure effectiveness.

Groundwater

Alternatives GW-2(A and B) and GW-5(A and B) provide varying amounts of containment of the contaminated groundwater. Additional off-site investigations to determine the extent of groundwater contamination are necessary to ensure that risks to neighboring communities are minimized. Alternatives GW-5 (A and B) provide a higher degree of long-term effectiveness than Alternatives GW-2 (A and B) by capturing a larger mass and volume of contaminants in the groundwater. The on-site treatment facility will therefore treat a greater quantity of contaminated groundwater and remove a larger mass of contaminants from the extracted groundwater. The additional extraction wells would also better contain the plume on-site.

Short-Term Effectiveness

Soil

Alternatives S-2A, S-3, and S-4(A and B) do involve construction activities that would pose a low level risk of exposure to soils by ingestion, direct contact and inhalation to Site workers; however this risk can be managed by appropriate health and safety measures. All of the alternatives can be implemented relatively quickly, in less than a year following completion of design.

Alternative S-3 involves a significant increase in dust, vapor, and noise generation during soil excavation. These would be minimized through the use of measures which would be undertaken to ensure that all activities are performed in such a way that vapors, dust, and other materials are not released to the surrounding community during excavation. In addition, Alternative S-3 includes off-site transportation of the excavated soils. This will increase truck traffic and noise in the community during the period when soil is being transported off-site. Transportation flow patterns will be designed to minimize traffic impacts on the community. This may entail constructing a road from the Site which will bypass residential areas.

Under Alternative S-4(A and B), a thermal desorber would be placed on-site, causing increases in noise and emissions from the unit. To minimize the risk from inhalation of vapors from the thermal desorber which is required, a secondary chamber would be utilized that would oxidize all organic compounds released from the LTTD process to carbon dioxide, water and hydrochloric acid.

Groundwater

All the groundwater alternatives provide short-term effectiveness in protecting the Site workers and neighboring communities from the risks due to ingestion and inhalation of VOCs. Alternatives GW-2(A and B) and GW-5(A and B) would pose a low level risk to Site workers during construction; however, this risk can be managed by the use of appropriate health and safety measures. Alternative GW-2 is a continuation of the existing system and is running now. Alternatives GW-5 (A and B) can be implemented very quickly (in approximately 3 months) since they are simply an addition to the current system.

Reduction of Toxicity, Mobility or Volume Through Treatment

Soil

Alternatives S-4(A and B) provide for physical removal of the contaminated material and the maximum reduction in toxicity and mobility through treatment. Alternative S-2A and Alternative S-3 do not include the use of treatment to reduce the toxicity, mobility or

volume of contaminated soil. For Alternative S-2A, reduction in the mobility of the contamination would be achieved through the use of containment. For Alternative S-3, reduction in toxicity, mobility and volume would be achieved through excavation and off-site disposal rather than through treatment.

Groundwater

Alternatives GW-2(A and B) and GW-5(A and B) reduce the toxicity and volume of contamination from the extracted groundwater. However, Alternative GW-5(A and B) would operate at approximately twice the pumping rate of Alternative GW-2(A and B). The mobility of the contaminants is completely controlled by the pump-and-treat alternatives to the extent that the groundwater is within the capture zone of the wells. Greater reduction of volume and toxicity of contaminated groundwater is achieved by GW-5 than GW-2. Alternative GW-5 also results in greater capture and containment of contaminated groundwater.

Implementability

Soil

All of the services and materials needed to implement the soil alternatives are readily available commercially. Each alternative utilizes standard technologies for excavation, capping and transportation of soils. However, due to the high demand for thermal desorption units, there may be a delay in implementing Alternative S-4 (A and B). All the alternatives are technically feasible but Alternatives S-4(A and B) require a treatability study to obtain design parameters for the full-scale system. Alternatives S-4(A and B) have complex administrative issues because of the quantity of equipment that needs to be set up at the Site and the need to provide substantive compliance with State air emissions permit requirements. Alternative S-3 is easily implementable using standard excavation technology. If possible, a temporary access road that would provide more direct access from the Site to nearby highways, would be built, in order to minimize the number of trucks traveling through the community. Engineering controls are readily implementable to minimize air borne dust and contaminants for all excavation activities. If necessary, a small pilot-scale study will be undertaken to help in estimating the ambient air impact for soil excavation at the Site.

Groundwater

All of the services and materials needed to implement the groundwater alternatives are readily available commercially. All the alternatives are technically feasible but Alternatives GW-2(A and B) and GW-5(A and B) require skilled operators to successfully implement the remedy. The alternatives are also feasible from an administrative standpoint. The required activities for the pump-and-treat would occur on Chemsol

property. The treatment plant for the interim remedy has already been built and has been in operation for the last three years with discharge to the MCUA POTW. The effluent line for the discharge to Stream 1A has also been installed even though it is not currently being used.

All the services needed to implement the alternatives already exist. The pump-and-treat alternatives require the most services since they require operation of the treatment plant and disposal of filtered waste from the plant.

Costs

The capital, annual operation and maintenance, and present worth costs are presented in Tables 10 and 11, (Appendix II). Present worth costs for all the alternatives were calculated assuming a 5% interest rate and a 30-year operation and maintenance period.

Soil

Capital costs for Alternative S-1 are estimated to be $338,660 which includes costs for a single sampling event of drummed waste and stockpiled soils along with transporting and off-site disposal of the drummed waste and the stockpiled soil. There would be no operation and maintenance costs so that the total present worth is estimated to be $338,660.

Capital costs for Alternative S-2A are estimated to be $1,855,850. This includes the costs of the sampling and off-site disposal described for Alternative S-1 plus the costs of constructing and seeding the soil cap. Annual operation and maintenance costs are estimated to be $2,000. The total present worth is estimated to be $1,894,000.

Capital costs for Alternative S-3 are estimated to be $5,573,000. This includes the costs of the sampling and off-site disposal described for Alternative S-1 plus the costs of excavating and disposing of the contaminated soils off-site. There are no annual operation and maintenance costs so that the total present worth is estimated to be $5,573,000.

Capital costs for Alternative S-4A are estimated to be $11,963,134. This includes the costs of the sampling and off-site disposal described for Alternative S-1 plus the costs of excavating and treating the contaminated soils on-site. There are no annual operation and maintenance costs since the treatment would be accomplished in less than a year so that the total present worth is estimated to be $11,963,134.

Capital costs for Alternative S-4B are estimated to be $12,241,639. This includes the costs of the sampling and off-site disposal described for Alternative S-1 plus the costs of excavating and treating the contaminated soils on-site and disposing the lead-

contaminated soils off-site. There are no annual operation and maintenance costs since the work would be accomplished in less than a year so that the total present worth is estimated to be $12,242,000.

Groundwater

In the case of all groundwater alternatives, the costs (Table 11, Appendix II) are in addition to those already incurred to install and operate the existing interim extraction and treatment system at the Site.

Alternative GW-1 does not have any capital cost. The annual operation and maintenance costs are estimated to be $59,336 and include costs for monitoring the groundwater. The total present worth cost is estimated to be $912,000.

Capital costs for Alternative GW-2A are estimated to be $45,097. These costs include costs associated with installation of underground piping from well C-1 to the treatment plant. The annual operation and maintenance costs are estimated to be $452,738. The total present worth is estimated to be $7,000,300.

Capital costs for Alternative GW-2B are estimated to be $45,097 and include costs associated with installation of underground piping from well C-1 to the treatment plant. Annual operation and maintenance costs are estimated to be $726,336. The total present worth is estimated to be $11,209,000.

Capital costs for Alternative GW-5A are estimated to be $390,189 and include costs associated with installation of underground piping from well C-1 to the treatment plant and costs for installing piping to five additional extraction wells. Annual operation and maintenance costs are estimated to be $670,892. The total present worth is estimated to be $10,699,000.

Capital costs for Alternative GW-5B are estimated to be $390,189 and include costs for installing piping to five additional extraction wells. Annual operation and maintenance costs are estimated to be $766,336. The total present worth is estimated to be $12,169,000.

State Acceptance

The NJDEP will not concur with this ROD. This stems from the fact that EPA's residential cleanup level for PCBs in soil is 1 ppm while NJDEP's residential cleanup criterion is 0.49 ppm. NJDEP cannot concur with the ROD unless it specifically requires institutional controls if the Site is not remediated to the NJDEP's 0.49 ppm residential use criterion for PCBs. However, NJDEP does not object to EPA's groundwater remedy.

Community Acceptance

EPA solicited input from the community on the remedial alternatives proposed for the Chemsol Site. While the community is supportive of EPA's preferred remedy, some citizens have indicated their preference for EPA to cleanup the soils at the Site to NJDEP cleanup criteria of 0.49 ppm for PCBs, instead of EPA's cleanup level of 1 ppm. The attached Responsiveness Summary addresses the comments received during the public comment period.

SELECTED REMEDY

Based upon consideration of the results of the RI/FS, the requirements of CERCLA, the detailed analysis of the alternatives, and public comments, EPA has determined that Alternative S-3 and Alternative GW-5 are the appropriate remedies for the Site, because they best satisfy the requirements of CERCLA §121 and the NCP's nine evaluation criteria for remedial alternatives, 40 CFR §300.430(e)(9). This remedy is comprised of the following components:

Soil

- Excavation and off-site disposal of approximately 18,500 cubic yards of contaminated soil with PCBs above 1 part per million (ppm) and lead above 400 ppm. The excavated areas will be backfilled with clean imported fill from an off-site location, covered with topsoil, then seeded with grass.

- Disposal of the excavated soils at an appropriate off-site disposal facility, depending on waste characteristics.

Groundwater

- Installation and pumping of additional extraction wells to contain contaminated groundwater on-site.

- Continued treatment of extracted groundwater through the existing groundwater treatment facility. The treated groundwater may continue to be released to the Middlesex County Utilities Authority (MCUA), if not, will undergo on-site biological treatment, prior to being released on-site, to Stream 1A.

- Perform an additional groundwater investigation to determine if contaminated groundwater is leaving the property boundaries.

