IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
WESTERN DIVISION

UNITED STATES OF AMERICA, Plaintiff, v. CITY OF WOODSTOCK; HONEYWELL INTERNATIONAL, INC.; Defendants.	Civil No. 07 C 50145

CONSENT DECREE BETWEEN PLAINTIFF UNITED STATES AND DEFENDANTS CITY OF WOODSTOCK AND HONEYWELL INTERNATIONAL

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I. BACKGROUND

A. The United States of America ("United States"), on behalf of the Administrator of the United States Environmental Protection Agency ("EPA") and the United States Department of the Interior ("DOI"), acting through the United States Fish and Wildlife Service (collectively "Plaintiff"), 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, 9613(b), concurrently with the lodging of this Consent Decree.

B. The complaint seeks, *inter alia*: (1) reimbursement of response costs incurred by EPA and the Department of Justice for response actions at the Woodstock Municipal Landfill Superfund Site ("Site") in Woodstock, Illinois, together with accrued interest; (2) performance of response work by the defendants at the Site consistent with the National Contingency Plan, 40 C.F.R. Part 300 (as amended) ("NCP"); and (3) natural resource damages, including natural resource damage assessment costs incurred by the United States.

C. Pursuant to Executive Order 12580 and the NCP, the President has delegated authority to act as Federal Trustee for natural resources at and near the Site to DOI, as represented by the United States Fish and Wildlife Service.

D. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C. § 9622(j)(1), EPA notified DOI 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 DOI to participate in the negotiation of this Consent Decree. DOI participated in negotiations with Settling Defendants concerning injury to natural resources at the Site.

E. The defendants that have entered into this Consent Decree ("Settling Defendants") do not admit any liability to Plaintiff arising out of the transactions or occurrences alleged in the complaint, 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.

F. 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 June 24, 1988, 53 Fed. Reg. 23,995.

G. In response to a release or a substantial threat of a release of a hazardous substance at or from the Site, a group of potentially responsible parties including Settling Defendants completed a Remedial Investigation and Feasibility Study ("RI/FS") for the Site pursuant to 40 C.F.R. § 300.430, and issued a Remedial Investigation Report ("RI") and a Feasibility Study Report ("FS").

H. 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, as amended, 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, as amended. A copy of the transcripts of all public meetings related to the remedial action plan is available to the public as

part of the administrative record upon which the Regional Administrator based the selection of the response action.

I. The decision by EPA on the remedial action to be implemented at the Site is embodied in a Record of Decision, executed on June 30, 1993, and a Record of Decision Amendment, executed on July 15, 1998 (collectively referred to herein as the "RODs").

J. The Remedial Design and Remedial Action specified by the RODs have been completed by Settling Defendants – apart from ongoing work devoted to the operation and maintenance of the remedy, wetlands restoration at the Site necessitated by the remedy, and groundwater monitoring – under a 1999 Unilateral Administrative Order captioned In the matter of Woodstock Municipal Landfill, EPA Docket No. V-W-00-C-570.

K. Based on the information presently available to EPA, EPA believes that the remaining Work will be properly and promptly conducted by the Settling Defendants if conducted in accordance with the requirements of this Consent Decree.

L. Solely for the purposes of Section 113(j) of CERCLA, 42 U.S.C. § 9613(j), the Remedial Action selected by the RODs and the Work to be performed by the Settling Defendants shall constitute a response action taken or ordered by the President.

M. 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 between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, 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 Settling Defendants. Solely for the purposes of this Consent Decree and the underlying complaint, 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 or 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 upon Settling Defendants and their successors and assigns. Any change in ownership or corporate 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 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 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 Defendants or their contractors shall provide written notice of the Consent Decree to all subcontractors hired to perform any portion of the Work required by this Consent Decree. Settling 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 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:

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

"City of Woodstock," "City," and "Woodstock" shall all mean the City of Woodstock, located in McHenry County, Illinois. City of Woodstock, City, and Woodstock are interchangeable for the purposes of this Consent Decree.

"Consent Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXIX). 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.

"DOI" means the United States Department of the Interior and any successor departments or agencies of the United States.

"Effective Date" shall be the effective date of this Consent Decree as provided in Paragraph 102.

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

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports, and other items pursuant to this 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 Section VII (Remedy Review), Section IX (Access and Institutional Controls) (including, but not limited to, the cost of attorney time and any monies paid to secure access and/or to secure or implement institutional controls including, but not limited to, the amount of just compensation), Section

XIV (Emergency Response), and Paragraph 85 of Section XXI (Work Takeover). Future Response Costs shall also include all Interim Response Costs, and all Interest on those Past Response Costs that Settling Defendants have agreed to reimburse under this Consent Decree that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from June 30, 2005 to the date of entry of this Consent Decree.

"Honeywell" shall mean Honeywell International, Inc.

"Impacted Wetlands Habitat Area" shall mean approximately 30 acres of wetlands adjacent to the Site, primarily on the south and west sides of the Site; and the Kishwaukee River from the Site to a point approximately 1000 feet downstream from the Site.

"Interim Response Costs" shall mean all unreimbursed costs, including direct and indirect costs, (a) paid by the United States in connection with the Site between June 30, 2005 and the Effective Date, or (b) incurred prior to the Effective Date but paid after that date.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

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

"Natural Resource" or "Natural Resources" shall mean land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources, belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States.

"Natural Resource Damages" shall mean any damages recoverable by the United States on behalf of the public, for injury to, destruction of, loss of, loss of use of, or impairment of Natural Resources at the Site or the Impacted Wetlands Habitat Area as a result of a release of hazardous substances, including, but not limited to: (i) the costs of assessing such injury, destruction, or loss or impairment arising from or relating to such a release; (ii) the costs of restoration, rehabilitation, or replacement of injured or lost natural resources or of acquisition of equivalent resources; (iii) the costs of planning such restoration activities; (iv) compensation for injury, destruction, loss, loss of use, or impairment of natural resources; and (v) each of the categories of recoverable damages described in 43 C.F.R. § 11.15.

"NRDAR Fund" shall mean DOI's Natural Resource Damage Assessment and Restoration Fund.

"Operation and Maintenance" or "O & M" shall mean all activities required to maintain the effectiveness of the Remedial Action, as required under the O & M Plan.

"O & M Plan" shall mean the O & M Plan for the Site, as revised and approved by EPA and dated April 2004, and as further revised and approved by EPA pursuant to this Consent Decree. A copy is attached as Appendix D.

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

"Party" or "Parties" shall mean the United States and the Settling Defendants.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the EPA paid at or in connection with the Site through June 30, 2005, plus Interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through such date.

"Plaintiff" shall mean the United States.

"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).

"Records of Decision" or "RODs" shall mean: (i) the Record of Decision for the Site executed by EPA on June 30, 1993, and (ii) the Record of Decision Amendment for the Site executed by EPA on July 15, 1998. The RODs are attached as Appendices A and B, respectively.

"Remedial Action" shall mean those activities, except for Operation and Maintenance, undertaken and to be undertaken by the Settling Defendants to implement the RODs.

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

"Settling Defendants" shall mean the City of Woodstock and Honeywell International, Inc.

"Site" shall mean the Woodstock Municipal Landfill Site, encompassing approximately 52 acres, located on the southwest corner of the intersection of State Highway 47 and U.S. Highway 14 in the City of Woodstock, McHenry County, Illinois, and depicted generally on the map attached as Appendix C.

"State" shall mean the State of Illinois.

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

"UAO" shall mean the 1999 Unilateral Administrative Order captioned In the matter of Woodstock Municipal Landfill, EPA Docket No. V-W-00-C-570.

"United States" shall mean the United States of America.

"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), 42 U.S.C. § 9601(33); and (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

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

V. GENERAL PROVISIONS

5. Objectives of the Parties. The objectives of the Parties in entering into this Consent Decree are to protect public health or welfare or the environment at the Site by the implementation of response actions at the Site by the Settling Defendants; to reimburse response costs of the United States; to reimburse Natural Resource Damage assessment costs incurred by DOI and to provide a specified amount that will be used to restore, replace, or acquire the equivalent of injured Natural Resources at the Site and in the Impacted Wetlands Habitat Area; and to resolve the Plaintiff's claims against Settling Defendants as provided in this Consent Decree.

6. Commitments by Settling Defendants.

a. Settling Defendants shall finance and perform the Work in accordance with this Consent Decree, the RODs, and all work plans and other plans, standards, specifications, and schedules set forth herein or developed by Settling Defendants and approved by EPA pursuant to this Consent Decree. Settling Defendants shall also reimburse the United States for Past Response Costs and Future Response Costs, and shall make a payment for Natural Resource Damages, as provided in this Consent Decree.

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

7. Compliance With Applicable Law. All activities undertaken by Settling Defendants pursuant to this Consent Decree shall be performed in accordance with the requirements of all applicable federal and state laws and regulations. Settling Defendants must also comply with all applicable or relevant and appropriate requirements of all Federal and State environmental laws as set forth in the RODs. The activities conducted pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP.

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 Defendants shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. The Settling Defendants may seek relief under the provisions of Section XVIII (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 City of Woodstock that is located within the Site, within 15 days after the entry of this Consent Decree, the City of Woodstock shall submit to EPA for review and approval a notice to be filed with the Recorder's Office, McHenry County, State of Illinois, which shall provide notice to all successors-in-title that the property is part of the Site, that EPA selected a remedy for the Site on July 15, 1998, and that potentially responsible parties have entered into a Consent Decree requiring implementation of the remedy. Such notice(s) shall identify the United States District Court in which the Consent Decree was filed, the name and civil action number of this case, and the date the Consent Decree was entered by the Court. The City of Woodstock shall record the notice(s) within 10 days of EPA's approval of the notice(s). The City of Woodstock shall provide EPA with a certified copy of the recorded notice(s) within 10 days of recording such notice(s).

b. 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 City of Woodstock shall give the grantee written notice of (i) this Consent Decree, (ii) any instrument by which an interest in real property has been conveyed that confers a right of access to the Site (hereinafter referred to as "access easements") pursuant to Section IX (Access and Institutional Controls) or the UAO, and (iii) any instrument by which an interest in real property has been conveyed that confers a right to enforce restrictions on the use of such property (hereinafter referred to as "restrictive easements") pursuant to Section IX (Access and Institutional Controls) or the UAO. At least 30 days prior to such conveyance, the City of Woodstock 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 easements, and/or restrictive easements was given to the grantee.

c. In the event of any such conveyance, the City of Woodstock's obligations under this Consent Decree, including, but not limited to, its obligation to provide or secure access and institutional controls, as well as to abide by such institutional controls, pursuant to Section IX (Access and Institutional Controls) of this Consent Decree, shall continue to be met by the City of Woodstock. In no event shall the conveyance release or otherwise affect the liability of the City of Woodstock 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

10. Supervising Contractor. All aspects of the Work to be performed by Settling Defendants pursuant to Section VI (Performance of the Work), Section VII (Remedy Review), Section VIII (Quality Assurance, Sampling, and Data Analysis), and Section 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.

11. Continued Implementation of the Remedial Action and O & M. The Settling Defendants shall continue to implement the Remedial Action and O & M in accordance with the O & M Plan until the performance standards in the RODs are achieved and for so long thereafter as is otherwise required under this Consent Decree.

12. Modification of Work Plans.

a. If EPA determines that modification to the work specified in any work plans developed to implement the Work (including any work plans developed to implement the Remedial Action under the UAO or the O & M Plan developed under the UAO) is necessary to achieve and maintain the performance standards in the RODs or to carry out and maintain the effectiveness of the remedy set forth in the RODs, EPA may require that such modification be incorporated in 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 RODs.

b. For the purposes of this Paragraph 12, Paragraph 42 (Completion of the Remedial Action), and Paragraph 43 (Completion of the Work) only, the "scope of the remedy selected in the RODs" is: installation and maintenance of a geosynthetic landfill cap; excavation and consolidation of contaminated sediments and sludges under the landfill cap; installation and maintenance of a landfill gas venting system compatible with the landfill cap; installation and operation of a groundwater extraction, treatment, and discharge system, should natural attenuation of the vinyl chloride plume fail to occur at a rate and to the degree necessary under State and federal law; development and implementation of a comprehensive monitoring program to ensure effectiveness of the remedy; mitigation of wetland areas where sediment removal occurs; mitigation of wetland damage or loss due to remedial activities; development and implementation of a surface water and sedimentation control system; and implementation of institutional controls to limit land and groundwater use.

c. If Settling Defendants object to any modification determined by EPA to be necessary pursuant to this Paragraph, they may seek dispute resolution pursuant to Section XIX (Dispute Resolution), Paragraph 62 (record review). The work plans shall be modified in accordance with final resolution of the dispute.

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

e. 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.

13. Settling Defendants acknowledge and agree that nothing in this Consent Decree, or in the work plans developed to implement the Work, constitutes a warranty or representation of any kind by the United States that compliance with the work requirements set forth in the work plans will achieve the performance standards in the RODs.

VII. REMEDY REVIEW

14. Periodic Review. Settling Defendants shall conduct any studies and investigations as requested by EPA, in order to permit EPA to conduct reviews of whether the Remedial Action is protective of human health and the environment at least every five years as required by Section 121(c) of CERCLA and any applicable regulations.