Surface Water and Sediments

- Monitoring of sediments and surface water to determine if remediation of Lot 1B results in lower PCB levels in the on-site streams, Stream 1A and 1B over time.

The selection of this remedy is based on the comparative analysis of the alternatives discussed above and provides the best balance of tradeoffs with respect to the nine evaluation criteria.

STATUTORY DETERMINATIONS

As was previously noted, CERCLA §121(b)(1), mandates that a remedial action must be protective of human health and the environment, cost-effective, and utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. Section 121(b)(1) also establishes a preference for remedial actions which employ treatment to permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances, pollutants, or contaminants at a site. CERCLA §121(d), further specifies that a remedial action must attain a degree of cleanup that satisfies ARARs under federal and state laws, unless a waiver can be justified pursuant to CERCLA §121(d)(4).

For the reasons discussed below, EPA has determined that the selected remedy meets the requirements of CERCLA §121.

Protection of Human Health and the Environment

The selected soil remedy protects human health and the environment by removing contaminated surface soils (0-2 feet depth) for off-site disposal. In addition, borings 74 and 76 with PCB contamination down to 6 feet depth, will also be excavated. Such excavation may also enable the NJDEP soil cleanup criteria to be achieved through soil compliance averaging. All excavated soils will be disposed of off-site at an appropriate disposal facility, depending on the characteristics of the soils.

The selected groundwater remedy will be protective of human health and the environment by controlling the migration of contaminated groundwater through pumping and the removal of contaminants through treatment of the pumped groundwater. This action will contain the highly contaminated groundwater on-site as well as provide for removal of contaminants, through treatment.

Compliance with ARARs

As part of the selected remedy, contaminated soils will be excavated and disposed of off-site. There are no chemical specific ARARs for soil. However, EPA and the State have promulgated guidances that while not legally applicable, were considered by EPA in establishing cleanup levels for the Site. The selected soil remedy will meet location - specific, and action-specific federal and State ARARs. Chemical-specific ARARs include: the Clean Air Act of 1976 which governs emissions resulting from excavation and off-site disposal of soils and Section 112 of the Clean Air Act which defines National Emissions Standards for Hazardous Air Pollutants (NESHAPs) (See Table 12).

Location-specific ARARs for the selected soil remedy include: Executive Order 11990 (Wetlands Protection); the Wetlands Construction and Management Procedures (40 CFR, Appendix A); Executive Order 11988 (Floodplain Management); and, the National Historic Preservation Act of 1966. Since a portion of the Site is classified as wetlands, the soil remedy needs to comply with Section 404 of the Clean Water Act and federal Executive Order 11990 which requires federal agencies to take actions to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. Any actions which disturb or impact wetlands would additionally require development of a wetland mitigation plan.

Action-specific ARARs for the soil remedy include: portions of the Resource Conservation and Recovery Act and its implementing regulations, specifically those portions dealing with the transportation, storage and disposal (including land disposal) of hazardous wastes and Department of Transportation requirements governing the off-site transport of hazardous materials.

As far as the selected groundwater remedy, the major chemical-specific ARARS are the Safe Drinking Water Act (SDWA) Maximum Contaminant Levels(MCLs) and the New Jersey Groundwater Quality Standards. For a given contaminant, at the conclusion of the groundwater remedy, groundwater in the aquifer at the Site boundaries should meet either the MCL or the Groundwater Quality Standard, whichever is more stringent (see Table 2). However, it is possible that the selected groundwater remedy will not meet chemical-specific ARARS for the organic contaminants in all groundwater beneath the Site. The water quality in the fractured bedrock aquifer is not expected to be restored to below MCLs or background levels for at least several decades due to the potential presence of DNAPLs. Any areas of contaminated groundwater which cannot be restored to meet State and/or federal groundwater quality standards (see Table 2) would require a waiver of such standards on the basis of technical impracticability. If after implementation of the remedy, it proves to be technically impracticable to meet the ARARS in Table 2, EPA would waive such standards. Performance data from the groundwater system would be used to determine the parameters and locations (both horizontally and vertically) which require such a technical impracticability waiver. Extracted groundwater would be treated to meet federal and State ARARS related to discharge of treated groundwater such as National Pollutant Discharge Elimination System (NPDES) and New Jersey Pollutant Discharge Elimination System (NJPDES) requirements.

Location-specific ARARS include for the selected groundwater remedy include: Executive Order 11990 (Wetlands Protection); the Wetlands Construction and Management Procedures (40 CFR, Appendix A); Executive Order 11988 (Floodplain Management); and, the National Historic Preservation Act of 1966. Since a portion of the Site is classified as wetlands, the groundwater remedy would comply with Section 404 of the Clean Water Act and federal Executive Order 11990 which requires federal agencies to take actions to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. Any actions which disturb or impact wetlands would additionally require development of a wetland mitigation plan.

Action-specific ARARS for the groundwater remedy include: portions of the Resource Conservation and Recovery Act and its implementing regulations, specifically those portions dealing with the transportation, storage and disposal (including land disposal) of hazardous wastes.

Cost Effectiveness

The selected soil remedy is cost-effective as it has been determined to provide the greatest overall long-term and short-term effectiveness in proportion to its present worth cost, $5.6 million with no annual operation and maintenance. Alternative S-4(A and B) would provide an equivalent level of protection, but at almost twice the cost [$11.96 - $12.24] million. Alternative S-2A (Capping with Soil), is estimated to cost $1.9 million, which is less than the selected remedy, but since contamination would be left on Site, Alternative S-2A would not provide a high degree of long-term effectiveness.

The selected groundwater remedy is cost-effective as it has been determined to provide the greatest overall long-term and short-term effectiveness. Even though the selected remedy, GW-5, has a higher O&M cost than GW-1 and GW-2, the pumping of these additional groundwater extraction wells allows for more effective on-site containment of the plume and also allows for groundwater extraction from other contaminated areas on-site.

Utilization of Permanent Solutions and Alternative Treatment Technologies to the Maximum Extent Practicable

The selected soil and groundwater remedies represent the maximum extent to which permanent solutions and alternative treatment technologies can be utilized in a cost-effective manner for the Chemsol Site. Furthermore, the selected remedies provide the best balance of tradeoffs with respect to the nine evaluation criteria.

Preference for Treatment as a Principal Element

The selected groundwater remedy satisfies the statutory preference for treatment as a principal element. The selected remedy utilizes treatment to reduce levels of contamination in groundwater to achieve ARARs, to the extent practicable. The

activated carbon in the extracted groundwater are either destroyed by catalytic oxidation or are collected on liquid phase carbon which are later regenerated. Regeneration of the carbon converts the organic contaminants to carbon dioxide, water and hydrochloric acid, thereby eliminating the toxicity.

DOCUMENTATION OF SIGNIFICANT CHANGES

The Proposed Plan for the Site was released to the public in August 1997. This Plan identified Alternative S-3 as the preferred alternative to address the soil contamination and Alternative GW-5 as the preferred alternative to address the groundwater contamination at the Chemsol, Inc. Site. Upon review of all comments submitted, EPA determined that no significant changes to the selected remedy, as it was presented in the Proposed Plan, were necessary.

D

Appendix D

Section 1 – Settling Work Defendants

AlliedSignal Inc., a successor to Allied Corporation (formerly known as Allied Chemical Corporation), The Bendix Corporation and Sinclair and Valentine Company, Inc. and on behalf of ASI Specialty Chemicals, L.L.C. (successor to EM Sector Holdings Inc., f/k/a UOP Inc.), a wholly owned subsidiary of AlliedSignal Inc.
Benjamin Moore & Co.
Borden, Inc.
Colgate-Palmolive Company (for Colgate-Palmolive Company, Ell Bee Chemical Co., Inc., and XEB Inc.)
Curtiss-Wright Corporation
Cytec Industries Inc. (on behalf of itself and on behalf of American Cyanamid Company)
E. I. du Pont de Nemours and Company (for Pitt-Consol Chemical, Continental Oil, CONOCO)
Exxon Chemical Americas, a division of Exxon Chemical Company, a division of Exxon Corporation (for Exxon Corporation, its divisions, subsidiaries and affiliates)
Ford Motor Company
General Electric Company
General Motors Corporation (for General Motors Corporation and its former Hyatt Bearings Division)
Gulton Industries
Hercules Incorporated
HNA Holdings, Inc. f/k/a Hoechst Celanese Corporation
Hoffmann-LaRoche Inc.
International Business Machines Corporation
Lucent Technologies Inc. (for and/or in place of AT&T Corp./Western Electric Company, Inc.)
Merck & Co., Inc.
Mobil Business Resources Corp. (for Mobil Oil Corporation)
Pfizer Inc.
Pratt & Whitney, Division of United Technologies Corporation
Rohm and Haas Company
Schering Corporation
Shell Oil Company (for Shell Oil Company and Shell Chemical Company)
Solutia Inc. (for Monsanto Company)
Texaco Inc. (for Texaco Inc., Tidewater Oil Company, and Jefferson Chemical Company)
Union Carbide Corporation (Union Carbide Chemicals and Plastics Company Inc.)
Wyeth-Ayerst Pharmaceuticals Inc.

Appendix D (cont'd)

Section 2 – De Minimis Settling Defendants

Ashland Inc. (for Ashland Chemical, Inc., Drew Chemical Corp., Fisher-Gamma Chemical)
BASF Corporation
Becton, Dickinson and Company
Ciba Specialty Chemicals Corporation and its successors and assigns
Con-Lux Coatings, Inc.
The Dow Chemical Company
Fisher-Price, Inc.
Henkel Corporation (to also include Henkel, Inc.)
Indopco, Inc. d/b/a National Starch and Chemical Company
International Flavors & Fragrances Inc.
Johnson & Johnson
Kimberly-Clark Corporation (for Kimberly-Clark Corporation and Plastic Coatings Co.)
Mattel, Inc.
Mayco Oil & Chemical, a division of Castrol Industrial North America
Morton International, Inc. (for Thiokol Corporation and Morton-Thiokol, Inc.)
Novartis Corporation and its successors and assigns
Olin Corporation (for Olin Corporation and Winchester Arms)
PPG Industries, Inc.
Reichhold, Inc., f/k/a Reichhold Chemicals, Inc.
Sequa Corporation (on behalf of Sun Chemical Corporation)
USX Corporation (formerly United States Steel Corporation)
W.R. Grace & Co. (for W.R. Grace & Co. and Hatco Corporation)

Section 3 - Owner Settling Defendant

Tang Realty, Inc.