15. EPA Selection of Further Response Actions. If EPA determines, at any time, that the Remedial Action is not protective of human health and the environment, EPA may select further response actions for the Site in accordance with the requirements of CERCLA and the NCP.

16. Opportunity to Comment. Settling Defendants and, if required by Sections 113(k)(2) or 117 of CERCLA, the public, will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of the review conducted pursuant to Section 121(c) of CERCLA and to submit written comments for the record during the comment period.

17. Obligation to Perform Further Response Actions. If EPA selects further response actions for the Site, Settling Defendants shall undertake such further response actions to the extent that the reopener conditions in Paragraphs 80 (United States' Pre-Certification Reservations Regarding Response Actions) or Paragraph 81 (United States' Post-Certification Reservations Regarding Response Actions) are satisfied. Settling Defendants may invoke the procedures set forth in Section XIX (Dispute Resolution) to dispute (1) EPA's determination that the reopener conditions of Paragraph 80 or 81 of Section XXI (Covenants Not To Sue by Plaintiff) are satisfied; (2) EPA's determination that the Remedial Action is not protective of human health and the environment; or (3) EPA's selection of the further response actions. Disputes pertaining to the whether the Remedial Action is protective or to EPA's selection of further response actions shall be resolved pursuant to Paragraph 62 (record review).

18. Submissions of Plans. If Settling Defendants are required to perform further response actions pursuant to Paragraph 17, they shall submit a plan for such work to EPA for approval in accordance with the procedures set forth in Section VI (Performance of the Work) and shall implement the plan approved by EPA in accordance with the provisions of this Decree.

VIII. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

19. Settling Defendants shall use quality assurance, quality control, and chain of custody procedures for all compliance and monitoring samples in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R5)" (EPA/240/B-01/003, March 2001), "Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998), and subsequent amendments to such guidelines upon notification by EPA to Settling Defendants of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. Settling Defendants shall utilize a Quality Assurance Project Plan ("QAPP") that is consistent with the NCP and applicable guidance documents. If relevant to the proceeding, the Parties agree that validated sampling data generated in accordance with the QAPP and reviewed and approved by EPA shall be admissible as evidence, without objection, in any proceeding under this Decree. Settling Defendants shall ensure that EPA personnel and EPA's authorized representatives are allowed access at reasonable times to all laboratories utilized by Settling

Defendants in implementing this Consent Decree. In addition, Settling Defendants shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring. Settling 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" and the "Contract Lab Program Statement of Work for Organic Analysis," dated February 1988, and any amendments made thereto during the course of the implementation of this Decree; however, upon approval by EPA, the Settling Defendants may use other analytical methods which are as stringent as or more stringent than the CLP-approved methods. Settling 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 Defendants shall only use laboratories that have a documented Quality System which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP) as meeting the Quality System requirements. Settling 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.

20. Upon request, Settling Defendants shall allow split or duplicate samples to be taken by EPA or EPA's authorized representatives. Settling Defendants shall notify EPA not less than 28 days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow the Settling Defendants to take split or duplicate samples of any samples it takes as part of EPA's oversight of Settling Defendants' implementation of the Work.

21. Settling Defendants shall submit to EPA one (1) copy of the results of all sampling and/or tests or other data obtained or generated by or on behalf of Settling Defendants with respect to the Site and/or the implementation of this Consent Decree unless EPA agrees otherwise.

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

IX. ACCESS AND INSTITUTIONAL CONTROLS

23. 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 and its representatives, including EPA and its 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:

(1) Monitoring the Work;

(2) Verifying any data or information submitted to the United States;

(3) Conducting investigations relating to contamination at or near the Site;

(4) Obtaining samples;

(5) Assessing the need for, planning, or implementing additional response actions at or near the Site;

(6) Assessing implementation of quality assurance and quality control practices as defined in the approved Quality Assurance Project Plans;

(7) Implementing the Work pursuant to the conditions set forth in Paragraph 85 (Work Takeover) of this Consent Decree;

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

(9) Assessing Settling Defendants' compliance with this Consent Decree; and

(10) 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 implementation, integrity, or protectiveness of the remedial measures to be performed pursuant to this Consent Decree; and

c. if requested by EPA in writing, execute and record in the Recorder's Office of McHenry County, State of Illinois, 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 23.a of this Consent Decree, and (ii) grants the right to enforce any 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 the United States, on behalf of EPA, and its representatives. Such Settling Defendants shall, within 60 days of such request by EPA, submit to EPA for review and approval with respect to such property:

(1) A draft easement, in substantially the form attached hereto as Appendix E, that is enforceable under the laws of the State of Illinois, and

(2) A current title insurance commitment or some other evidence of title acceptable to EPA, which shows title to the land described in the easement to be free and clear of all prior liens and encumbrances (except when those liens or encumbrances are approved by EPA or when, despite best efforts, Settling Defendants are unable to obtain release or subordination of such prior liens or encumbrances).

Within 15 days of EPA's approval and acceptance of the easement and the title evidence, such Settling Defendants shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment to affect the title adversely, record the easement with the Recorder's Office of McHenry County. Within 30 days of recording the easement, such Settling Defendants shall provide EPA with a final title insurance policy, or other final evidence of title acceptable to EPA, and a certified copy of the original recorded easement showing the clerk's recording stamps. If the easement is to be conveyed to the United States, the easement and title evidence (including final title evidence) shall be prepared in accordance with the U.S. Department of Justice Title Standards 2001, and approval of the sufficiency of title must be obtained as required by 40 U.S.C. § 255.

24. 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 Defendants shall use best efforts to secure from such persons:

a. an agreement to provide access thereto for Settling Defendants, as well as for the United States on behalf of EPA, and the State, 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 23.a of this Consent Decree;

b. an agreement, enforceable by the Settling Defendants and the United States, to refrain from using the Site, or such other property, in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the remedial measures to be performed pursuant to this Consent Decree.

25. For purposes of Paragraphs 23 and 24 of this Consent Decree, "best efforts" includes the payment of reasonable sums of money in consideration of access, access easements, land/water use restrictions, restrictive easements, and/or an agreement to release or subordinate a prior lien or encumbrance. If (a) any access or land/water use restriction agreements required by Paragraphs 24.a or 24.b of this Consent Decree are not obtained within 45 days of the date of entry of this Consent Decree, or (b) Settling Defendants are unable to obtain an agreement pursuant to Paragraph 23.c.(1) from the holder of a prior lien or encumbrance to release or subordinate such lien or encumbrance to the easement being created pursuant to this consent decree within 45 days of the date of entry of this consent decree, Settling Defendants shall promptly notify the United States in writing, and shall include in that notification a summary of

the steps that Settling Defendants have taken to attempt to comply with Paragraph 23 or 24 of this Consent Decree. The United States may, as it deems appropriate, assist Settling 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, or in obtaining the release or subordination of a prior lien or encumbrance. Settling Defendants shall reimburse the United States in accordance with the procedures in Section XV (Payments by Settling Defendants), for all costs incurred, direct or indirect, by the United States in obtaining such access, land/water use restrictions, and/or the release/subordination of prior liens or encumbrances including, but not limited to, the cost of attorney time and the amount of monetary consideration paid or just compensation.

26. 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 RODs, ensure the integrity and protectiveness thereof, or ensure non-interference therewith, Settling Defendants shall cooperate with EPA's efforts to secure such governmental controls.

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

X. REPORTING REQUIREMENTS

28. In addition to any other requirement of this Consent Decree, Settling Defendants shall submit to EPA one (1) copy of written quarterly progress reports that: (a) describe the actions which have been taken toward achieving compliance with this Consent Decree during the previous quarter; (b) include a summary of all results of sampling and tests and all other data received or generated by Settling Defendants or their contractors or agents in the previous quarter; (c) identify all work plans, plans, and other deliverables required by this Consent Decree to be completed and submitted during the previous quarter; (d) describe all actions, including, but not limited to, data collection and implementation of work plans that are scheduled for the next quarter 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 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 during the previous quarter and those to be undertaken in the next quarter. Settling Defendants shall submit these progress reports to EPA and the State by the tenth day after the end of each calendar quarter following the lodging of this Consent Decree until the Settling Defendants' receipt of EPA's notification pursuant to Paragraph 43.b of Section XIII (Certification of Completion). If requested by EPA, Settling Defendants shall also provide briefings for EPA to discuss the progress of the Work.

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

30. Upon the occurrence of any event during performance of the Work that Settling 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 Defendants shall within 24 hours of the onset of such event orally notify the EPA Project Coordinator, or, in the event that the EPA Project Coordinator is not available, the Emergency Response Branch, Region 5, United States Environmental Protection Agency. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.

31. Within 20 days of the onset of such an event, Settling Defendants shall furnish to EPA a written report, signed by the Settling 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 Defendants shall submit a report setting forth all actions taken in response thereto.

32. Settling Defendants shall submit one (1) copy of all plans, reports, and data required by this Consent Decree or by any work plan for performance of the Work to EPA in accordance with the schedules set forth in this Decree or in such plan. Settling Defendants shall simultaneously submit one (1) copy of all such plans, reports, and data to the State. Upon request by EPA or the State, Settling Defendants shall submit in electronic form all portions of any report or other deliverable Settling Defendants are required to submit pursuant to the provisions of this Consent Decree.

33. All reports and other documents submitted by Settling Defendants to EPA (other than the quarterly progress reports referred to above) which purport to document Settling Defendants' compliance with the terms of this Consent Decree shall be signed by an authorized representative of the Settling Defendants.

XI. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

34. After review of any plan, report, or other item which is required to be submitted for approval pursuant to this Consent Decree, EPA 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 Defendants modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Settling Defendants at least one notice of deficiency and an opportunity to cure within ten (10) 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.

35. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 34(a), (b), or (c), Settling 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 XIX (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 34(c) and the submission has a material defect, EPA retains its right to seek stipulated penalties, as provided in Section XX (Stipulated Penalties).

36. Resubmission of Plans.

a. Upon receipt of a notice of disapproval pursuant to Paragraph 34(d), Settling Defendants shall, within thirty (30) 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 XX, shall accrue during the 30-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 37 and 38.

b. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 34(d), Settling 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 Defendants of any liability for stipulated penalties under Section XX (Stipulated Penalties).

37. In the event that a resubmitted plan, report, or other item, or portion thereof, is disapproved by EPA, EPA may again require the Settling 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 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 XIX (Dispute Resolution).

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

39. 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. 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.

XII. PROJECT COORDINATORS

40. As of the time of signature of this Consent Decree, Brad Bradley is the EPA project coordinator and Ronald Frehner of Conestoga-Rovers & Associates is the Settling Defendants' project coordinator. Should any Party change its project coordinator, the identity of the successor will be given to the other Parties at least 5 working days before the change occurs, unless impracticable, but in no event later than the actual day the change is made. The Settling 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 Defendants' Project Coordinator shall not be an attorney for any of the Settling Defendants in this matter. 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.

41. EPA may designate other representatives, including, but not limited to, EPA and State employees and federal and State contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Consent Decree. EPA's 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 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 s/he 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.

XIII. CERTIFICATION OF COMPLETION

42. Completion of the Remedial Action.

a. Within 90 days after Settling Defendants conclude that the Remedial Action has been fully performed and the Performance Standards have been attained, Settling Defendants shall schedule and conduct a pre-certification inspection to be attended by Settling Defendants and EPA. If, after the pre-certification inspection, the Settling 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, pursuant to Section XI (EPA Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, a registered professional engineer and the Settling Defendants' Project Coordinator shall state that the Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of a Settling Defendant or the Settling 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 completion of the pre-certification inspection and receipt and review of the written report, EPA determines that the Remedial Action or any portion thereof has not been completed in accordance with this Consent Decree or that the Performance Standards have not been achieved, EPA will notify Settling Defendants in writing of the activities that must be undertaken by Settling Defendants pursuant to this Consent Decree to complete the Remedial Action and achieve the Performance Standards, provided, however, that EPA may only require Settling 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 RODs," as that term is defined in Paragraph 12.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 Defendants to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling Defendants shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject to their right to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion, that the Remedial Action has been performed in accordance with this Consent Decree and that the Performance Standards have been achieved, EPA will so certify in writing to Settling Defendants. This certification shall constitute the Certification of Completion of the Remedial Action for purposes of this Consent Decree, including, but not limited to, Section XXI (Covenants Not to Sue by Plaintiff). Certification of Completion of the Remedial Action shall not affect Settling Defendants' obligations under this Consent Decree.

43. Completion of the Work.

a. Within 90 days after Settling Defendants conclude that all phases of the Work (including O & M), have been fully performed, Settling Defendants shall schedule and conduct a pre-certification inspection to be attended by Settling Defendants and EPA. If, after the pre-certification inspection, the Settling Defendants still believe that the Work has been fully performed, Settling Defendants shall submit a written report by a registered professional engineer 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 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 determines that any portion of the Work has not been completed in accordance with this Consent Decree, EPA will notify Settling Defendants in writing of the activities that must be undertaken by Settling Defendants pursuant to this Consent Decree to complete the Work, provided, however, that EPA may only require Settling 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 RODs," as that term is defined in Paragraph 12.b. EPA will set forth in the notice a schedule for performance of such activities

consistent with the Consent Decree or require the Settling Defendants to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling 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 XIX (Dispute Resolution).

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

XIV. EMERGENCY RESPONSE

44. 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 Defendants shall, subject to Paragraph 45, 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. If EPA's Project Coordinator is not available, the Settling Defendants shall notify the EPA Region 5 Emergency Response Unit. In the event that Settling Defendants fail to take appropriate response action as required by this Section, and EPA takes such action instead, Settling Defendants shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Paragraph 47 (Settling Defendants' Payments for Future Response Costs).

45. 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 XXI (Covenants Not to Sue by Plaintiff).

XV. PAYMENTS BY SETTLING DEFENDANTS

46. Settling Defendants' Initial Payment.

a. Within 30 days of the Effective Date, Settling Defendants shall pay a total of $967,000 to the United States. Payment shall be made by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account in accordance with current EFT procedures, referencing the civil action number and DOJ Case Numbers 90-11-2-959/1 and 90-11-2-959/2. Payment shall be made in accordance with instructions provided to the Settling Defendants by the Financial Litigation Unit of the United States Attorney's Office for the Northern District of Illinois. Of the total amount to be paid by Settling Defendants to the United States pursuant to this Subparagraph:

(1) $567,000 shall be deposited in the Woodstock Landfill Special Account within the EPA Hazardous Substances Superfund, in reimbursement of Past Response Costs, to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substances Superfund; and

(2) $20,000 shall be deposited in the NRDAR Fund, to be applied toward natural resource damage assessment costs incurred by DOI; and

(3) $380,000 shall be deposited in a Site-specific sub-account within the NRDAR Fund, to be managed by DOI to pay for Trustee-sponsored natural resource damage restoration projects in accordance with Section XVI.

b. At the time of payment, Settling Defendants shall send notice that payment has been made and copies of the EFT transmittal notice to the United States, to EPA, to the Regional Financial Management Officer, and to DOI in accordance with Section XXVI (Notices and Submissions), and to:

United States Department of the Interior
Natural Resource Damage Assessment and Restoration Program
Attn: Restoration Fund Manager
1849 C Street, NW
Mailstop 4449
Washington, DC 20240

47. Settling Defendants' Payments for Future Response Costs.

a. Settling Defendants shall pay to EPA all Future Response Costs not inconsistent with the National Contingency Plan. On a periodic basis the United States will send Settling Defendants a bill requiring payment that includes an EPA Itemized Cost Summary. Settling Defendants shall make all payments within 30 days of Settling Defendants' receipt of each bill requiring payment, except as otherwise provided in Paragraph 48. Settling Defendants shall make all payments required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making the payment, EPA Site/Spill ID Number 05DB, and DOJ Case Number 90-11-2-959/1. Settling Defendants shall send the check(s) to:

U.S. EPA - Region 5
Superfund Program Accounting and Analysis Section
P.O. Box 371531
Pittsburgh PA 15251-7531

b. At the time of payment, Settling Defendants shall send notice that payment has been made to the United States, to EPA, and to the Regional Financial Management Officer, in accordance with Section XXVI (Notices and Submissions).

48. Settling Defendants may contest payment of any Future Response Costs under Paragraph 47 if they determine that the United States 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 pursuant to Section XXVI (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 Defendants shall within the 30 day period pay all uncontested

Future Response Costs to the United States in the manner described in Paragraph 47. Simultaneously, the Settling Defendants shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Illinois and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. The Settling Defendants shall send to the United States, as provided in Section XXVI (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 statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, the Settling Defendants shall initiate the Dispute Resolution procedures in Section XIX (Dispute Resolution). If the United States prevails in the dispute, within 5 days of the resolution of the dispute, the Settling Defendants shall pay the sums due (with accrued Interest) to the United States in the manner described in Paragraph 47. If the Settling Defendants prevail concerning any aspect of the contested costs, the Settling Defendants shall pay that portion of the costs (plus associated accrued Interest) for which they did not prevail to the United States in the manner described in Paragraph 47; Settling Defendants shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XIX (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding the Settling Defendants' obligation to reimburse the United States for its Future Response Costs.

49. Late Payments.

a. In the event that the payment required by Paragraph 46 is not made within 30 days of the Effective Date, Settling Defendants shall pay Interest on the unpaid balance. The Interest to be paid under this Subparagraph shall begin to accrue on the Effective Date.

b. In the event that any payment required by Subparagraph 47 is not made within 30 days of the Settling Defendants' receipt of the bill, Settling Defendants shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill.

c. Interest that is payable under this Paragraph shall accrue through the date of the payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to Plaintiff by virtue of Settling Defendants' failure to make timely payments under this Section including, but not limited to, payment of stipulated penalties pursuant to Section XX (Stipulated Penalties). The Settling Defendants shall make all payments required by this Paragraph in the manner described in Paragraphs 46 and 47.

d. All payments of Interest made under this Paragraph for failure to timely make the payment required by Paragraph 46 shall be split between the EPA Hazardous Substances Superfund and the NRDAR with 60 percent to the EPA Hazardous Substances Superfund and 40 percent to the NRDAR. All payments of Interest made under this Paragraph for failure to timely make the payment required by Paragraph 47 shall be deposited in the EPA Hazardous Substances Superfund.

XVI. TRUSTEE-SPONSORED NATURAL RESOURCE RESTORATION PROJECTS

50. Management and Application of Funds. All funds deposited in a segregated, Site-specific sub-account within the NRDAR Fund under Paragraph 46 shall be managed by DOI to pay for Trustee-sponsored natural resource restoration efforts in accordance with this Consent Decree. All such funds shall be applied toward the costs of restoration, rehabilitation, or replacement of injured natural resources, and/or acquisition of equivalent resources, including, but not limited to any administrative costs and expenses necessary for, and incidental to, restoration, rehabilitation, replacement, and/or acquisition of equivalent resources planning, and any restoration, rehabilitation, replacement, and/or acquisition of equivalent resources undertaken.

51. Restoration Planning. DOI shall prepare a Restoration Plan describing how the funds dedicated for Trustee-sponsored natural resource restoration efforts under this Section will be used. As provided by 43 C.F.R. § 11.93, the Plan will identify how funds will be used for restoration, rehabilitation, replacement, or acquisition of equivalent resources. The Plan may also identify how funds will be used to address services lost to the public until restoration, rehabilitation, replacement, and/or acquisition of equivalent resources is completed.

52. Use and Expenditure of Funds. Decisions regarding any use or expenditure of funds under this Section shall be made by DOI, and Settling Defendants shall not be entitled to dispute any decision relating to use of funds or restoration efforts under this Section under the dispute resolution provisions of this Consent Decree or in any other forum or proceeding.

XVII. INDEMNIFICATION

53. Settling Defendants' Indemnification of the United States.

a. The United States does not assume any liability by entering into this agreement or by virtue of any designation of Settling Defendants as EPA's authorized representatives under Section 104(e) of CERCLA. Settling Defendants shall indemnify, save, and hold harmless the United States and its 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 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 Defendants as EPA's authorized representatives under Section 104(e) of CERCLA. Further, the Settling Defendants agree to pay the United States all costs incurred including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Settling 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. The United States shall not be held out as a party to any contract entered into by or on behalf of Settling Defendants in carrying out activities pursuant to this Consent Decree. Neither the Settling Defendants nor any such contractor shall be considered an agent of the United States.

b. The United States shall give Settling Defendants notice of any claim for which the United States plans to seek indemnification pursuant to this Paragraph, and shall consult with Settling Defendants prior to settling such claim.

54. Settling Defendants waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Settling 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 Defendants shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Settling 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.

XVIII. FORCE MAJEURE

55. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the Settling Defendants, any entity controlled by Settling Defendants, or Settling Defendants' contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Settling Defendants' best efforts to fulfill the obligation. The requirement that the Settling 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 in the RODs.

56. 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 Defendants shall notify orally EPA's Project Coordinator or, in his or her absence, the EPA Region 5 Superfund Division Director, within ten (10) days of when Settling Defendants first knew that the event might cause a delay. Within ten (10) days thereafter, Settling 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 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 Defendants, such event may cause or contribute to an endangerment to public health, welfare, or the environment. The Settling Defendants shall include with any notice all available documentation supporting their claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Settling 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 Defendants shall be deemed to know of any circumstance of which Settling Defendants, any entity controlled by Settling Defendants, or Settling Defendants' contractors knew or should have known.

57. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify the Settling Defendants in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify the Settling Defendants in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

58. If the Settling Defendants elect to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution), they shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Settling 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 Defendants complied with the requirements of Paragraphs 55 and 56, above. If Settling Defendants carry this burden, the delay at issue shall be deemed not to be a violation by Settling Defendants of the affected obligation of this Consent Decree identified to EPA and the Court.

XIX. DISPUTE RESOLUTION

59. 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 under or with respect to this Consent Decree. However, the procedures set forth in this Section shall not apply to actions by the United States to enforce obligations of the Settling Defendants that have not been disputed in accordance with this Section.

60. Any dispute 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 20 days from the time the dispute arises, unless it 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.

61. Statements of Position.

a. In the event that the parties cannot resolve a dispute by informal negotiations under the preceding Paragraph, then the position advanced by EPA shall be considered binding unless, within thirty (30) days after the conclusion of the informal negotiation period, Settling 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 Defendants. The Statement of Position shall specify the Settling Defendants' position as to whether formal dispute resolution should proceed under Paragraph 62 or Paragraph 63.

b. Within thirty (30) days after receipt of Settling Defendants' Statement of Position, EPA will serve on Settling 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 62 or 63. Within fifteen (15) days after receipt of EPA's Statement of Position, Settling Defendants may submit a Reply.

c. If there is disagreement between EPA and the Settling Defendants as to whether dispute resolution should proceed under Paragraph 62 or 63, the parties to the dispute shall follow the procedures set forth in the paragraph determined by EPA to be applicable. However, if the Settling 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 62 and 63.

62. Formal dispute resolution for disputes 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 Defendants regarding the validity of the RODs' 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 EPA Region 5 Superfund Division Director will issue a final administrative decision resolving the dispute based on the administrative record described in Subparagraph 62.a. This decision shall be binding upon the Settling Defendants, subject only to the right to seek judicial review pursuant to Subparagraphs 62.c. and d.

c. Any administrative decision made by EPA pursuant to Subparagraph 62.b. shall be reviewable by this Court, provided that a motion for judicial review of the decision is filed by the Settling Defendants with the Court and served on all Parties within ten (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 Defendants' motion.

d. In proceedings on any dispute governed by this Paragraph, Settling Defendants shall have the burden of demonstrating that the decision of the EPA Region 5 Superfund 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 Subparagraph 62.a.

63. Formal dispute resolution for disputes 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 Defendants' Statement of Position submitted pursuant to Paragraph 61, the EPA Region 5 Superfund Division Director will issue a final decision resolving the dispute. The Superfund Division Director's decision shall be binding on the Settling Defendants unless, within ten (10) days of receipt of the decision, the Settling 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 Defendants' motion.

b. Notwithstanding Paragraph L 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.

64. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone or affect in any way any obligation of the Settling Defendants under this Consent Decree, not directly in dispute, unless EPA or the Court agrees 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 73. 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 Defendants do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XX (Stipulated Penalties).

XX. STIPULATED PENALTIES

65. Settling Defendants shall be liable to the United States for stipulated penalties in the amounts set forth in this Section for failure to comply with the requirements of this Consent Decree specified below, unless excused under Section XVIII (Force Majeure). "Compliance" by Settling Defendant shall include completion of the activities under this Consent Decree or any work plan or other plan approved under this Consent Decree within the specified time schedules established by and approved under this Consent Decree.

66. Nonpayment of Past Response Costs. Settling Defendants shall be liable to the United States for stipulated penalties of $1000 per day for failure to make the payment required by Paragraph 46.

67. Nonpayment of Future Response Costs. Settling Defendants shall be liable to the United States for stipulated penalties of $1000 per day for failure to make any payment of Future Response Costs, as required by Paragraph 47.

68. Work. Settling Defendants shall be liable to the United States for the following stipulated penalties, per violation per day, for failure to perform any element of the Work as required by this Consent Decree, or by any work plans developed to implement the Work (including any EPA-approved work plans developed to implement the Remedial Action under the UAO and the EPA-approved O & M Plan developed under the UAO):

Penalty Per Violation Per Day	Period of Noncompliance
$1000	1st through 14th day
$2000	15th through 30th day
$5000	31st day and beyond

69. Reports, Written Submittals, and Notices. Settling Defendants shall be liable to the United States for the following stipulated penalties, per violation per day, for failure to submit any report, written submittal, or notice as required by this Consent Decree, or by any work plans developed to implement the Work (including any work plans developed to implement the Remedial Action under the UAO and the EPA-approved O & M Plan developed under the UAO):

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$1000	15th through 30th day
$2000	31st day and beyond

70. Work Takeover. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 85 of this Consent Decree, Settling Defendants shall be liable for a stipulated penalty in the amount of $500,000.

71. Notice of Noncompliance. Following EPA's determination that Settling Defendants have failed to comply with a requirement of this Consent Decree, EPA may give Settling Defendants written notification of the same and describe the noncompliance. EPA may send Settling 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 Settling Defendants of a violation. Settling Defendants shall pay Interest on the unpaid balance, which shall begin to accrue on the date of a written demand made pursuant to this Paragraph.