Appendix E

Settling Federal Agencies

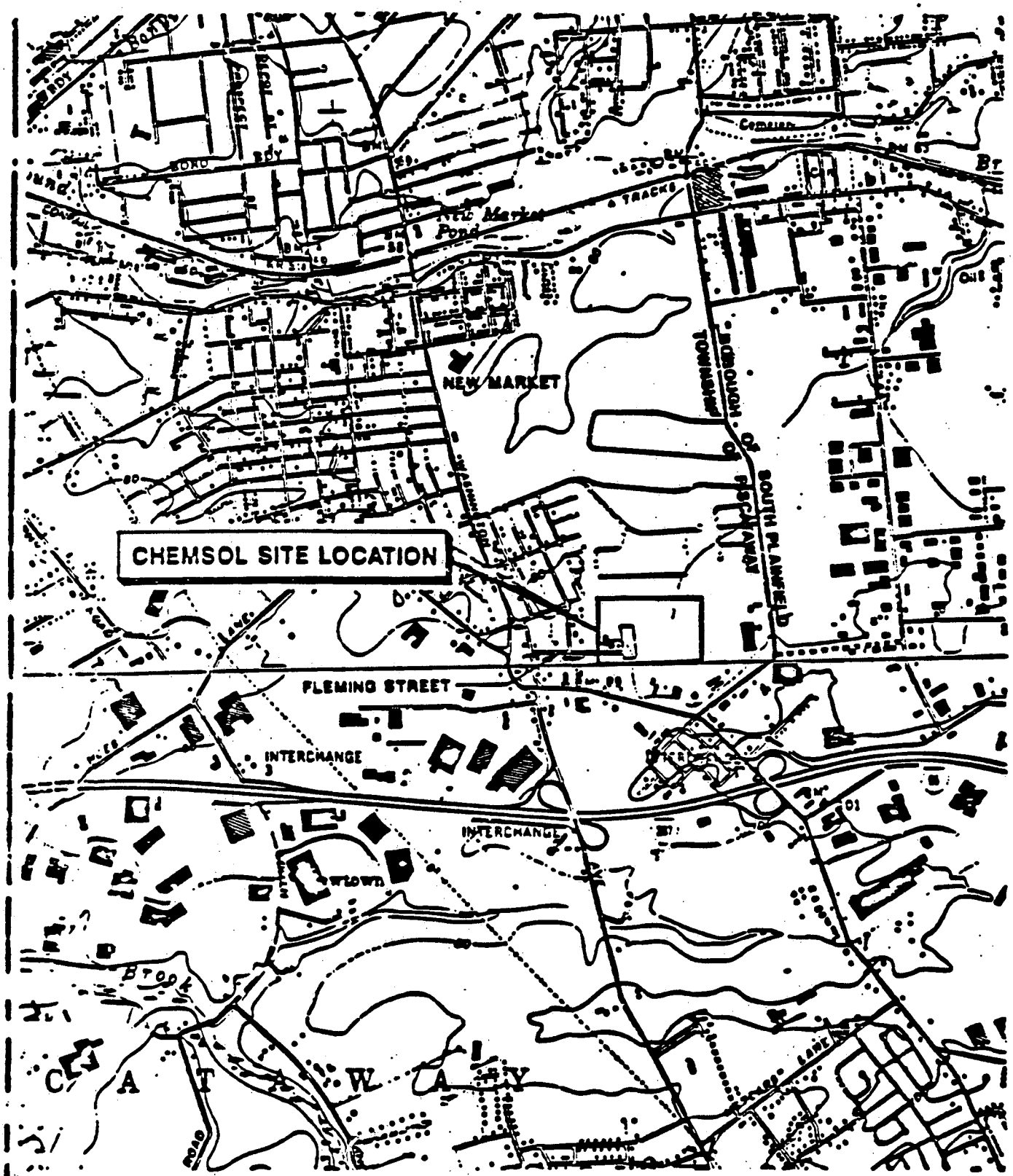
General Services Administration

Department of the United States Army

Department of the United States Navy

Department of the United States Air Force

F



SOURCE: USGS TOPOGRAPHIC MAP, PLAINFIELD, NEW JERSEY, 1981.

1000 0 1000 2000

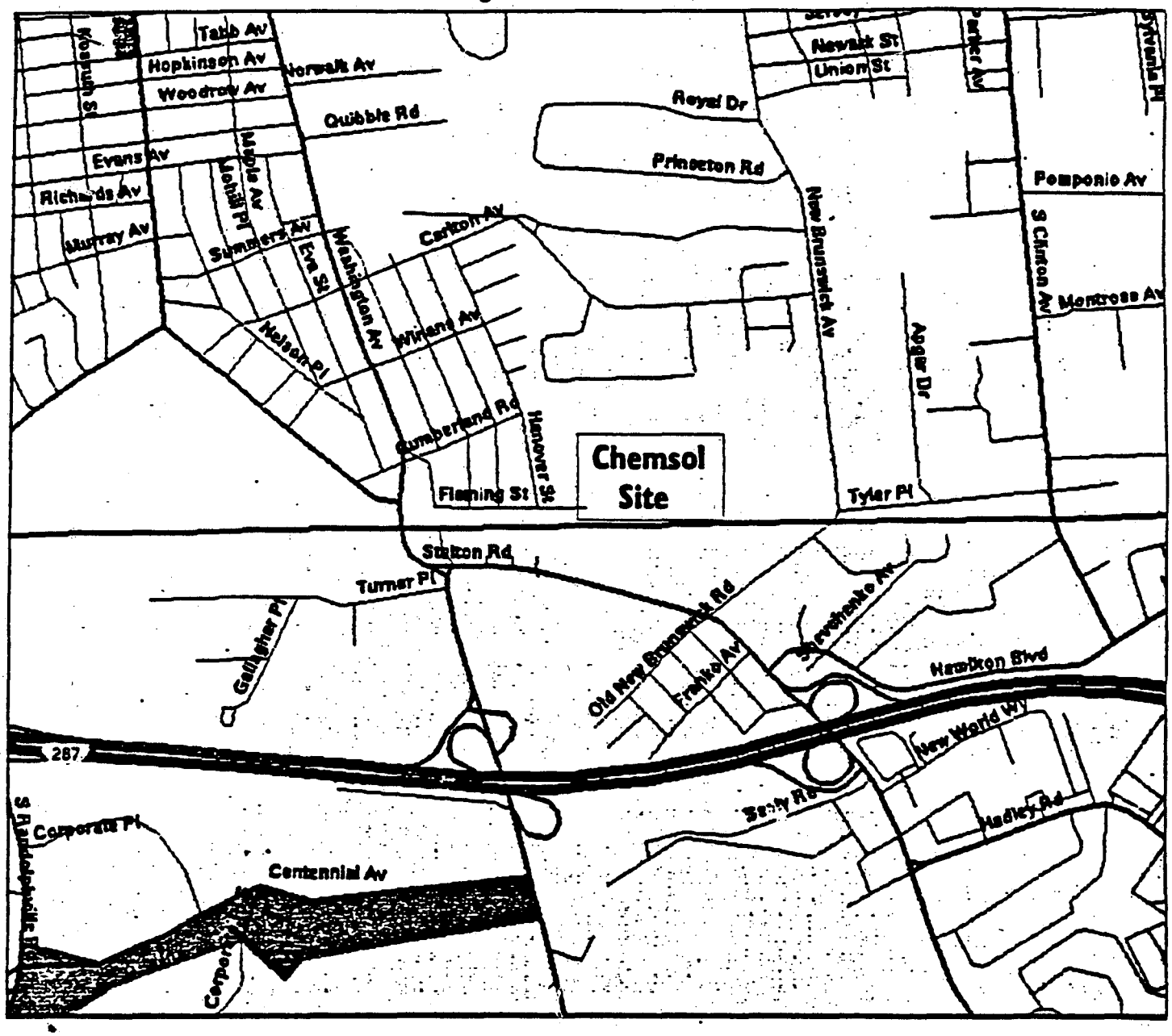
SCALE IN FEET

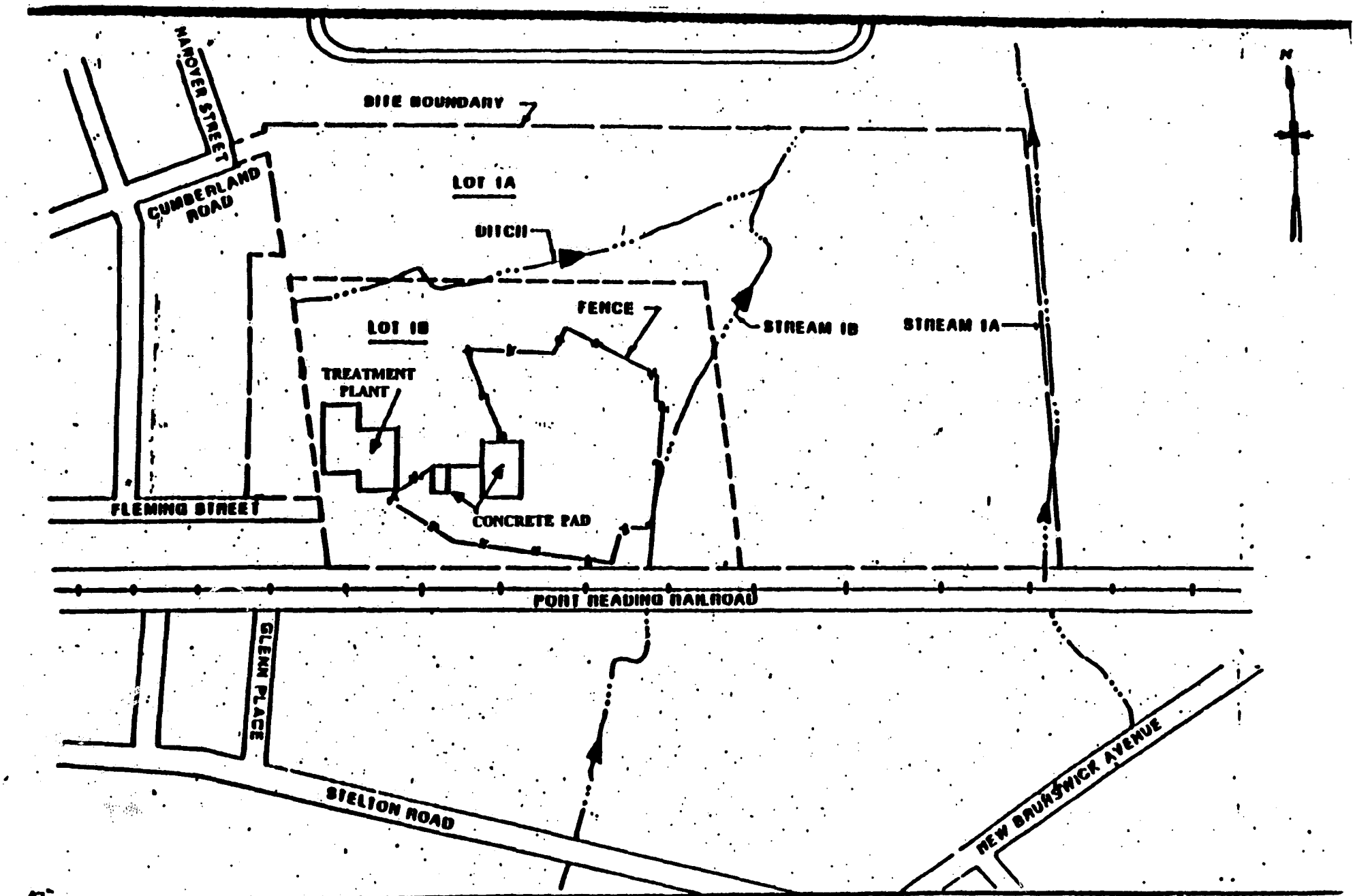
CHEMSOL INCORPORATED (TANG REALTY) SITE
PISCATAWAY TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY

SITE LOCATION MAP

MALCOLM PIRNIE

Figure 1: Site Location





CHEMSOL, INC.
PISCATAWAY, NEW JERSEY
SITE MAP

FIGURE 2

G

STATEMENT OF WORK

Chemsol, Inc. Superfund Site

The objectives of the Work to be conducted pursuant to the Consent Decree for the Chemsol, Inc. Superfund Site (the "Site") are to control the sources of contamination at the Site and to reduce or minimize the migration of contaminants by:

- Excavation and off-site disposal of approximately 18,500 cubic yards of contaminated soils with PCBs above 1 part per million (ppm) and lead above 400 ppm. See Figure 3 in the Record of Decision (ROD) for the minimum area to be excavated. The ROD is Appendix C to the Consent Decree (CD).

- To prevent direct contact with and ingestion of any remaining soil with PCB and lead concentrations in excess of New Jersey state cleanup criteria.

- Augment the existing groundwater system to contain that portion of contaminated water within the boundaries of the property owned by the Owner Settling Defendant that is unlikely to be technically practicable to fully restore, and restore any remaining affected groundwater within the boundaries of the property owned by the Owner Settling Defendant to State and Federal drinking water standards set forth in Table 2 of EPA's September 18, 1998 Record of Decision ("ROD"); and

- Extract and treat as much contamination as practicable from the fractured bedrock within the boundaries of the property owned by the Owner Settling Defendant.

If necessary following completion of the soil excavation, the selected remedy as set forth in the ROD may be supplemented by the imposition of a Deed Notice on the Site. The major components of the Selected Remedy include the following two Remedial Work Elements:

Remedial Work Element I

- Excavation and off-site disposal of surface soils contaminated with polychlorinated biphenyls (PCBs) above 1 part per million (ppm) and lead above 400 ppm. The excavated areas will be backfilled with clean imported fill from an off-site location augmented with clean fill from the on-site soil stockpiles, (providing the on-site fill meets the State of New Jersey residential soil clean-up criteria), covered with topsoil, then vegetated; and

- Disposal of the excavated soils at an appropriate off-site disposal facility, depending on waste characteristics.

Remedial Work Element II

- Installation of additional wells or retrofitting existing wells and pumping to contain contaminated groundwater within the boundaries of the property owned by the Owner Settling Defendant;

- Continued treatment of extracted groundwater through the existing groundwater treatment facility. The treated groundwater may continue to be discharged to the Middlesex County Utilities Authority (MCUA). If discharging to the MCUA becomes infeasible, treated groundwater will undergo additional treatment as necessary, prior to being discharged on-site, to Stream 1A, in compliance with the State of New Jersey requirements. Additional treatment may include biological treatment in the on-site biological treatment unit;

- Additional groundwater investigation to determine if contaminated groundwater is leaving the property boundaries;

- Implementation of long-term maintenance and operation of the ground-water extraction/treatment system; and

- Monitoring of sediments and surface water to determine if remediation of Lot 1B results in lower PCB and volatile organic levels in Stream 1B and the Northern Ditch, over time.

The Work to be performed under the Consent Decree shall include, but shall not be limited to, the following:

A. Pre-remedial Design Activities for the Selected Remedy for the Site;

B. Remedial Design (RD) of the Selected Remedy for the Site, as set forth in the ROD. The ROD is attached as Appendix

C to the Consent Decree;

C. Remedial Construction of the Remedial Action for Remedial Work Elements I and II;

D. Implementation of Long-Term Operation of the Remedial Action for RWE II (including Post-Construction Monitoring); and

E. Post-Remediation Monitoring.

I. **PERFORMANCE STANDARDS**

For soils, on the property owned by Owner Settling Defendants the Performance Standard shall be 1 ppm PCBs and 400 ppm lead for soils below ground surface of the property owned by the Owner Settling Defendant. Based on data collected to date, excavation will be required at a minimum as shown in Figure 3 of the ROD. In addition, soils will be excavated to depths down to 6 feet within the vicinity of borings 74 and 76. This excavation plan may be augmented based on additional data collected during design.

For contaminated groundwater within the boundaries of the property owned by the Owner Settling Defendant, the goal is to achieve the State and Federal drinking water standards set forth in Table 2 of the ROD, unless EPA determines that such standards would be technically impracticable to achieve within a reasonable period of time.

II. **PROJECT SUPERVISION/MANAGEMENT**

The Remedial Design, Remedial Construction, and Remedial Action, as defined in the Consent Decree, and any other activities performed, will be under the direction and supervision of a qualified New Jersey State licensed professional engineers and meet any and all requirements of applicable Federal, New Jersey State and local laws. Settling Work Defendants shall notify EPA and the New Jersey Department of Environmental Protection ("NJDEP") , in writing, of the names of all contractors and subcontractors proposed to be used in the development and implementation of the Work to be performed. Selection of any such engineer, contractor, or subcontractor shall be subject to approval by EPA.

III. PRE-REMEDIAL DESIGN ACTIVITIES

The pre-remedial design activities to be performed in the implementation of the Selected Remedy for the Site include the following:

A. Collect one round of samples from all existing wells to evaluate the current extent of groundwater contamination and the effectiveness of the interim pumping system pursuant to the scope of work dated October 23, 1998 submitted by the Settling Work Defendants and approved by EPA by letter dated November 4, 1998. (Performed November through December 1998.)

B. Sample existing wells: (TW-14, TW-15 and MW-104) to collect hydrologic and chemical data to assist in determining whether contaminated groundwater is leaving the property boundaries.

C. Perform a pre-remedial action characterization of PCB concentrations in surface water, sediments and groundwater quality prior to implementation of the Selected Remedy. The nature and extent of the pre-remedial action characterizations will be set forth in the Sampling, Analysis, and Monitoring Plan (SAMP) prepared as part of the Remedial Design Work Plan (RDWP).

D. Evaluate the existing groundwater treatment plant to determine its practical capacity.

E. Conduct of a Pre-Design Verification Study (PDVS) for Remedial Work Element II. The PDVS will involve construction of extraction wells and supplemental observation wells, followed by a controlled pumping of the extraction well system. The combined extraction rate of the system will be progressively increased until the design objective of on-site containment of contaminated groundwater is verified through monitoring of the observational well network. Thereafter, extraction of water from select additional wells will be studied to enhance contaminant mass removal.

F. More precisely delineate the horizontal extent of surface soil (zero to two feet below ground surface) with PCB concentrations greater than 1 ppm and lead concentrations greater than 400 ppm as shown on Figure 3 of the ROD.

G. More precisely delineate the vertical and horizontal extent of subsurface soils with PCB and VOC contamination within the vicinity of borings 74 and 76.

H. Perform a Stage IB cultural resources survey for compliance with the National Historic Preservation Act.

IV. REMEDIAL DESIGN ACTIVITIES

The remedial design activities to be performed in the implementation of the Selected Remedy for the Site include the following:

A. Design of the excavation and off-site disposal of contaminated on-site soils along with the back-filling of the excavated areas as well as contingency plans, as necessary.

B. Design of a recontouring, grading and vegetation plan for the excavated areas to be backfilled.

C. Design and augmentation of the ground-water extraction/ treatment system as outlined in the ROD. This design shall include, at a minimum, selection of the number, depth, pumping rates, and location of the additional extraction wells.

D. Provisions for performing long-term surface and ground-water monitoring to evaluate the effectiveness of the remedial action, which shall include collecting quarterly groundwater elevation measurements, as required, to demonstrate containment and groundwater quality monitoring, as required, at monitoring wells selected during remedial design. Upon approval by EPA, the long-term monitoring requirements may be decreased over time.

E. Provisions for performing annual surface water and sediment sampling in Stream 1A,1B and the Northern Ditch to evaluate the effectiveness of the remedial action on PCB levels in sediment.