72. Penalty Accrual. All penalties under this Section 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 XI (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 Defendant of any deficiency; (2) with respect to a decision by the EPA Region 5 Superfund Division Director under Subparagraphs 62.b or 63.a of Section XIX (Dispute Resolution), during the period, if any, beginning on the 21st day after the date that Settling Defendant's reply to EPA's Statement of Position is received until the date that the Superfund Division Director issues a final decision regarding such dispute; or (3) with respect to judicial review by this Court of any dispute under Section XIX (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.

73. Penalties shall continue to accrue as provided in the preceding Paragraph 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 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 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 Defendants to the extent that they prevail.

74. All penalties accruing under this Section shall be due and payable to the United States within 30 days of Settling Defendants' receipt from EPA of a demand for payment of the penalties, unless Settling Defendants invoke the Dispute Resolution procedures under Section XIX (Dispute Resolution). All payments to the United States under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall indicate that the payment is for stipulated penalties, and shall reference EPA Site/Spill ID Number 05DB, DOJ Case Number 90-11-2-959/1, and the name and address of the party making payment, and shall be mailed to:

U.S. EPA - Region 5
Superfund Program Accounting and Analysis Section
P.O. Box 371531
Pittsburgh PA 15251-7531

Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to the United States as provided in Section XXVI (Notices and Submissions).

75. If Settling Defendants fail to pay stipulated penalties when due, the United States may institute proceedings to collect the penalties, as well as Interest.

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

77. 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 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.

78. 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.

XXI. COVENANTS NOT TO SUE BY PLAINTIFF

79. In consideration of the actions that will be performed and the payments that will be made by the Settling Defendants under the terms of the Consent Decree, and except as specifically provided in Paragraphs 80-84 of this Section: (1) the United States covenants not to sue or to take administrative action against Settling Defendants pursuant to Sections 106 and 107(a) of CERCLA for response costs or response actions relating to the Site; and (2) the United States covenants not to sue Settling Defendants for Natural Resource Damages pursuant to Section 107(f) of CERCLA and Section 311(f) of the Clean Water Act, 33 U.S.C. § 1321(f). Except with respect to future liability for response costs or response actions, these covenants not to sue shall take effect upon the receipt by the United States of the total payments required by Paragraphs 46 and 47 of this Consent Decree. With respect to future liability for response costs or response actions, these covenants not to sue shall take effect on Certification of Completion of the Remedial Action by EPA under Subparagraph 43.b of Section XIII (Certification of Completion). These covenants not to sue are conditioned upon the satisfactory performance by Settling Defendants of their obligations under this Consent Decree. These covenants not to sue extend only to the Settling Defendants and do not extend to any other person.

80. United States' Pre-Certification Reservations Regarding Response Actions. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Settling Defendants

a. to perform further response actions relating to the Site, or

b. to reimburse the United States for additional costs of response if, prior to Certification of Completion of the Remedial Action:

(1) conditions at the Site, previously unknown to EPA, are discovered, or

(2) information, previously unknown to EPA, is received, in whole or in part,

and EPA determines that these previously unknown conditions or information together with any other relevant information indicates that the Remedial Action is not protective of human health or the environment.

81. United States' Post-certification Reservations Regarding Response Actions. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Settling Defendants

a. to perform further response actions relating to the Site, or

b. to reimburse the United States for additional costs of response if, subsequent to Certification of Completion of the Remedial Action:

(1) conditions at the Site, previously unknown to EPA, are discovered, or

(2) information, previously unknown to EPA, is received, in whole or in part,

and EPA determines that these previously unknown conditions or this information together with other relevant information indicate that the Remedial Action is not protective of human health or the environment.

82. For purposes of Paragraph 80, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date the Record of Decision Amendment for the Site was signed and set forth in the RODs for the Site and the administrative record supporting the RODs. For purposes of Paragraph 81, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date of Certification of Completion of the Remedial Action and set forth in the RODs, the administrative record supporting the RODs, the post-RODs administrative record, or in any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of the Remedial Action.

83. Reservations Regarding Natural Resource Damages. Notwithstanding any other provision of this Consent Decree, the United States reserves the right to institute proceedings against the Settling Defendants in this action or in a new action seeking recovery of Natural Resource Damages, including costs of damages assessment, based on: (i) conditions with respect to the Site or the Impacted Wetlands Habitat Area, unknown to DOI as of the date of lodging of this Consent Decree, that result in releases of hazardous substances that contribute to injury to, destruction of, or loss of Natural Resources; or (ii) information received by DOI after the date of lodging of this Consent Decree which indicates that the releases of hazardous substances at the Site or in the Impacted Wetlands Habitat Area have resulted in injury to, destruction of, or loss of Natural Resources of a type or future persistence that was unknown, or of a magnitude greater than was known, to DOI at the date of lodging of this Consent Decree.

84. General Reservations of Rights. The United States reserves, and this Consent Decree is without prejudice to, all rights against Settling Defendants with respect to all matters not expressly included within Plaintiff's covenant not to sue. Notwithstanding any other provision of this Consent Decree, the United States reserves all rights against Settling Defendants with respect to:

a. claims based on a failure by Settling Defendants to meet a requirement of this Consent Decree;

b. liability for response actions or response costs arising from the past, present, or future disposal, release, or threat of release of Waste Material outside of the Site;

c. liability for damages for injury to, destruction of, loss of, loss of use of, or impairment of Natural Resources outside of the Site or the Impacted Wetlands Habitat Area;

d. liability based upon a Settling Defendant's transportation, treatment, storage, or disposal, or the arrangement for the transportation, treatment, storage, or disposal of Waste Material at or in connection with the Site, other than as provided in the RODs, the Work, or otherwise ordered by EPA, after signature of this Consent Decree by the Settling Defendants;

e. criminal liability;

f. liability for violations of federal or state law which occur during or after implementation of the Remedial Action; and

g. liability, prior to Certification of Completion of the Remedial Action, for additional response actions that EPA determines are necessary to achieve Performance Standards, but that cannot be required pursuant to Paragraph 12 (Modification of Work Plans).

85. Work Takeover. In the event EPA determines that Settling 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 Defendants may invoke the procedures set forth in Section XIX (Dispute Resolution), Paragraph 62 (record review), to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Settling Defendants shall pay pursuant to Paragraph 47.

86. 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.

XXII. COVENANTS BY SETTLING DEFENDANTS

87. Covenant Not to Sue. Subject to the reservations in Paragraph 88, Settling Defendants hereby covenant not to sue and agree not to assert any claims or causes of action against the United States with respect to the Site, Natural Resource Damages, or this Consent Decree, including, but not limited to:

a. any direct or indirect claim for reimbursement from the EPA 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 or Clean Water Act Section 311(f) related to the Site or Natural Resource Damages, or

c. any claims arising out of response actions at or in connection with the Site or Natural Resource Damages, including any claim under the United States Constitution, the State of Illinois Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law.

Except as provided in Paragraph 90 (Waiver of Claims) and Paragraph 94 (Waiver of Claim-Splitting Defenses), these covenants not to sue shall not apply in the event that the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 80-84, but only to the extent that Settling Defendants' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

88. The Settling Defendants reserve, and this Consent Decree is without prejudice to, 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.

89. 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).

90. Waiver of Claims. Settling Defendants agree not to assert any claims or causes of action (including claims for contribution under CERCLA) that they may have for all matters relating to the Site, including Natural Resource Damages relating to the Site or the Impacted Wetlands Habitat Area, against any other person who is a potentially responsible party under CERCLA at the Site. This waiver shall not apply with respect to any defense, claim, or cause of action that the Settling Defendant may have against any other person if such person asserts a claim or cause of action relating to the Site against the Settling Defendant; nor shall it apply to any defense, claim, or cause of action arising out of action undertaken by the Settling Defendant in response to a release or threat of release in accordance with Paragraph 44 of this Consent Decree.

XXIII. EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION

91. Except as provided in Paragraph 90 (Waiver of Claims), 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. Except as provided in Paragraph 90 (Waiver of Claims), each of the Parties expressly reserves any and

all rights, 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.

92. The Parties agree, and by entering this Consent Decree this Court finds, that the Settling Defendants are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2), for matters addressed in this Consent Decree. For the purpose of this Section XXIII (Effect of Settlement; Contribution Protection), the "matters addressed" in this settlement are: (1) all response actions taken and to be taken and all response costs incurred or to be incurred by the United States (including Past Response Costs and Future Response Costs) or by any other person (other than the State) with respect to the Site; and (2) Natural Resource Damages.

93. The Settling Defendants 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 within 10 days of service of the complaint on them. In addition, Settling Defendants shall notify the United States 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.

94. Waiver of Claim-Splitting Defenses. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site or the Impacted Wetlands Habitat Area, 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, or other defenses based upon any contention that the claims raised by the United States 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 XXI (Covenants Not to Sue by Plaintiff).

XXIV. ACCESS TO INFORMATION

95. Settling Defendants shall provide to EPA, upon request, copies of all documents and information within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Consent Decree, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Settling Defendants shall also make available to EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

96. Business Confidential and Privileged Documents.

a. Settling Defendants may assert business confidentiality claims covering part or all of the documents or information submitted to the United States 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, or if EPA has notified Settling Defendants that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Settling Defendants.

b. The Settling 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 Defendants assert such a privilege in lieu of providing documents, they shall provide the Plaintiff 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 Settling 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. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

XXV. RETENTION OF RECORDS

98. Until 10 years after the Settling Defendants' receipt of EPA's notification pursuant to Paragraph 43 of Section XIII (Certification of Completion), each Settling Defendant shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to its liability under CERCLA with respect to the Site, provided, however, that Settling Defendants who are potentially liable as owners or operators of the Site must retain, in addition, all documents and records that relate to the liability of any other person under CERCLA with respect to the Site. Each Settling Defendant must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any documents or records (including documents or records in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work, provided, however, that each Settling Defendant (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned documents required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

99. At the conclusion of this document retention period, Settling Defendants shall notify the United States at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States, Settling Defendants shall deliver any such records or documents to EPA. The Settling 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 Defendants assert such a privilege, they shall provide the Plaintiff 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 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.

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

XXVI. NOTICES AND SUBMISSIONS

101. Whenever, under the terms of this Consent Decree, 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, DOI, and the Settling 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
Washington, D.C. 20044-7611
Re: DJ # 90-11-2-959/1 and 90-11-2-959/2

and

Superfund Division Director, EPA Region 5
U.S. Environmental Protection Agency
77 West Jackson Blvd.
Chicago, IL 60604

As to EPA:

Brad Bradley
EPA Project Coordinator
U.S. Environmental Protection Agency (SR-6J)
77 West Jackson Blvd.
Chicago, IL 60604

As to DOI:

Robyn Thorson
Regional Director
U.S. Fish and Wildlife Service
Bishop Henry Whipple Federal Building
1 Federal Drive
Fort Snelling, MN 55111

and

Kimberly Gilmore
U.S. Department of the Interior
Office of the Solicitor
Three Parkway Center, Room 385
Pittsburgh, PA 15220

As to the Regional Financial Management Officer:

Financial Management Officer
U.S. Environmental Protection Agency
Mail Code MF-10J
77 West Jackson Blvd.
Chicago, IL 60604

As to the State:

IEPA BOL FSRS NPL Unit
Erin Rednour
1021 N. Grand Ave. East
PO Box 19276
Springfield, IL 62794-9276
MC #24

As to the City of Woodstock:

Timothy J. Clifton
City Manager
City of Woodstock
121 W. Calhoun Street
Woodstock, IL 60098

and

Mark J. Steger
Holland & Knight
131 S. Dearborn St., 30th Floor
Chicago, IL 60603

As to Honeywell:

Chuck Geadelmann, P.E.
Remediation Manager
15102 Minnetonka Industrial Road
Minnetonka, MN 55345

and

Brian D. Israel
Arnold & Porter, LLP
555 12th St, NW
Washington DC 20004

XXVII. EFFECTIVE DATE

102. 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.

XXVIII. RETENTION OF JURISDICTION

103. This Court retains jurisdiction over both the subject matter of this Consent Decree and the Settling Defendants 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, or to resolve disputes in accordance with Section XIX (Dispute Resolution) hereof.

XXIX. APPENDICES

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

"Appendix A" is the ROD issued on June 30, 1993 (without appendices).

"Appendix B" is the Amended ROD issued on July 15, 1998 (without appendices).

"Appendix C" is the map of the Site.

"Appendix D" is excerpts of the O & M Plan for the Site.

"Appendix E" is the model easement referenced in Section IX (Access and Institutional Controls).

XXX. MODIFICATION

105. Schedules specified in this Consent Decree for completion of the Work may be modified by agreement of EPA and the Settling Defendants. All such modifications shall be made in writing.

106. Except as provided in Paragraph 12 (Modification of Work Plans), no material modifications shall be made to the any work plans developed to implement the Work (including any work plans developed to implement the Remedial Action under the UAO and the O & M Plan developed under the UAO) without written notification to and written approval of the

United States, Settling Defendants, and the Court, if such modifications fundamentally alter the basic features of the selected remedy within the meaning of 40 C.F.R. § 300.435(c)(2)(B)(ii). Modifications to any such work plan that do not materially alter that document, or material modifications to a work plan that do not fundamentally alter the basic features of the selected remedy within the meaning of 40 C.F.R. § 300.435(c)(2)(B)(ii), may be made by written agreement between EPA and the Settling Defendants.