V. REMEDIAL DESIGN WORK PLAN

Within sixty (60) days of the date on which Settling Work Defendants receive written authorization to proceed from EPA under Paragraph 10(a) of the consent decree, Settling Work Defendants shall submit to the EPA and the State, for review and approval, a detailed RD Work Plan ("RDWP") for the design of the remedy. The RDWP shall provide for the collection of all data needed for performing the RD. The RDWP shall comply with CERCLA and relevant EPA guidance, including the EPA document entitled *Guidance on Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties*, (OSWER Directive 9355.5-01, EPA/540/G-90-001), dated April 1990, and shall be in conformance, *inter alia*, with *the Superfund Remedial Design and Remedial Action Guidance*, dated June, 1986, the *Guidance on Expediting Remedial Design and Remedial Action*, dated August 1990, and other EPA guidance documents. The RDWP shall include plans and schedules for implementation of the RD and pre-design tasks identified above, and shall include, but not be limited to, the following items:

A. Sampling, Analysis, and Monitoring Plan

1. The Sampling, Analysis, and Monitoring Plan ("SAMP") shall describe in detail the sampling, analysis, and monitoring that shall be performed during the pre-design and design phases, as specified in this Statement of Work ("SOW"), the ROD, and the Consent Decree. The SAMP shall provide, as necessary, the following:

   a. A plan for additional delineation of the surface soils (zero to two feet below ground surface) with PCB concentrations greater than 1 ppm and lead concentrations greater than 400 ppm.

   b. A plan for more precise delineation of the vertical and horizontal extent of subsurface soils with PCB and VOC contamination within the vicinity of borings 74 and 76.

   c. A plan for the collection of chemical data and confirmatory samples during the soil excavation.

   d. A plan for conduct of a groundwater

investigation to determine if contaminated groundwater is leaving the property boundaries.

e. A plan for the PDVS setting forth the following:

(1) Extraction well location and construction details.

(2) Observation well locations and construction details.

(3) Initial pumping rates and planned step increases in rates.

(4) Water level monitoring procedures.

(5) Time-series water quality sampling and analytical program

(6) Discharge water management.

f. A plan for the collection of groundwater, surface water and stream sediment samples for a pre-remedial action characterization.

g. A plan for the performance of air monitoring during any design phase field studies.

h. A plan for continuous water-level monitoring under on-site static conditions to evaluate potential effects of off-site pumping on the groundwater system at the site.

2. All sampling and monitoring shall be performed in accordance with the *Region II CERCLA Quality Assurance Manual, Revision 1, EPA Region II*, dated October 1989, and any updates thereto, or an alternate EPA-approved method, and the guidelines set forth in the Consent Decree. All testing methods and procedures shall be fully documented and referenced to established methods or standards.

3. The SAMP shall include, at a minimum, the following items:

a. An explanation of the sampling, analysis, testing, and monitoring procedures that will produce data for the pre-design or RD;

b. A detailed description of the sampling, analysis, and testing to be performed, including sampling methods, analytical and testing methods, sampling locations and frequency of sampling;

c. A map depicting sampling locations; and

d. A schedule for performance of specific tasks.

4. Additional sampling locations, testing, and analyses subsequently identified shall be submitted as an addendum to the SAMP.

B. Quality Assurance Project Plan

1. The Quality Assurance Project Plan ("QAPP") for the pre-design and design activities shall be developed by Settling Work Defendants, and approved by EPA prior to the commencement of any sampling, testing and monitoring activities.

2. The QAPP shall be developed in accordance with the *Region II CERCLA Quality Assurance Manual, Revision 1, EPA-Region II*, dated October, 1989, and "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operation," (EPA QA/R5; "Preparing Perfect Project Plans," (EPA /600/9-88/087), and subsequent amendments to such guidelines upon notification by EPA other guidance as specified in the Consent Decree.

3. The QAPP shall include, at a minimum, the following items:

a. Title Page
b. Table of Contents
c. Project Description
d. Project Organization and Responsibility
e. Project Data Quality Objectives (DQOs)
f. Sampling Procedures
g. Sample Custody
h. Calibration Procedures and Frequency
i. Analytical Procedures
j. Data Reduction, Validation and Reporting
k. Internal Quality Control Checks
l. Performance and Systems Audits
m. Preventive Maintenance

n. Specific Routine Procedures Used to Assess Data Precision, Accuracy, and Completeness
o. Corrective Action
p. Quality Assurance Reports to Management

4. In order to provide quality assurance and maintain quality control with respect to all samples to be collected, Settling Work Defendants shall ensure the following:

a. Quality-assurance and chain-of-custody procedures shall be performed in accordance with the *Region II CERCLA Quality Assurance Manual, Revision 1, EPA Region II*, dated October 1989, and any updates thereto, or other procedures as outlined in the EPA-approved QAPP.

b. For all sampling and analysis, engagement of labs which are in good standing in EPA's Contract Lab Program ("CLP"), or have demonstrated their ability to perform all tasks required under the CLP.

c. In the event that the lab utilized by Settling Work Defendants is not a current CLP participant for a relevant set of parameters, Settling Work Defendants shall ensure that the lab will analyze performance evaluation samples submitted by EPA for those parameters for quality assurance purposes.

d. The lab utilized for analyses of samples shall perform all analyses according to accepted EPA methods as documented in the *CLP Statement of Work for Organic Analysis (revision OLMO-1.8)*, dated March, 1990, or the latest revision, *the CLP Statement of Work for Inorganic Analysis (revision ILMO-2.1)*, dated September, 1991, or the latest revision, other equivalent EPA-approved methods, or other procedures as outlined in the EPA-approved QAPP.

e. Upon receipt from the lab, data will be validated in accordance with the EPA-approved QAPP.

f. Submission of the validation package (checklist, report and Form #1 containing the final data) to EPA, prepared in accordance with the provisions of Subparagraph g., below.

g. Assurance that all analytical data are validated according to the procedures stated in the *EPA Region II CLP Organics Data Review and Preliminary Review (SOP #HW-6, Revision 8)*, dated January, 1992 or the latest revision, and the *Evaluation of Metals Data for the CLP (SOP #HW-2, Revision II)*, dated January, 1992, or the latest revision, other EPA-approved equivalent procedures, or other procedures as outlined in the EPA-approved QAPP.

h. Upon request by EPA, Settling Work Defendants shall promptly provide EPA with any unvalidated results of all sampling and/or tests or other data generated by Settling Work Defendants with respect to implementation of the Consent Decree.

i. For all sampling and analysis, Settling Work Defendants shall require full CLP or CLP-equivalent deliverables from the lab. Upon EPA's request, Settling Work Defendants shall submit to EPA full documentation of any sampling event or sample analysis.

j. Settling Work Defendants shall ensure that all contracts with the lab utilized by Settling Work Defendants for analyses of samples provide for access of EPA personnel and authorized representatives of EPA for the purpose of ensuring the accuracy of lab results related to the Site.

k. For any analytical work performed, including that done in a fixed laboratory, in a mobile laboratory, or in-onsite screening analyses, Settling Work Defendants must submit to EPA a "Non-CLP Superfund Analytical Services Tracking System" form for each non-Contract Laboratory (CLP) laboratory utilized during a sampling event, within thirty (30) days after acceptance of the analytical results. Upon

completion, such documents shall be submitted to the EPA Project Coordinator, with a copy of the form and transmittal letter to:

Regional Sample Control Center
Coordinator (RSCC)
USEPA - Division of Environmental
Science and Assessment
MS - 215
2890 Woodbridge Avenue
Edison, NJ 08837

C. Health and Safety Contingency Plan

A Health and Safety Contingency Plan ("HSCP") for all RD activities performed under the Consent Decree shall be developed by Settling Work Defendants to address the protection of public health and safety and the response to contingencies that could impact public health, safety, and the environment. The HSCP shall satisfy the requirements of the *Occupational Safety and Health Guidance for Hazardous Waste Site Activities*, (October, 1985, DHH 5 NIOSH Publication No. 85-115), and the Occupational Safety and Health Administration, U.S. Department of Labor ("OSHA") requirements cited below:

1. All Site activities shall be performed in such a manner as to ensure the safety and health of personnel so engaged. All Site activities shall be conducted in accordance with all pertinent general industry (29 C.F.R. Part 1910) and construction (29 C.F.R. Part 1926) OSHA standards, and EPA's *Standards Operating Safety Guides* (OSWER, 1988) as well as any other applicable State and municipal codes or ordinances. All Site activities shall comply with those requirements set forth in OSHA's final rule entitled "Hazardous Waste Operations and Emergency Response," 29 C.F.R. Part 1910.120, Subpart H.

2. The HSCP shall include, at a minimum, the following items:

   a. Plans showing the location and layout of any temporary facilities to be constructed on or near the Site;

b. A description of the known hazards and an evaluation of those risks associated with the Site, and the potential health impacts related to the Site activities;

c. A list of key personnel and alternates responsible for Site safety, response operations, and protection of the public;

d. A description of levels of protection (based on specified standards) to be utilized by all personnel;

e Delineation of work, decontamination, and safe zones, and definitions of the movement of zones;

f. A description of decontamination procedures for personnel and equipment, and the procedures for handling and removal of disposable clothing or equipment;

g. Incidental emergency procedures which address emergency care for personnel injuries and exposure problems, and containment measures. These procedures shall include evacuation routes, internal and external communications procedures for response to fire, explosion, or other emergencies, the name of the nearest hospital, and the route to that hospital. Local agencies with the capability to respond to emergencies shall be identified and their capabilities shall be described. A description of the procedures for informing the community of these measures shall be outlined;

h. A description of the personnel medical surveillance program in effect;

i. A description of monitoring for personnel safety;

j. A description of routine and special personnel training programs; and

k. A description of an air monitoring program to determine concentrations of Site-related airborne contaminants to which workers on-site

and persons near the Site boundary may be exposed. The results of work-zone air monitoring may be used as a trigger for implementing Site-boundary air monitoring.

D. Description of Additional RD Tasks

The RDWP shall include, if necessary, a detailed description of all other RD tasks and pre-design tasks (see Sections III. and IV., above) to be performed, along with a schedule for performance of those tasks. Such tasks shall include, at a minimum, the preparation of the RD Reports required by Section VII., below, and tasks necessary to ensure compliance with ARARs, as outlined herein and in the ROD, such as the establishment of a Classification Exception (CEA) for the Site until such time that it can be shown that the State's groundwater standards are not exceeded. The RDWP shall include an outline of the requirements of the RD Reports.