107. 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

108. 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 CERCLA 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.

109. 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

110. Each undersigned representative of a Settling Defendant to this Consent Decree and the undersigned delegate of the Assistant Attorney General for the Environment and Natural Resources Division 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.

111. 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.

112. 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. The parties agree that Settling Defendants need not file an answer to the complaint in this action unless or until the court expressly declines to enter this Consent Decree.

XXXIII. FINAL JUDGMENT

113. This Consent Decree and its appendices constitute the final, complete, and exclusive agreement and understanding among the parties with respect to the settlement embodied in the Consent Decree. The parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree.

114. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between and among the United States and the Settling Defendants. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

SO ORDERED THIS 31st DAY OF Oct., 2007.

United States District Judge

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. City of Woodstock et al. (N.D. Ill.) relating to the Woodstock Municipal Landfill Site.

FOR THE UNITED STATES OF AMERICA

7/23/17
Date

W. BENJAMIN FISHEROW
Deputy Section Chief
Environmental Enforcement Section

7/17/2007
Date

THOMAS A. BENSON
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611

PATRICK J. FITZGERALD
United States Attorney
Northern District of Illinois

MONICA V. MALLORY
Assistant United States Attorney
Northern District of Illinois
308 W. States St., Ste 300
Rockford, IL 61101

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. City of Woodstock et al. (N.D. Ill.) relating to the Woodstock Municipal Landfill Site.

July 17, 2007
Date

for RICHARD C. KARL
Superfund Director, Region 5
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604

July 10, 2007
Date

THOMAS M. WILLIAMS
Associate Regional Counsel
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. City of Woodstock et al. (N.D. Ill.) relating to the Woodstock Municipal Landfill Site.

FOR THE CITY OF WOODSTOCK

Signature: _____

Name (print): Dr. Brian Sager

Title: Mayor

Address: City of Woodstock
121 W. Calhoun Street
Woodstock, IL 60098

_____
Date

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

Name (print): Mark J. Steger

Title: Attorney

Address: Holland & Knight LLP
131 S. Dearborn Street, 30th Fl.
Chicago, IL 60603

Ph. Number: 312-715-5753

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. City of Woodstock et al. (N.D. Ill.) relating to the Woodstock Municipal Landfill Site.

FOR HONEYWELL INTERNATIONAL, INC.

1 June 2007
Date

Signature: [signature]
Name (print): TROY JEANNINE KENNEDY
Title: PORTFOLIO DIRECTOR - HSER
Address: 101 COLUMBIA RD
MEY-3 - HSER
MORRISTOWN, NJ 07962

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

Name (print): Brian D. Israel
Title: Attorney
Address: Arnold & Porter, LLP
555 12th Street, NW
Washington, DC 20004
Ph. Number: (202) 942-6546

Appendix A:

Record of Decision

June 30, 1993

70398

RECORD OF DECISION

SELECTED REMEDIAL ALTERNATIVE

DECLARATION

SITE NAME AND LOCATION

Woodstock Municipal Landfill
Woodstock, Illinois

STATEMENT OF BASIS AND PURPOSE

This decision document represents the United States Environmental Protection Agency's (U.S. EPA) selected remedial action for the Woodstock Municipal Landfill (Woodstock) site located in Woodstock, Illinois. This decision document was developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, with the National Oil and Hazardous Substances Contingency Plan (NCP). This decision is based on the Administrative Record for this site.

The State of Illinois is expected to concur with the selected remedy.

ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from the site, if not addressed by implementing the response action selected in this Record of Decision (ROD), may present an imminent and substantial endangerment to public health, welfare, or the environment.

DESCRIPTION OF THE REMEDY

This remedy is intended to be the final action for the site. The remedy addresses all contaminated media and includes: contaminated soil, sediment, and groundwater, landfilled wastes, leachate generation and emission of landfill gases.

The major components of the selected remedy include:

* Excavation and consolidation of contaminated sediments and sludges under the landfill cap;

* Installation and maintenance of a geosynthetic landfill cap in compliance with Illinois Administrative Code (IAC) Title 35, Subtitle G, Chapter 1, Subchapter i: Solid Waste and Special Waste Hauling, Part 811.314;

* Installation and maintenance of a landfill gas venting system that is compatible with the type of cap

specified in this Record of Decision;

* Installation and operation of a groundwater extraction, treatment, and discharge system;

* Development and implementation of a comprehensive monitoring program to ensure the effectiveness of the remedy;

* Mitigation of wetland areas where contaminated sediment removal occurs;

* Mitigation of wetland damage or loss during or after remedial activities are complete;

* Development and implementation of a surface water and sedimentation control system;

* Implementation of institutional controls to limit land and groundwater use.

STATUTORY DETERMINATIONS

The selected remedy is protective of human health and the environment, complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost-effective. This remedy utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable and satisfies the statutory preference for remedies which employ treatment that reduces toxicity, mobility, or volume as a principal element.

Because this remedy may result in hazardous substances remaining on-site above health-based levels, a review will be conducted at least every five years after commencement of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

Valdas V. Adamkus
Regional Administrator, Region V

6/30/93.
Date

II. Site History and Enforcement Activities

The landfill had a number of different owners between 1935, when it was first used as a trash dump and open burning area, and when it was covered and classified as closed by the IEPA in October 1980. The current owner of the landfill property is the City of Woodstock. Other properties which are considered part of the site are under private ownership.

From approximately 1940 until leased to Woodstock in 1958, the site was used as a local trash dump and open burning area by William Gaulke. The site was used by the City under a lease agreement with Mr. Gaulke as a household garbage and municipal landfill from 1958 until its acquisition by the City in 1968. Following acquisition of the property, the property was used for the disposal of household and municipal solid waste and various industrial solid wastes including waste paint and coating materials, plating wastes, solvents, waste metals, inks and drummed material including polychlorinated biphenyls. In addition, approximately 7200 cubic yards of sludge generated by Woodstock Die Casting Inc., an Allied Signal subsidiary was also disposed of at the landfill.

The IEPA filed a complaint against the City of Woodstock in 1972 regarding operation of the landfill. The Illinois Pollution Control Board (IPCB) issued an opinion that evidence substantiated charges of open dumping, liquid deposition without approval, failure to follow set guidelines, and operating without a permit. The City of Woodstock was ordered to cease and desist all violations, obtain the necessary permits, and was fined for its actions. During this same time period, IEPA requested the installation of a leachate collection system to address releases from the landfill. However, no system was installed and a waiver was granted by the IPCB based on the City of Woodstock's stated intent to close the landfill in the near future and because the leachate did not violate surface water standards at the time. The City discontinued disposal activities at the site in 1975 and closed the landfill by covering it with fill material. Numerous inspections were conducted at the site by IEPA from 1975-1980. IEPA continually notified the city during this time that the landfill was indeed no longer accepting waste and was considered closed, but the final cover was deficient. In 1980, the IEPA classified the site as closed and covered. In 1983, the City was granted a permit from the IEPA to landfarm municipal sewage sludge at the site. A second permit was issued by the IEPA in July 1988, but sludge application was discontinued prior to that date, so the later permit has not been used.

During a July 1988 sampling investigation by the Technical Assistance Team (a USEPA contractor tasked to do site investigations), residential wells located downgradient of the landfill were sampled and found to contain arsenic, selenium, and thallium in excess of the Safe Drinking Water Act maximum drinking water levels. A subsequent sampling investigation in December 1988 again detected these substances in the same wells, but the concentrations did not exceed the regulatory criteria.

Based on the results of U.S. EPA and IEPA investigations and taking into account such factors as populations at risk, the potential of hazardous substances being present, the potential for contamination of drinking water supplies and the potential destruction of sensitive ecosystems, the site was proposed to be placed on the National Priorities List in June 1988. The site was placed on the National Priorities List in October 1989. A consent order to conduct an RI/FS was agreed to by Allied Signal and the City of Woodstock in September 1989.

III. Highlights of Community Participation

Compliance with the public participation requirements of Section 113 (k)(2)(B)(i-v) of CERCLA/SARA, have been achieved for the Woodstock site by:

- A press release was issued in June 1990 announcing a public "Remedial Investigation/Feasibility Study (RI/FS) kick-off" meeting to be held to inform the community as to U.S. EPA plans;
- The public "RI/FS kick-off" meeting was held in June 1990, announcing the initiation of the RI/FS;
- A fact sheet was developed and distributed in conjunction with the June 1990 meeting;
- A site information repository was established at the Woodstock Public Library to allow local access to site-related documents;
- A fact sheet was sent to all persons or organizations on the community relations mailing list in October 1992 updating them on the progress of the project;
- An Administrative Record has been compiled, including the RI, Baseline Risk Assessment, FS, and other documents, and has been placed in the site information repository;

SUMMARY OF REMEDIAL ALTERNATIVE SELECTION
WOODSTOCK MUNICIPAL LANDFILL
WOODSTOCK, ILLINOIS

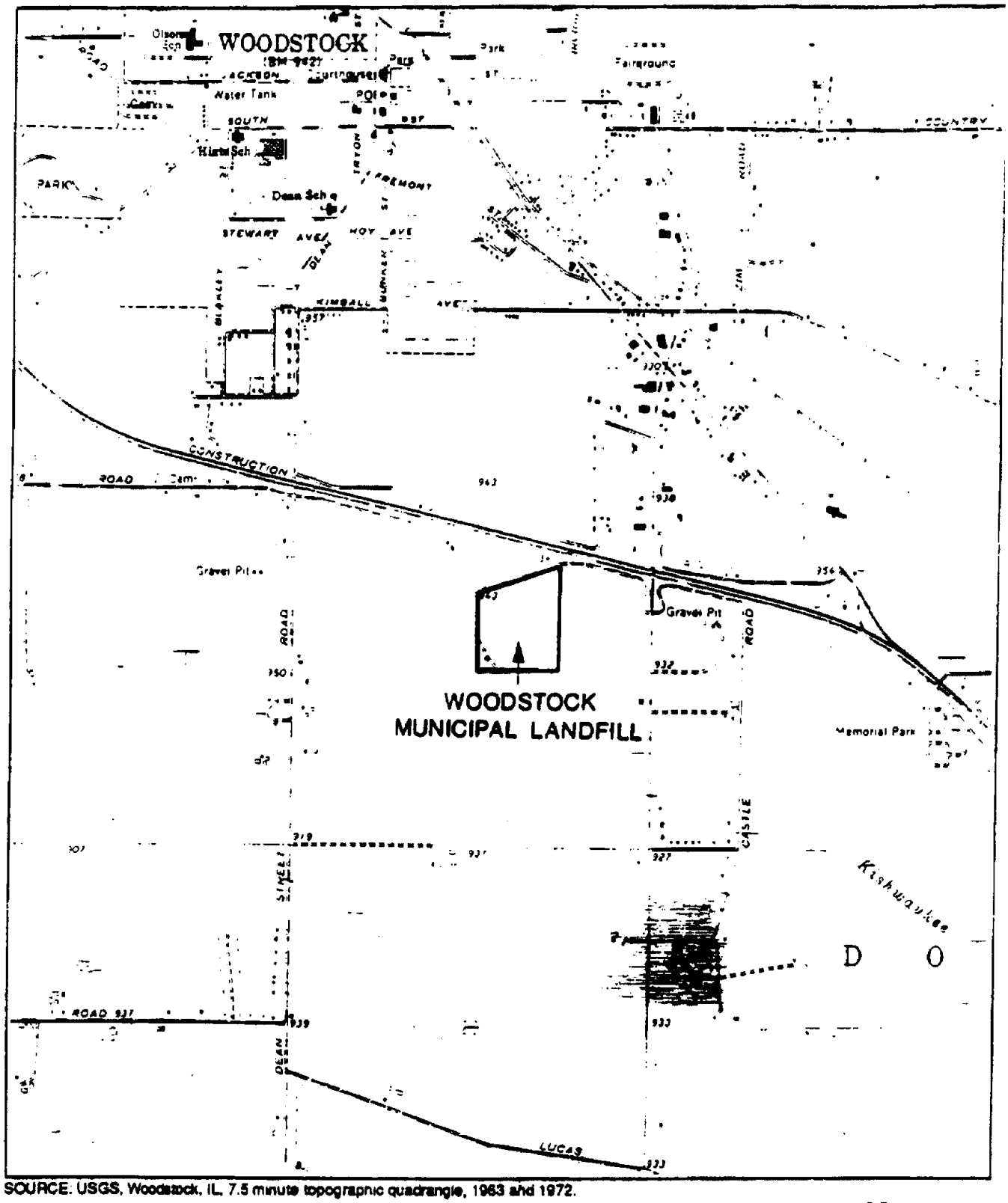
I. Site Name, Location and Description

The Woodstock Municipal Landfill site is located on the south side of the city of Woodstock, Illinois, a municipality with a population of approximately 14,350 residents. The site is located south of Davis Road, southwest of the intersection of U.S. Route 14 and Illinois Route 47 and is shown on Figure 1. The coordinates for the site are northeast quarter of Section 17, Township 44 North, Range 7 East (NE 1/4, Se 17, T44N, R7E).