E. Plan for Obtaining Access and Other Approvals

This plan shall address any approvals which Settling Work Defendants will need to comply with the Consent Decree, with the exception of those approvals needed from EPA. The plan shall detail how such approvals will be sought and shall include a schedule for obtaining all necessary approvals. Such approvals shall include the consent of owners of property at or near the Site regarding access to conduct sampling, monitoring, or other activities in accordance with the Consent Decree, and approval from any off-site facility accepting waste materials from the Site. The plan shall be amended if subsequent approvals are required.

F. RD Schedule; Draft Schedule for Remedial Construction, Operation of the Remedial Action (RA), and Post-Remediation Monitoring

1. The RDWP shall include a schedule for the pre-design, preliminary design, and final design submittals, and a draft schedule for Remedial Construction, operation of the RA, and Post-Remediation Monitoring activities. The schedule shall be in the form of a task/subtask activity bar chart or critical path method sequence of events.

2. The draft schedule for Remedial Construction,

operation of the RA, and Post-Remediation Monitoring activities may be revised during the remedial process, subject to EPA's approval.

3. The RD schedule shall provide for the completion and submittal to EPA of the Final Design Report for Remedial Work Element I within **two hundred and forty days (240) days** of EPA's written notification of approval of the RD Work Plan and shall provide for the completion and submittal of the design report for Remedial Work Element II within 390 days of EPA's written notification of approval of the RD Work.

VI. APPROVAL OF RD WORK PLAN

EPA will either approve the RD Work Plan or will require modification of such plan, in accordance with the procedures as set forth in the Consent Decree.

VII. REMEDIAL DESIGN

Settling Work Defendants shall perform the RD as specified herein and in the ROD, in conformance with the RDWP approved by EPA and within the time frames specified in the RD schedule contained therein. The RD shall include the preparation of separate Preliminary RD Reports (conceptual or approximately 50% completion) for Remedial Work Elements I and II and separate Final RD Reports (100% completion) for Remedial Work Elements I and II.

A. Preliminary and Final RD Reports

The reports shall be submitted to EPA and NJDEP in accordance with the schedule set forth in the approved RDWP. Each RD report(s) shall include a discussion of the design criteria and objectives, with emphasis on the capacity and ability to meet design objectives successfully. Each report shall also include the plans and specifications that have been developed at that point in time along with a design analysis. The design analysis shall provide the rationale for the plans and specifications, including supporting calculations and documentation of how these plans and specifications will meet the requirements of the ROD. Each of the design report for Remedial Work Elements I and II shall also

include the following items (to the extent that work has been performed regarding the items), as appropriate:

1. A discussion of the manner in which the Remedial Action will achieve the Performance Standards;

2. A draft schedule for Remedial Construction activities, and a preliminary schedule for both operation of the RA for RWE II and Post-Remediation Monitoring activities.

B. Additional Preliminary Design Report-Requirements

Each of the Preliminary Design Report for Remedial Work Elements I and II shall include, as appropriate:

1. Preliminary drawings showing general arrangement of all work proposed, as enumerated in B.4., below.;

2. A discussion of the manner in which the pre-design components detailed in **Section III., above**, for the Remedial Action will be considered;

3. Table of Contents for the specifications, including a listing of items from the Construction Specifications Institute master format that are expected to be included in the construction specifications. This master format is presented in the Construction Specifications Institute's Manual of Practice, 1985 edition, available from the Construction Specifications Institute, 601 Madison Street, Alexandria, Virginia 22314;

4. Engineering drawings representing an accurate identification of existing Site conditions and an illustration of the work proposed. Typical items to be provided on such drawings include, at a minimum, the following:

   a. Title sheet including at least the title of the project, a key map, the name of the designer, date prepared, sheet index, and EPA/NJDEP Project identification;

   b. Existing site conditions map showing:

      (1) All owners of record for all properties within 200 feet of the Site;

(2) A Site survey including the distance and bearing of all property lines that identify and define the project Site;

(3) All easements, rights-of-way, and reservations;

(4) All buildings, structures, wells, facilities, and equipment, if any;

(5) A topographic survey, including existing contours and spot elevations for all areas that will be affected by the remedial activities, based on U.S. Coast and Geodetic Survey data;

(6) All utilities;

(7) Location and identification of all natural features including, *inter alia*, wooded areas, water courses, wetlands, flood hazard areas, and depressions; and

(8) Flood hazard data and delineation, if applicable.

c. A site layout plan(s) showing:

(1) Limits and depth of soil excavation;

(2) Proposed site completion contours;

(3) Extraction well layout;

(4) Piping routes and other utilities, as appropriate;

(5) Decontamination areas, staging areas, borrow areas, and stockpiling areas;

(6) Site security measures; and

(7) Roadways.

d. Preliminary Piping and Instrumentation Diagrams, as necessary, showing equipment, piping, and controls.

e. Detailed cross-section, or profile sheets, if required to illustrate the design at the preliminary level of completion.

5. All drawings shall include north arrow, scale, sheet identification numbers, definitions of all symbols and abbreviations, and the person responsible for preparing each sheet;

6. A specification for signs at the site, stating that the project is being performed under EPA oversight.

7. Survey work that is appropriately marked, recorded and interpreted for mapping, property easements and design completion;

8. Drawings of all proposed equipment, improvements, details and all other items to be developed in accordance with the current standards and guidelines of the New Jersey State Board of Professional Engineers and Land Surveyors. Drawings shall be of standard size, approximately 24" x 36". A list of drawing sheet titles will be provided;

9. Any value engineering proposals; and

10. A preliminary analysis of methods for satisfying permitting requirements.

C. <u>Additional Final Design Report Requirements</u>

Each of the final design reports for Remedial Work Elements I and II shall also include, as appropriate:

1. Final plans and specifications, including a technical specification for photographic documentation of the Remedial Construction Work;

2. A Construction Quality Assurance Project Plan ("CQAPP") for sampling, analysis, testing, and monitoring to be performed during the Remedial Construction phase of the Work. Quality assurance items to be addressed include, at a minimum, the following:

a. Inspection and certification of the Work;
b. Measurement and daily logging;
c. Field performance and testing;
d. Record drawings and logs;
e. Testing that is not otherwise covered by the specifications and a summary of testing as required by the specifications; and

3. A report describing those efforts made to secure access, obtain other approvals, and the results of those efforts (see Section V.E., above). Legal descriptions of property or easements to be acquired shall be provided.

4. A Wetland Mitigation Plan - The Wetland Mitigation Plan shall outline actions to be taken to avoid disruption of wetlands, minimize impacts to wetlands, and/or compensate for wetlands affected by remedial activities associated with the Site. The Wetland Mitigation Plan shall address all wetland areas identified by the wetland delineation performed as part of the RI for the Site. The Wetland Mitigation Plan shall include, but shall not be limited to, a depiction of the wetland boundaries identified by the delineation and a description of major plant communities, soil type (s) , and hydrology, with the results clearly plotted on a Site map;

5. Final engineer's construction cost estimate, which may be provided under separate cover concurrent with submittal of the Final RD Report.

6. A plan for implementation of construction and construction oversight.

7. A method for selection of the construction contractor(s).

8. A detailed analysis of methods for satisfying permitting requirements.

9. Confirmatory sampling and analysis of soil, to evaluate the effectiveness of the soil excavation in meeting the Performance Standards and requirements set forth in the 1998 ROD and the Consent Decree.

10. A proposed schedule for implementing all of the

above. The Remedial Construction schedule shall provide for the completion of the remedial construction of RWE I and II within **two hundred and forty (240) days** of EPA's written notification of approval of the final Design Report.

VIII. **APPROVAL OF RD REPORTS**

A. EPA will review and comment on the Preliminary and Final RD Reports for Remedial Work Elements I and II.

B. Changes required by EPA's comments/modifications on the respective Preliminary RD Reports shall be made in each of the respective Final RD Reports.

C. EPA will either approve the Final RD Reports or will require modification, in accordance with the procedures set forth in the Consent Decree. Each of the EPA-approved Final RD Reports shall also be referred to as the "Final Design Reports".

IX. **REMEDIAL ACTION**

A. Within ninety (90) days after approval of the Final RD Report by EPA for a given Remedial Work Element, Settling Work Defendants shall award a contract for Remedial Action for the respective Remedial Work Element.

B. Within thirty (30) days of the award of a Remedial Action contract for a given Remedial Work Element, Settling Work Defendants shall submit a Remedial Action Work Plan ("RAWP") for Remedial Construction activities for the respective Remedial Work Elements. Each RAWP shall include, at a minimum, the following items:

1. A "Request for Modification of Approved Final RD Report", if applicable, including any requests for modification of the approved Final Design Report based on construction methods identified by the contractor (s) , any proposed modifications to the construction schedule developed under Section VII., above, or any other requests for modification subject to EPA approval in its sole discretion.

2. A Site Management Plan ("SMP") for Remedial Action activities. The SMP for Remedial Action shall include, at a minimum, the following items:

a. Identification of the Remedial Action Project Team (including, but not limited to, the Construction Contractor).

b. A final schedule for the completion of the Remedial Action and all major tasks therein, as well as a schedule for completion of required plans, and other deliverables.

c. Methodology for implementation of the CQAPP (developed during the RD).

d. Procedures and plans for the decontamination of construction equipment and the disposal of contaminated materials.

e. Methods for satisfying permitting requirements.

f. Discussion of the methods by which construction operations shall proceed. Discussion shall include the following:

   (1) Timing of and manner in which activities shall be sequenced;

   (2) Preparation of the Site, including security, utilities, decontamination facilities, construction trailers, and equipment storage;

   (3) Coordination of construction activities;

   (4) Site maintenance during the Remedial Action;

   (5) Coordination with local authorities regarding contingency planning and potential traffic obstruction; and

   (6) Entry and access to the Site during the construction period(s) and periods of inactivity, including provisions for decontamination, erosion control and dust control.

g. Discussion of construction quality control, including:

(1) Methods of performing the quality control inspections, including when inspections should be made and what to look for;

(2) A summary of quality control testing procedures, as required by the specifications or modified in accordance with B.1., above. This includes information which authenticates that personnel and labs performing the tests are qualified;

(3) Procedures for scheduling and managing submittals, including those of subcontractors, off-site fabricators, suppliers, and purchasing agents; and

(4) Reporting procedures including frequency of reports and report formats.