The land surrounding the Woodstock site is a mixture of residential, agricultural, wetlands, commercial, and light industrial use. Land use immediately north of the site is primarily residential and agricultural. Land use west of the site is semiagricultural with much of the land currently classified as a wetland. Wetlands are located adjacent to the site on the east. Kishwaukee River runs south along the southwestern perimeter of the site. The City of Woodstock Wastewater Treatment Plant and additional wetlands are also located south of the site.

The site geology consists of a complex sequence of unconsolidated glacial deposits which are approximately 200 feet thick. These deposits have been divided into four units; an upper sand and gravel aquifer, an intermediate clay till member, a lower clay till member, and a sand unit which overlies bedrock comprised of dolomite and shale. The glacial and bedrock aquifers underlying the site are considered to be Class I by the State of Illinois. Class I aquifers include groundwater which is either currently being used or has the potential to be used as a drinking water source. Surface water runoff is generally to the west and south and is confined by drainage to the wetlands and subsequent infiltration or overland flow into Kishwaukee River.

The nearest residents to the site are located approximately 500 feet north of the site. The nearest existing residential well which may potentially be impacted by the contaminated groundwater if further migration occurs is located approximately 2500 feet southwest of the site. Based on data collected during the remedial investigation, groundwater contamination has not migrated to the local residential wells used for drinking water. The majority of the residents in the City of Woodstock are provided water through a municipal water supply system. This system is not considered to be threatened by the site.



SOURCE: USGS, Woodstock, IL 7.5 minute topographic quadrangle, 1963 and 1972.

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FIGURE 1
SITE LOCATION MAP

WOODSTOCK MUNICIPAL LANDFILL
WOODSTOCK, IL

- A formal advertisement announcing the commencement of the public comment period, the availability of the proposed plan, and the time and place of the public meeting was placed in the Northwest Herald on April 7, 1993. The Herald is a major local paper of general circulation;

- The Proposed Plan for remedial action was released for public comment and placed into the Administrative Record on April 9, 1993;

- A thirty (30) day comment period was established and scheduled to end on May 10, 1993;

- A public meeting was held on April 28, 1993, at the Woodstock Public Library at which U.S. EPA and IEPA presented the Proposed Plan to the community and received verbal comments. A transcript was kept of the public meeting and was made available to the public and placed in the Administrative Record and site repositories;

- A fact sheet was developed and distributed in conjunction with the April 28, 1993 meeting;

- U.S. EPA granted a thirty (30) day extension of the public comment period on April 28, 1993, extending the closing date to June 9, 1993;

- An advertisement was placed in the local newspaper on May 12 and May 13, 1993, announcing the extension of the public comment period to June 9, 1993;

- Three public availability meetings were held on June 2, 1993 at the Woodstock Public Library to address community concerns dealing with the risks posed by the site as well as to answer additional concerns with the proposed remedy:

- U.S. EPA has received oral and written comments regarding the RI/FS, Baseline Risk Assessment, and the Proposed Plan. Comments have been addressed in the attached Responsiveness Summary.

IV. Scope and Role of the Selected Remedy

This ROD addresses remediation of the contaminated surface soil, sediments, and groundwater and addresses leachate which is being generated and is discharging from the landfill. The contaminants found in these media represent

the principal threat from the Woodstock site. The generation of leachate presents a threat as a continuous contaminant source to groundwater, surface water and to the wetlands surrounding the site. In addition, a direct contact threat exists from exposure to surface soils and leachate. The primary purpose of this remedy is twofold; 1) to restore the contaminated groundwater to an acceptable level that will allow for its unrestricted use and 2) to cap the landfill, thereby minimizing the generation of leachate and eliminating the risk posed by the surface soils and sediments.

V. Summary of Site Characteristics

The remedial investigation was conducted by the PRP's contractor, Warzyn, and was initiated in July 1990. The investigation was completed in June 1992 when the Final Remedial Investigation Report was issued. The remedial investigation identified the types of contaminants that are migrating from the landfill, and assessed the potential impact of contaminant migration on human health and the environment. The assessment of the landfill was accomplished by conducting three phases of field work. The purpose of phase I was to gather information on the general nature of the site, such as the geology and hydrogeology, and to identify and quantify the nature of any potential impact at or surrounding the site. The purpose of phase II was to complete the understanding of the site characteristics. This included delineation of the extent to which contamination was released from the site and the interactions between groundwater, surface water and leachate. The assessment was completed with the phase III investigation which included test pit excavation, waste sampling, additional soil sampling and further refinement of the groundwater flow regime of the site. Figures 2 and 3 depict the locations of the various samples which were collected during these phases of work. During the course of these phases of fieldwork, data were obtained from sampling residential wells, monitoring and leachate wells, surface and subsurface soils, surface water and sediment.

The following is a brief overview of the nature and extent of the contamination found during the investigation:

Landfill Gas Characteristics

Gas samples were collected from leachate wells with the highest rate of gas flow (LW-3 and LW-4). Volatile organic compounds (VOCs) were detected and included Freon 114, chloroethane, benzene, toluene, chlorobenzene, ethylbenzene, 4-ethyl toluene, 1,3,5-trimethylbenzene, 1,2,4-

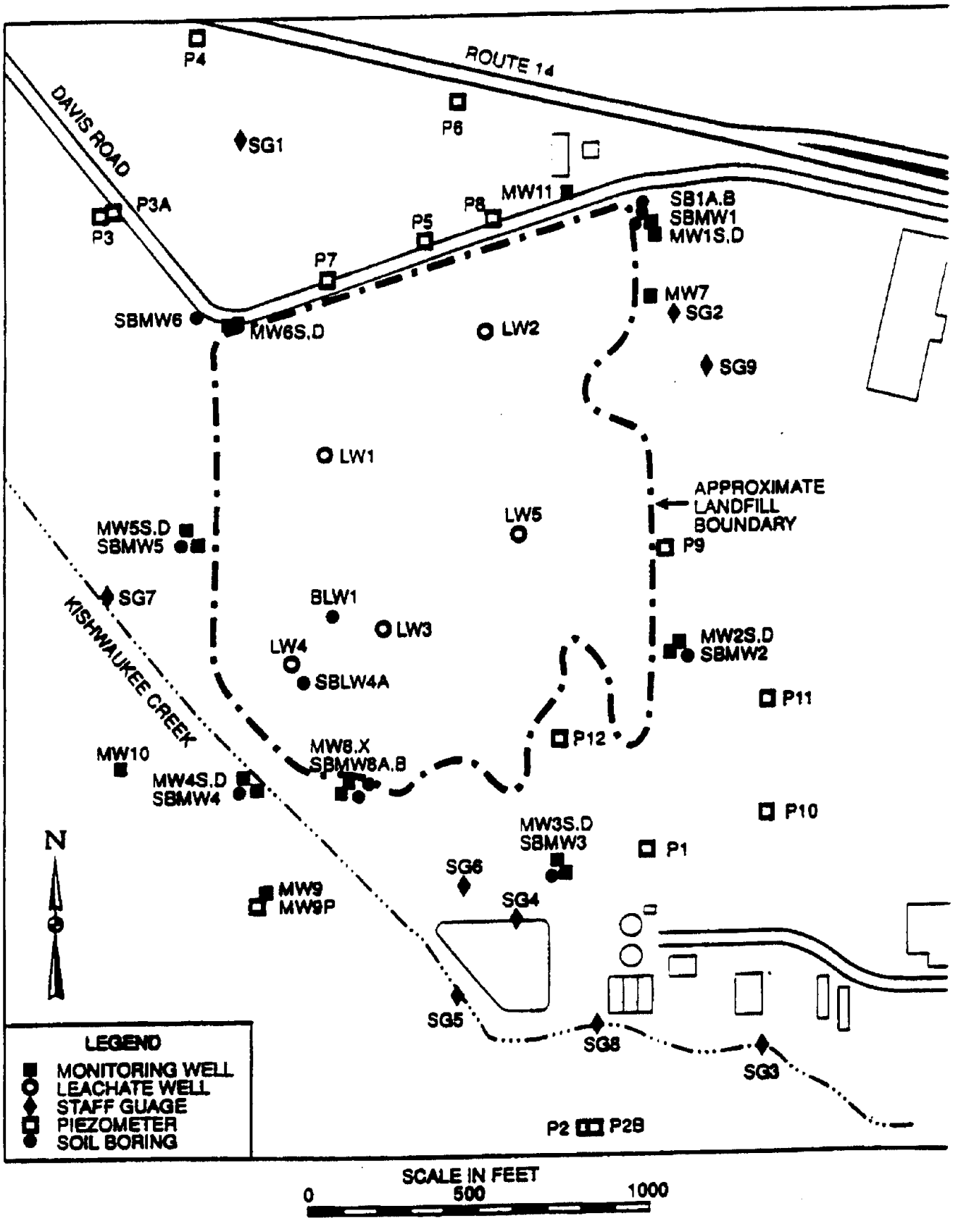

FIGURE 2
MONITORING WELL, PIEZOMETER, LEACHATE WELL,
SOIL BORING AND STAFF GUAGE LOCATION MAP

WOODSTOCK MUNICIPAL LANDFILL
WOODSTOCK, IL

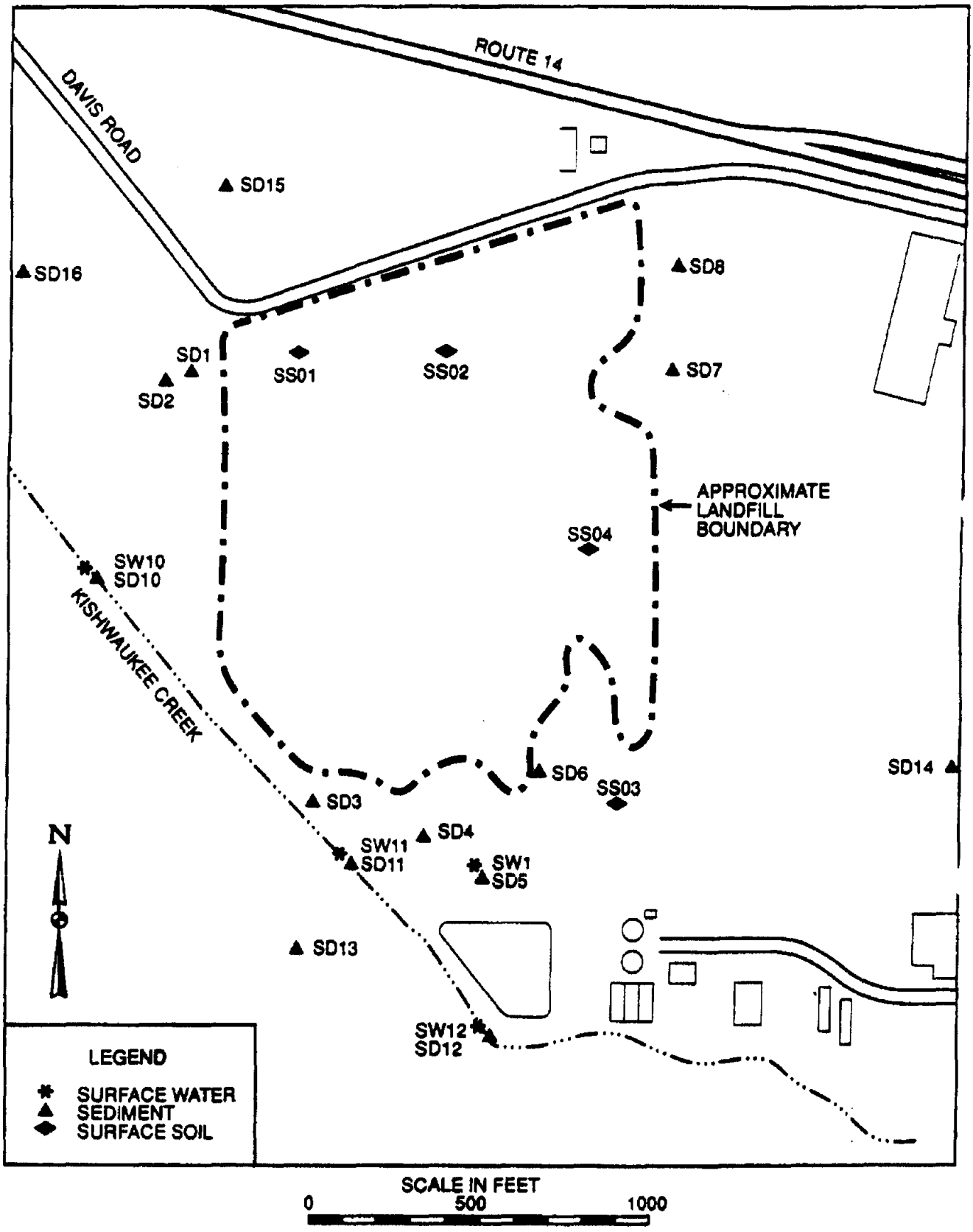

FIGURE 3
SURFACE WATER, SEDIMENT, AND
SURFACE SOIL SAMPLE LOCATION MAP
WOODSTOCK MUNICIPAL LANDFILL
WOODSTOCK, IL

trimethylbenzene, and xylene. Concentrations of these compounds ranged from 48 to 470 ppb.

Landfill Leachate Characteristics

Two rounds of leachate samples were collected from each of the five leachate wells. Analysis of these samples detected the presence of VOCs including benzene, chlorobenzene, 1,2 dichloroethene, toluene, and xylene ranging in concentration from 1 to 16 ppb. Naphthalene, a semi-volatile compound, was also detected at concentrations ranging from 6 to 34 ppb. In addition, several tentatively identified VOCs and semi-volatile organic compounds (SVOCs) were also identified and ranged in concentration from 3-48 ppb. A number of metals including arsenic, antimony, barium, beryllium, cadmium, cobalt, copper, chromium, iron, lead, magnesium, mercury, nickel, selenium, silver, vanadium, and zinc were also detected and ranged in concentration from 1 ppb to 185 ppm. Metals which were detected that exceeded primary drinking water standards include arsenic (ranged from 77-102 ppb with 50 ppb as the standard), barium (810-10,800 ppb, standard is 1000 ppb), chromium (86-1400 ppb, standard is 50 ppb), copper (497-3070, standard is 1300 ppb), lead (150-18,000 ppb, standard is 15 ppb), mercury (2.2-3.9 ppb, standard is 2 ppb), and nickel (1070-15,000 ppb, standard is 100 ppb). During the installation of the leachate wells, it was noted that infiltration of water was causing a mounding effect to occur, generating a large volume of leachate that subsequently discharges from the landfill.

Surface Soil Characteristics

Surface soil samples were collected and were found to be contaminated with numerous SVOCs, many of which were tentatively identified but were classified as unknown. SVOCs which were identified include phenanthrene, di-n-butylphthalate,, fluoranthene, pyrene, butylbenzlphthalate, benzo(a)anthracene, chrysene, benzo(a)pyrene, benzo(g,h,i)perylene, benzo(b)fluoranthene, benzo(k)fluoranthene, and 4-chloroaniline. Concentrations of the known and tentatively identified SVOCs range from 43-23000 ppb. In addition, numerous inorganic compounds were also detected including arsenic, barium, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, selenium, silver, and zinc. Concentrations of these compounds range from 0.07-34000 ppm.

Waste Characteristics

Five test pits were excavated in areas identified as possible drum disposal locations. One test pit yielded an intact drum containing polychlorinated biphenols (PCBs),

acetone, 4 methyl-2-pentanone, and toluene. In addition, several crushed drum lids and/or drum fragments were also discovered during this activity. Other test pits located crushed drums which no longer contained waste product(s).

Groundwater Characteristics

A total of 17 monitoring wells were installed at the site and each of these wells was sampled twice, with the exception of MW-11, which was installed and sampled at the end of the scheduled fieldwork. Inorganic contaminants were detected including cyanide, lead, zinc, nickel, iron, manganese, and magnesium. Concentrations of these contaminants ranged from 3-1750 ppb. VOCs were also detected including benzene, toluene, chlorobenzene, 1,2 dichloroethene, and vinyl chloride. Concentrations of VOCs ranged from 2-21 ppb. Vinyl chloride, which was detected in the upper aquifer in monitoring wells MW-4D and MW-8, exceeded the maximum contaminant level (MCL) of 2 ppb for this contaminant. The vinyl chloride plume is shown on Figure 4. In addition, secondary drinking water standards were exceeded for iron, manganese, chloride, and total dissolved solids.

Surface Water Characteristics

A total of four surface water samples were collected from locations near the landfill in Kishwaukee River. Analysis of these samples identified the presence of arsenic, barium, copper, iron, lead, manganese, nickel and zinc. Concentrations of these contaminants ranged from 7.4-32,200 ppb. The levels of iron detected in these sampl exceeded the ambient water quality criteria for this compound.

Sediment Characteristics

Sediment samples collected from the surrounding wetlands and Kishwaukee River contained one VOC, toluene, at concentrations ranging from 7-92 ppb. In addition, arsenic, barium, iron, lead, magnesium, manganese, mercury, vanadium, selenium, copper, nickel, zinc, and chromium were also detected ranging in concentration from 0.15-67000 ppm.

The data tables which identify the media that was sampled, the contaminant(s) identified in that media, and the respective concentrations have been attached as an appendix to this document.

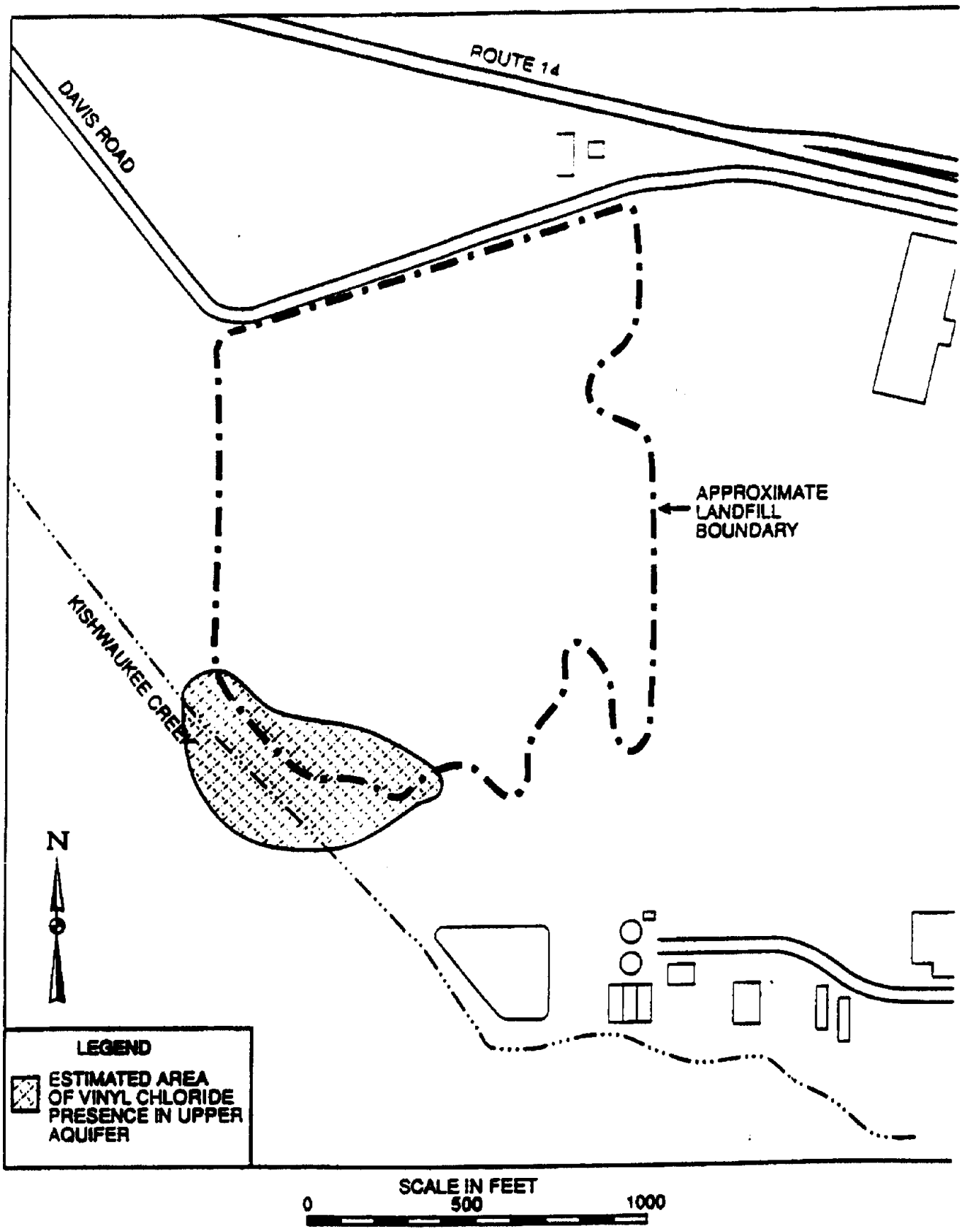

FIGURE 4
ESTIMATED AREA OF VINYL CHLORIDE
PRESENCE IN THE WATER TABLE AQUIFER
WOODSTOCK MUNICIPAL LANDFILL
WOODSTOCK, IL

The key conclusions which may be surmised from this data are as follows:

Groundwater contamination was detected in the upper aquifer immediately southwest and downgradient of the landfill. The contaminant of concern, vinyl chloride, was detected at concentrations that exceed the maximum contaminant level of 2 ppb (e.g. the maximum permissible level) for this compound.

Contamination was detected in leachate gas samples and in leachate groundwater samples collected from wells on the landfill. The contaminants included volatile organics such as benzene, ethylbenzene, toluene and xylene. In addition, inorganic contaminants such as arsenic, barium, chromium, lead and mercury were also detected in excess of regulatory criteria. Leachate is also identified as the source of contamination that is adversely affecting the groundwater, surface water and sediments at the site.

Contamination was detected in surface soils, surface water, and sediments at the site. These three media were contaminated with a wide range of VOCs, SVOCs, and inorganic compounds.

Leachate generation, if not controlled, will continue to cause further releases to the impacted media and surrounding wetlands and result in further adverse environmental impacts. While the wetlands are currently limiting the full impact of the landfill releases to the environment through attenuation, the capacity and capability of the wetlands to function in such a manner is limited.

VI. Summary of Site Risks

Risks to Human Health

A major goal of the RI was to assess potential risks to public health and the environment if the Woodstock site is not remediated. The assessment of impacts to human health is called the Baseline Risk Assessment (BLRA). Using information about what contaminants are present at the site, as well as the concentrations, quantities, locations and ability of the contaminants to migrate, a BLRA was developed to determine what, if any, risks are posed by the site and if remedial action is warranted.

Separate calculations are made for those compounds that can cause cancer and for those that can have other health

effects. For the compounds that can cause cancer (carcinogens), risks are estimated as the additional possibility of developing cancer due to exposure to the compounds. For the non-cancer causing compounds (noncarcinogens), a risk number called the hazard index (HI) is calculated so that if the risk is less than or equal to 1, no adverse health effects would be expected. If the risk is greater than 1, adverse health effects are possible.

The BLRA indicates that the site as it now exists, may pose an unacceptable cancer risk (CR) of 5×10^{-5} or CR = 5×10^{-5}) to trespassers (children/adolescents playing on-site) through exposure to surface soils. This exposure may occur through ingestion or dermal contact with polyaromatic hydrocarbons (PAHs) which are present in the contaminated surface soil. An additional physical hazard is currently posed to children by the debris piles and miscellaneous debris located on the site.

The BLRA also identified unacceptable cancer and non-cancer risks posed by the site under future land-use scenarios. As mentioned above under the current land use conditions, exposure to PAHs in the surface soil poses an unacceptable level of cancer risk to trespassers. In addition, under the potential future use scenario of the site being used as a park or recycling center, consumption of leachate from an on-site well was estimated to pose a potential non-cancer (hazard index of 10 or HI = 10) and cancer (CR = 4×10^{-4}) risk to these park users. The primary chemicals that posed a non-cancer risk due to leachate consumption were cadmium, cobalt, copper, lead, nickel and zinc. The primary chemicals that posed a cancer risk were arsenic and beryllium. Another potential health risk would also exist if a well was placed in or near the area contaminated with vinyl chloride. In this scenario, an unacceptable cancer risk (CR = 1×10^{-3}) exists if groundwater contaminated with vinyl chloride was consumed over a long exposure period by the resident(s) drinking from a contaminated well. The final scenario which was evaluated in the BLRA was use of the landfill itself for residential structures. Under this scenario, an unacceptable cancer risk (CR = 5×10^{-3}) and non-cancer risk (HI = 100) is posed by using the leachate as a groundwater source, inhalation of volatile organic compounds, surface soil exposure and consumption of home grown vegetables.