3. An updated HSCP for the Remedial Construction phase of the Work (see Section V.C., above, for these requirements). The Health and Safety Contingency Plan shall address health and safety measures to be implemented and observed by construction personnel, as well as recommended health and safety measures for the adjacent community and general public, together with a description of the program for informing the community of these recommendations. The Contingency Plan shall include the name of the person responsible in the event of an emergency situation, as well as the necessary procedures that must be taken in the event of an emergency, as outlined in the Consent Decree.

C. Approval of Remedial Action Work Plan

EPA will either approve the RAWP or require modification of it in accordance with the procedures set forth in the Consent Decree. EPA will either approve, disapprove, or require modification of any requests for modification of the Final Design Report and construction schedule in accordance with the procedures set forth in the Consent Decree.

D. Performance of Remedial Construction

1. Upon EPA's written approval of the RAWP, Settling

Work Defendants shall initiate the Remedial Construction in accordance with the respective RAWP and the approved Final Design Report for the given Remedial Work Element, which shall include the approved Remedial Construction schedule.

2. During performance of the Remedial Construction, Settling Work Defendants may identify and request EPA approval for field changes to the approved RAWP, Final Design Report, and construction schedule, as necessary to complete the work. EPA will either approve, disapprove, or require modification of any requests for field changes in accordance with the procedures set forth in the Consent Decree.

E. Operation & Maintenance Manual

1. No later than ninety (90) days prior to the scheduled completion date of the Remedial Construction phase of Remedial Work Element (II), Settling Work Defendants shall submit to EPA a new or an updated O&M Manual. The O&M Manual shall conform to EPA guidelines contained in Considerations for Preparation of Operation and Maintenance Manuals, EPA-430/9-74-001 (1974).

2. The O&M Manual shall include, at a minimum, the following:

   a. A SAMP addendum for O&M activities (see Section V.A., above, for SAMP requirements);

   b. An amended QAPP for O&M activities consistent with Section V.B., above;

   c. An HSCP for O&M activities;

   d. A discussion of potential operating problems and remedies for such problems;

   e. A discussion of alternative procedures in the event of system failure;

   f. A schedule for equipment replacement; and

   g. An O&M schedule that identifies the frequency of O&M activities and the timing of those activities.

3. EPA will either approve the O&M Manual or require modification of it, in accordance with the procedures set forth in the Consent Decree.

4. Proposed modifications to the approved O&M Manual may be submitted to EPA for consideration upon completion of construction, or thereafter if Settling Work Defendants can demonstrate that such modifications would enhance and/or maintain the environmental monitoring programs. EPA will either approve, disapprove, or require modifications of the request for modification of the O&M Manual in accordance with the procedures set forth in the Consent Decree.

X. PRE-FINAL INSPECTION, REMEDIAL CONSTRUCTION REPORT, NOTICE OF COMPLETION

A. At least fourteen (14) days prior to the completion of construction of (a) Remedial Work Element I (the excavation and off-site disposal of contaminated soils element of the Remedial Action) , and (b) Remedial Work Element II (the installation and pumping of additional ground-water extraction wells and the continuation of treatment through the existing groundwater treatment facility element of the Remedial Action), Settling Work Defendants and their contractor(s) shall be available to accompany EPA personnel or their representatives on a pre-final inspection for each Remedial Work Element. Each pre-final inspection shall consist of a walk-over of the Site to determine the completeness of the construction of each Remedial Work Element and its consistency with the RD Reports, the Consent Decree, the requirements of the ROD, and applicable Federal and State laws, rules, and regulations.

B. Following each pre-final inspection, EPA will either specify the necessary corrective measures to the Remedial Construction, as appropriate, or will determine that construction is complete. If EPA requires corrective measures to either Remedial Work Element, Settling Work Defendants shall undertake the corrective measures according to a schedule approved by EPA. Within fourteen (14) days after completion of the construction of the

corrective measures, Settling Work Defendants and their contractor(s) shall be available to accompany EPA personnel or their representatives on an inspection as provided for in the preceding paragraph. Said inspection will be followed by further directions and/or notifications by EPA as provided above in this paragraph.

C. For each Remedial Work Element set forth in Subsection A., above, Settling Work Defendants shall submit a Draft Remedial Construction Report within forty-five (45) days of EPA's determination that construction of the Remedial Work Element is complete as set forth in Subsection B., above. These reports shall include the following sections:

1. Notice of Completion

A Notice of Completion section shall be provided indicating that Remedial Construction has been completed in compliance with the requirements of the respective EPA-approved Final RD Reports, the ROD, and the Consent Decree. The Notice of Completion shall be signed by a qualified licensed professional engineer meeting any and all requirements of applicable Federal and State laws, and shall certify that the Remedial Construction work has been completed in full satisfaction of the requirements of the Consent Decree, this SOW, and all plans, specifications, schedules, reports, and other items developed hereunder, including modifications, if any, as described in 3.a., below.

2. Construction Quality Control

This section of the Remedial Construction Report should provide a summary of the implementation of the construction quality control plan and provide an assurance that the Remedial Construction was completed in compliance with the requirements of the respective EPA-approved Final RD Reports, the ROD, and the Consent Decree.

3. Construction Activities

The Construction Activities section should include the following:

a. Narrative description:

This section should include a narrative description of the construction activities undertaken for the remedial action (e.g., quantities excavated, cleanup levels achieved, materials and/or equipment used, etc.) The name and the specific role of the major design and remedial action contractors should be provided. A verification that all equipment used during the Remedial Construction has been decontaminated, dismantled and removed from the Site should also be provided. If the Selected Remedy as implemented differs from the approved plans and specifications of the Final Design Report, such modifications shall be reported, and record drawings shall be provided showing all such modifications. The reasons for all such modifications shall be described in detail. The record drawings shall be signed and stamped by a professional engineer.

b. Photographs:

This section should include photographs and/or slides that record the progress of Remedial Construction including, at a minimum, the important features of the Site prior to the commencement of the Work, Remedial Construction activities for the various tasks, and the appearance of the Site after the Remedial Construction has been completed.

4. Final Inspection

This section documents the pre-final and final inspections conducted by the Settling Work Defendants and EPA at the completion of construction. This section should include a brief description of the deficient construction items (punchlist) reported and resolved during the pre-final and final inspections and a list of attendees at the inspection(s). The final resolution of all deficient items should be documented.

5. Certification

This section shall include a certification statement, signed by a responsible corporate representative of the Settling Work Defendants or by the Settling Work Defendants Project Coordinator, which states the following:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

6. O&M

This section should discuss the highlights of O&M activities, as well as provide insight to potential problems/concerns.

7. Record Drawings

Settling Work Defendants shall submit to EPA the record engineering drawings for all facilities constructed pursuant to the Consent Decree. The record drawings shall be signed and stamped by a professional engineer licensed in the State of New Jersey.

D. EPA will either approve the respective Draft Remedial Construction Reports, thus making them the Final Remedial Construction Reports, require modifications of them, and/or require corrective measures to fully and properly implement the Remedial Action, in accordance with Subsection B., above.

XI. CONTINUED OPERATION OF REMEDIAL ACTION FOR GROUNDWATER

A. Upon EPA's approval of the Remedial Construction Report for each Remedial Work Element in accordance with Section X.D., above, Settling Work Defendants shall continue Remedial Action for groundwater activities in accordance with the relevant approved O&M Manual, which includes the O&M schedule.

B. Goal for Groundwater Restoration

1. The Performance Standards for groundwater restoration at the Site are included in the ROD. The ROD, attached to the Consent Decree, lists federal and State MCLs and other criteria for various chemicals, including contaminants detected in the Site ground water. Settling Work

Defendants:

a. shall perform operation of the Remedial Action for the ground-water remediation system until the Performance Standards have not been exceeded for a period of three (3) consecutive years, or a shorter period if approved by EPA in its sole discretion, or

b. if all performance standards are not met, may petition EPA for a technical impracticability (TI) waiver of one or more of the Performance Standards consistent with EPA guidance, including, but not limited to, Guidance for Evaluating the Technical Impracticability of Ground-Water Restoration (EPA/540-R-93-080) dated September 1993, and shall implement any Alternative Remedial Action, selected by EPA, in its sole discretion, in conjunction with the issuance of the TI waiver.

Neither the submission of a petition by Settling Work Defendants nor the granting of a waiver of one or more Performance Standards by EPA pursuant to this Section shall relieve Settling Work Defendants of their obligation to (i) continue to operate the groundwater remedy as required by the Consent Decree and this SOW unless EPA specifies otherwise, (ii) attain Performance Standards for any contaminants for which EPA has not specifically granted a waiver, and (iii) complete any other obligation under this Consent Decree.

3. Settling Work Defendants petition for a TI waiver shall include, at a minimum, the information and analyses required by EPA guidance and the following Site-specific information:

a. a list of each Performance Standard for which a waiver is being sought, and the spatial limits for which they are sought.

b. a description of the conceptual model for Site contamination, including geological, hydrogeologic, and geochemical characterizations. The sources, distribution, characteristics, migration potential and fate, and quantities of contaminants present at the Site at the time of the petition shall be described. These descriptions shall

incorporate pertinent data obtained during design, construction, and operation of ground water remediation system, as well as other pertinent information obtained during any previous Site characterization efforts;

c. comprehensive ground-water monitoring data and an evaluation of the ground-water remedy implemented, along with any other remedial actions performed which enhanced or affected this remedy. The petition shall also demonstrate that the remedy has been designed, constructed, and operated in a manner which is consistent with the conceptual model of the Site;

d. a description of known or suspected ground-water contaminant sources at the Site. The petition shall also describe any source control and removal efforts undertaken, and the effectiveness of those efforts;

e. an analysis of the performance of the ground-water remedy which describes the spatial and temporal trends in ground-water contaminant concentrations within the ground-water plume. The petition shall discuss the hydrogeo-chemical factors which influence the remedy's ability to achieve the Performance Standards, and demonstrate how these factors inhibit the remedial system achieving the Performance Standards;

f. a demonstration (including appropriate engineering analysis) that all other technologies which are potentially applicable to the Site cannot attain the Performance Standards in a manner that is practicable from an engineering perspective. This demonstration shall include a prediction of the level of cleanup other technologies can attain;

g. a predictive analysis of the approximate time frame required to achieve the Performance Standards with the existing ground-water remediation system (and any Alternative Remedial Strategies, if applicable) using methods appropriate for the data and the Site-

specific conditions. Such analysis shall also address the uncertainty, if any, inherent in these predictions;

h. a description and comparison of Alternative Remedial Strategies proposed to be implemented by the Settling Work Defendants if a waiver is granted, and the level of cleanup and control of hazardous substances, pollutants, and contaminants the proposed Alternative Remedial Strategy(ies) will attain. Alternative Remedial Strategies must attain a level of cleanup and control that ensures protection of human health and the environment and prevents further migration of contaminated ground water. Alternative Remedial Strategies may include the establishment of alternative Performance Standards, and other alternative remediation requirements to ensure protectiveness. Proposed modifications to the existing remedy and any additional response actions proposed to be undertaken shall be described by the Settling Work Defendants in detail. EPA will make the final determination regarding the components of the Alternative Remedial Strategy which shall be implemented at the Site by Settling Work Defendants;

i. a description of any additional ground-water monitoring required to verify compliance with the alternative Performance Standards or remedial requirements. EPA will make the final determination regarding the scope of the ground-water monitoring requirements under the remedial alternative; and

j. other information or analyses not included above but which Settling Work Defendants or EPA considers appropriate to making a determination on the petition.

4. Upon receipt of all information required by the previous Paragraph, EPA will review and consider the information in the petition and any other relevant information. After opportunity for review and comment by the State, EPA will determine (1) whether compliance with any of the Performance Standards shall be waived; (2) what, if any, Alternative Remedial Strategy(ies), including

alternative Performance Standards and other protective measures, will be established by EPA; (3) whether modifications to the ground-water portion of the remedial action or any additional response actions relating to ground-water contamination are required; and (4) whether revised interim milestone and completion dates are needed for attainment of Performance Standards or alternative Performance Standards under this Consent Decree. EPA's determination on the petition will be consistent with the National Contingency Plan (NCP), Section 121(d) of CERCLA, and any other applicable laws, regulations, and guidance in effect at the time.

If EPA, after a reasonable opportunity for review and comment by the State, grants any petition or other relief pursuant to this Section, that decision will be reflected in a post-ROD decision document, as required by the NCP.

6. Upon issuance of EPA's post-ROD decision document, and, if necessary, filing of a revised SOW and Consent Decree with the Court and issuance of a court order approving the modification, Settling Work Defendants shall, implement the modifications selected by EPA to the ground-water portion of the remedial action or additional response actions relating to ground-water contamination, and achieve and maintain all Performance Standards, alternative Performance Standards, and remediation requirements established pursuant to this Section. Unless expressly modified by EPA's decision on the petition submitted hereunder, all requirements of this Consent Decree, including Settling Work Defendants, obligation to achieve the alternative Performance Standards and to conduct long-term ground-water monitoring, shall continue in force and effect.

7. No action taken by EPA pursuant to this Section of the SOW, including EPA's decision on Settling Defendants petition(s), shall be subject to dispute resolution or judicial review.

C. <u>Notice of Completion and Final Report for Operation of Remedial Action of RWE II</u>

1. Within **thirty (30) days** of meeting the Performance Standards as specified in the ROD and this SOW for the third consecutive year (or a shorter period if approved by EPA in its sole discretion), or, if Alternative Remedial Strategies are authorized by EPA, within **thirty (30) days** of completion of those strategies, Settling Work Defendants shall submit to EPA a Notice of Completion and Final Report for the RA.

2. EPA will determine whether the RA (including any Alternative Remedial Strategies) has been completed in accordance with the standards, specifications and reports required by the Consent Decree. If EPA determines that they have not been so completed, EPA will notify Settling Work Defendants in writing of those tasks which must be performed to complete the RA (including any Alternative Remedial Strategies). Settling Work Defendants shall then implement the specified activities and tasks in accordance with the specifications and schedules established by EPA and shall then submit a further report on the specified activities and tasks and certification signed by a licensed professional engineer, within **thirty (30) days** after completion of the specified activities and tasks. Any modifications to the Final Report for the RA required by EPA shall be in accordance with the procedures set forth in the Consent Decree.

XII. PRE-CERTIFICATION INSPECTION, CERTIFICATION OF COMPLETION FOR GROUNDWATER

A. For Remedial Work Element II set forth in Section X.A., above, Settling Work Defendants shall schedule and conduct a pre-certification inspection to be attended by Settling Work Defendants and EPA within ninety (90) days after Settling Work Defendants conclude that the Remedial Action has been fully performed and the Performance Standards have been attained. If, after the pre-certification inspection, Settling Work Defendants still believe that the Remedial Action has been fully performed and the Performance Standards have been attained, they shall submit a written report requesting certification to EPA for approval, with a copy to the State, within thirty (30) days of the inspection. This report should include

documentation that the Performance Standards have been met in accordance with the Consent Decree. Each Performance Standard should be addressed by providing the standard, the results of field sampling, as appropriate, and the basis for determining that the standard was met. If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity for review and comment by the State, determines that the Remedial Action or any portion thereof has not been completed in accordance with the Final RD Report or this Consent Decree, or that the Performance Standards have not been achieved, EPA will notify Settling Work Defendants in writing of the activities that must be undertaken to complete the Remedial Action or achieve the Performance Standards. EPA will set forth in the notice a schedule for performance of such activities or require the Settling Work Defendants to submit a schedule to EPA for approval. Settling Work Defendants shall perform all activities described in the notice in accordance with the specifications and schedules.

B. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion, and after a reasonable opportunity for review and comment by the State, that all Remedial Action has been fully performed in accordance with the Consent Decree and that the Performance Standards have been achieved, EPA will so certify in writing to Settling Work Defendants.

C. Upon EPA's certification of completion of the RA (including any Alternative Remediate Strategies), Settling Work Defendants shall continue the Remedial Action with post-remediation monitoring in accordance with the Post-Remediation Monitoring Plan, as set forth in **Section XIII.**, below.

XIII. POST-REMEDIATION MONITORING PLAN

A. Within **thirty (30) days** of the date on which all designated monitoring points have recorded readings less than or equal to the Performance Standards specified in the ROD and this SOW, or within thirty (30) days of the date that EPA determines, in its sole discretion, that an ARAR waiver is granted, Settling Work Defendants shall submit to EPA a Post-Remediation Monitoring ("PRM") Plan.

B. The PRM Plan shall include, at a minimum, the following:

1. An SMP for PRM activities;

2. A SAMP for PRM activities providing for monitoring of ground water and, if appropriate, air during the operation of the ground-water treatment system if some other technology is found more appropriate. At a minimum, ground-water sampling shall be performed and reported on quarterly basis, unless a decrease in sampling frequency has been approved by EPA (i.e., at least four times per year);

3. A QAPP for PRM activities consistent with **Section V.B.**, above.

4. An HSCP for PRM activities;

5. A description of work to be performed under PRM activities; and

6. A PRM schedule, that identifies the frequency of monitoring and when these activities will commence.

C. EPA will either approve the PRM Plan, or require modification of it, in accordance with the procedures set forth in this Consent Decree.

XIV. POST-REMEDIATION MONITORING

A. Upon EPA's certification of completion of the RA or EPA's approval of the PRM Plan, whichever comes later, Settling Work Defendants shall commence with the PRM program for a period of three (3) years, in accordance with the PRM Plan, which includes the PRM schedule.

B. If contaminant concentrations increase above the Performance Standards (as specified in the ROD and this SOW), or contaminant concentrations increase above the alternative Performance Standards as set forth in **Section XI.**, above, during post-remediation monitoring, EPA will evaluate the need, and may require Settling Work Defendants to, reinstate the remediation system.

C. Notice of Completion and Final Report for Post-Remediation Monitoring.

1. Within five (5) days of the completion of post-remediation monitoring, Settling Work Defendants shall submit to EPA a Notice of Completion for Post-Remediation Monitoring. The Notice of Completion shall be signed by a licensed professional engineer meeting any and all requirements of applicable Federal, State, and local laws, and shall certify that the PRM activities has been completed in full satisfaction of the requirements of the Consent Decree, this SOW, and all plans, specifications, schedules, reports and other items developed hereunder.

2. Within **forty (40) days** of the completion of post-remediation monitoring, Settling Work Defendants shall submit to EPA a Final Report for Post-Remediation Monitoring. The Final Report for Post-Remediation Monitoring shall summarize the Work performed under the PRM Plan and the data so generated. Deliverables under the Final Report for Post-Remediation Monitoring shall be signed by a licensed professional engineer meeting any and all requirements of applicable Federal, State, and local laws, and shall certify that the PRM activities and report deliverables have been completed in full satisfaction of the requirements of the Consent Decree, this SOW, and all plans, specifications, schedules, reports and other items developed hereunder. Any modifications to the Final Report for Post-Remediation Monitoring required by EPA shall be in accordance with the procedures set forth in the Consent Decree.

3. EPA will determine whether the PRM activities or any portion(s) thereof have been completed in accordance with the standards, specifications, and reports required by this Consent Decree. If EPA determines that PRM activities have not been so completed, EPA will notify Settling Work Defendants in writing of those tasks which must be performed to complete the post-remediation monitoring. Settling Work Defendants shall then implement the specified activities and tasks in accordance with the specifications and schedules established by EPA and shall then submit a further report on the specified activities and tasks and certification signed by a licensed professional engineer, within

thirty (30) days after completion of the specified activities and tasks. EPA will notify Settling Work Defendants in writing when PRM activities have been completed in accordance with the requirements of this Consent Decree.