ENVIRONMENTAL RISKS

The purpose of the ecological assessment is to identify contaminants of potential ecological concern associated with

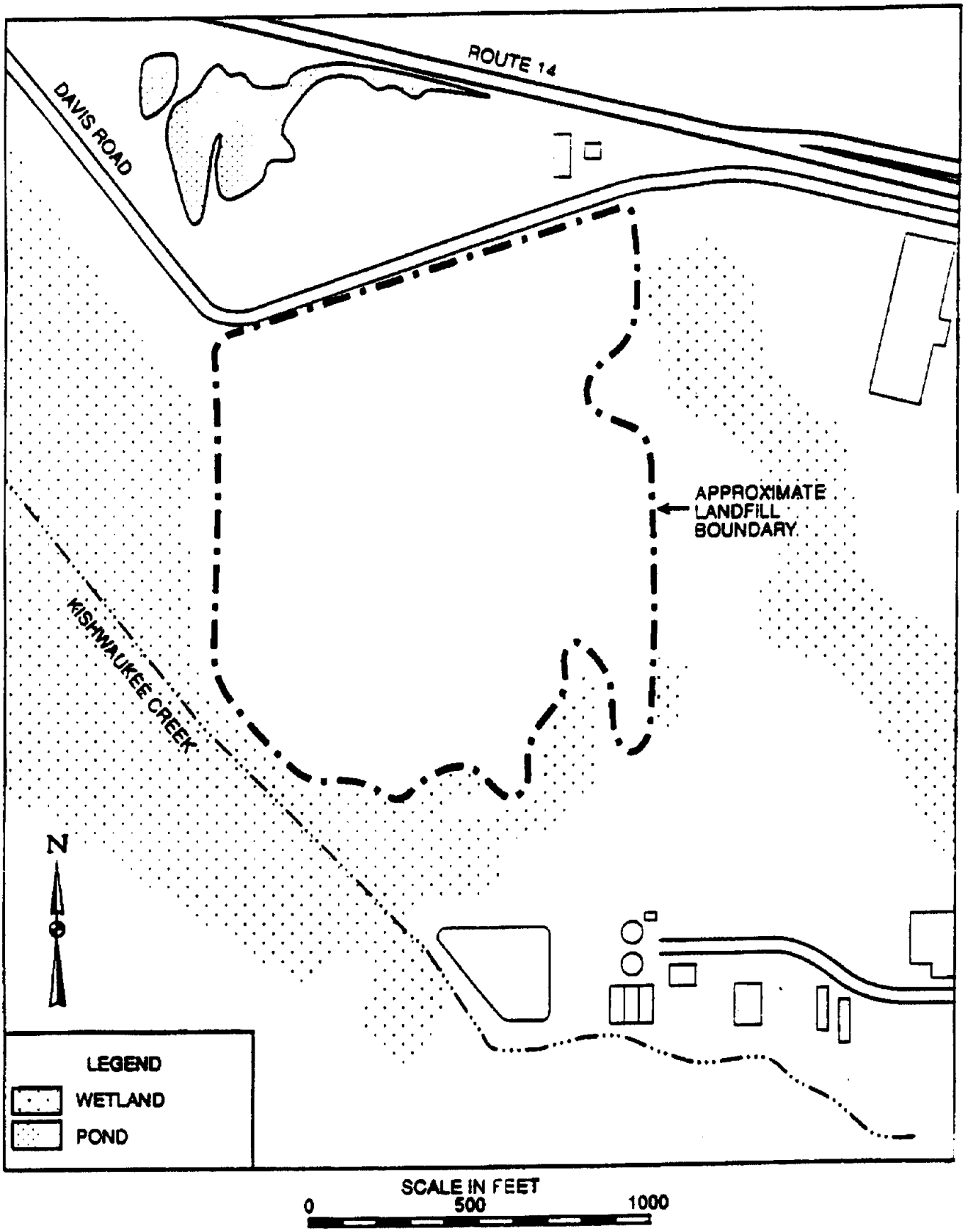

FIGURE 5
ECOLOGICAL FEATURES

WOODSTOCK MUNICIPAL LANDFILL
WOODSTOCK, IL

the site and their effects on plant or animal species of concern. The ecological features of the site are shown on Figure 5. The assessment conducted for the Woodstock site has determined that copper, mercury, and zinc concentrations in the surface soils at the site may adversely affect small terrestrial mammal populations. Exposure of aquatic species to iron which was detected in exceedance of regulatory criteria also poses a potential risk. No conclusions could be reached as to whether past ecological effects have occurred due to the presence of other inorganic contaminants in surface water and sediments at the site due to the lack of biota sampling or biological assays. Additional ecological assessments will be conducted by the Natural Resources Trustee/U.S. Fish and Wildlife Service at the site.

SUMMARY

Actual and threatened releases of hazardous substances are occurring from this site. The source of the risks originate from the contaminants within and emanating from the landfill through releases to groundwater, surface water, sediments, soils, and air. If not addressed, these releases may present an imminent and substantial endangerment to public health, welfare or the environment. Thus, it is necessary that corrective and mitigative action be taken to address the threats posed by the actual or threatened releases.

VII. Description of Alternatives

Based on the results of the RI, a list of alternatives was assembled to address the site remedial action objectives and ensure compliance with the requirements of the NCP. These alternatives are presented in the Feasibility Study prepared for the site. The following remedial alternatives were developed and are briefly described below.

ALTERNATIVE 1 NO ACTION

CERCLA requires that the "No Action" alternative be evaluated at every site to establish a baseline against which all other alternatives are compared. Under this alternative, no remedial actions would take place and the site would remain in its present condition.

Capital cost: 0
Annual maintenance and monitoring cost: $10,000
Estimated present net worth: $37,000
Estimated time to implement: None

Note: The $10,000 maintenance and monitoring cost is not an annual cost, but reflects the cost of reviewing site conditions on a five year basis.

ALTERNATIVE 2 ACCESS RESTRICTIONS, INSTITUTIONAL CONTROLS AND MONITORING

The purpose of Alternative 2 is to control access to the site, and to monitor the groundwater and existing landfill cover. The major elements of this alternative include:

* Institutional controls
* Fencing
* Monitoring

Institutional controls would include land use restriction and deed restrictions to preclude groundwater usage.

A chain-link fence would be installed and maintained around the perimeter of the site. The purpose of the fence would be to control access to the site, and thus, limit exposure to the surface soils on-site. Erosion control measures would be taken during fence construction to protect the adjacent wetlands.

The primary objectives of monitoring would be to monitor groundwater quality, wetlands water quality, and the condition of the existing landfill cover. Groundwater sampling and analysis would be conducted on a periodic basis. Visual inspections of the cover and monitoring for differential settlement would also be performed. The frequency of all sampling activities or inspections will be determined by the USEPA and IEPA (the "Agencies") during Remedial Design.

Capital cost: $124,000
Annual maintenance and monitoring cost: $25,000
Estimated present net worth: $614,000
Estimated time to implement: 1 month

ALTERNATIVE 3 - ACCESS RESTRICTIONS, INSTITUTIONAL CONTROLS, GROUNDWATER EXTRACTION SYSTEM, AND MONITORING

The purpose of Alternative 3 is to control access to the site, contain and treat the contaminated groundwater, and monitor the groundwater and existing landfill cover. The major elements of this alternative are:

* Institutional controls
* Fencing

* Monitoring
* Groundwater extraction, treatment, and discharge

Institutional controls would include land use restrictions and deed restrictions to preclude groundwater usage.

A chain-link fence would be installed and maintained around the perimeter of the site. The purpose of the fence would be to control access to the site, and thus, limit exposure to the surface soils on-site. Erosion control measures would be taken during fence construction to protect the adjacent wetlands.

The objectives of monitoring would be to assess the following: treatment system efficiency, groundwater and wetland quality, and the condition of the existing landfill cover. Groundwater and treatment system sampling and analyses would be conducted on a periodic basis. The landfill cover would also be periodically inspected visually and monitored for differential settlement. The frequency of all sampling activities and inspections will be determined by the Agencies during Remedial Design.

The groundwater extraction system would consist of installing groundwater extraction wells in the area of vinyl chloride contamination. Groundwater would then be pumped from the extraction system to the publicly owned treatment works (POTW). On-site treatment will be required only if pretreatment standards are exceeded during this action.

Capital cost: $576,000
Annual maintenance and monitoring cost: $101,000
Estimated present net worth: $1,414,000
Estimated time to implement: 6 months

ALTERNATIVE 4 - INSTITUTIONAL CONTROLS, RECONSTRUCT EXISTING COVER, AND MONITORING

The purpose of Alternative 4 is to minimize infiltration, promote surface water runoff, eliminate leachate seeps, and isolate the contaminants of concern. The major elements of this alternative include:

* Institutional controls
* Monitoring
* Cover reconstruction

Institutional controls would include land use restrictions and deed restrictions to preclude groundwater usage.

Periodic monitoring would be conducted to evaluate the

condition of the reconstructed landfill cover, the sedimentation basin and wetlands water quality, and groundwater quality. The reconstructed cover would be monitored periodically for differential settlement. The frequency of all sampling activities and inspections will be determined by the Agencies during Remedial Design.

The landfill cover would be reconstructed by removing existing trees and brush on the landfill, sealing leachate seeps, regrading the site, locating a suitable borrow site for fill material, importing fill material as necessary, placing this fill on top of the existing surface soils, and vegetating the new cover. A minimum cover thickness of 2 ft. would be established over the entire landfill. In areas where sewage sludge has been deposited on the landfill, a minimum of 6 in. of new soil will be placed, regardless of the depth of existing cover soils. The reconstructed cover would also be sloped by filling and regrading to promote surface water drainage from the landfill area. The reconstructed cover would extend to the edge of the landfill and would avoid the adjacent wetlands. The trees and brush removed from the landfill would be appropriately disposed of, as approved by the Agencies. Erosion control measures would be taken to protect the perimeter wetlands. A surface water control system would also be part of this remedy.

Capital cost: $4,418,000
Annual maintenance and monitoring cost: $69,000
Estimated present net worth: $5,770,000
Estimated time to implement: 6 months

ALTERNATIVE 5 - INSTITUTIONAL CONTROLS, RECONSTRUCT EXISTING COVER, GROUNDWATER EXTRACTION SYSTEM, AND MONITORING

The major elements of Alternative 5 are the same as Alternative 4 with remediation of contaminated groundwater included. These elements would therefore include:

* Institutional controls
* Monitoring
* Cover reconstruction
* Groundwater extraction, treatment, and discharge

The first three elements of this alternative were discussed in Alternative 4. The fourth element, the groundwater extraction system, would consist of installing groundwater extraction wells in the area of vinyl chloride contamination. Groundwater would then be pumped from the extraction system to an on-site treatment facility if the POTW pretreatment standards were exceeded during this

action.

Capital cost: $4,860,000
Annual maintenance and monitoring cost: $129,000
Estimated present net worth: $6,490,000
Estimated time to implement: 6 months

ALTERNATIVE 6 - INSTITUTIONAL CONTROLS, CONSTRUCT GEOSYNTHETIC CLAY CAP, AND MONITORING

The purpose of Alternative 6 is to minimize infiltration, promote surface water runoff, eliminate leachate seeps, and isolate the contaminants of concern. The major elements of this alternative include:

* Institutional controls
* Monitoring
* Geosynthetic clay cap

Institutional controls would include land use restrictions and deed restrictions to preclude groundwater usage.

The primary objectives of monitoring would be to monitor sedimentation basin and wetlands water quality, groundwater quality, and the condition of the landfill cap. Periodic groundwater sampling and analysis would be performed. Regular visual inspections would be conducted to evaluate the integrity of the landfill cap, and to check for erosion and differential settlement.

The landfill cap would be constructed as specified in 35 IAC 811.314. Generally, this includes removing the existing trees and brush, regrading the surface, sealing the leachate seeps, placement of a geosynthetic liner with a bentonite component, placement of a drainage layer, a rooting zone layer, and topsoil. The cap would then be revegetated. The geosynthetic clay layer would have a permeability comparable to 3 ft. of compacted clay (1×10^{-7} cm/s). The geosynthetic clay cap would extend to the edge of the landfill and would avoid the adjacent wetlands. The trees and brush removed from the landfill would be appropriately disposed of, as approved by the Agencies. The drainage layer will be designed so as to route landfill gases to a venting system. Erosion control measures would be taken to protect the perimeter wetlands. A surface water control system will be designed appropriate to the final grade such that it will limit erosion of the landfill cover from sheet flow, will not cause degradation of adjacent wetlands, meet local stormwater retention requirements, and allow for the monitoring of surface water runoff at distinct discharge

points.

Capital cost: $6,612,000
Annual maintenance and monitoring cost: $69,000
Estimated present net worth: $7,964,000
Estimated time to implement: 6 months

ALTERNATIVE 7 - INSTITUTIONAL CONTROLS, CONSTRUCT GEOSYNTHETIC CLAY CAP, GROUNDWATER EXTRACTION SYSTEM, AND MONITORING

The major elements of Alternative 7 are the same as those in Alternative 6 with remediation of contaminated groundwater included. These elements would therefore include:

* Institutional controls
* Monitoring
* Geosynthetic clay cap
* Groundwater extraction, treatment, and discharge

The first three elements of this alternative were discussed in Alternative 6. The fourth element, the groundwater extraction system, would consist of installing groundwater extraction wells in the area of vinyl chloride contamination. Groundwater would then be pumped from the extraction system to the POTW. On-site treatment will be required only if pretreatment standards are exceeded during this action.

Capital cost: $7,054,000
Annual maintenance and monitoring cost: $129,000
Estimated present net worth: $8,681,000
Estimated time to implement: 6 months

ALTERNATIVE 8 - INSTITUTIONAL CONTROLS, CONSTRUCT RCRA SUBTITLE D (i.e., SOLID WASTE-TYPE) CAP, AND MONITORING

The purpose of Alternative 8 is to minimize infiltration, promote surface water runoff, eliminate leachate seeps, and isolate the contaminants of concern. The major elements of this remedy include:

* Institutional controls
* Monitoring
* Solid waste-type cap

Institutional controls would include land use restrictions and deed restrictions to preclude groundwater usage.

The primary objectives of monitoring would be to monitor sedimentation basin and wetlands water quality, groundwater quality, and the condition of the landfill cap. Periodic groundwater sampling and analysis would be performed. Regular visual inspections would be conducted to evaluate the integrity of the landfill cap, and check for erosion and differential settlement.

Cap construction would involve the construction of a RCRA Subtitle D solid waste-type cap which would seal the leachate seeps, limit infiltration, and promote surface water drainage from the landfill area. Construction would begin with removal of the trees and brush on the landfill. The trees and brush removed would be appropriately disposed of, as approved by the Agencies. A borrow site would be located for fill materials, of which a clay source will be of primary importance. Fill material would be imported to provide grades suitable for positive drainage. The constructed cap would generally consist of a low permeability clay layer placed to a compacted thickness of 3 ft. A 2.5 ft. protective soil cover may be placed above the clay. A 6 in. organic topsoil layer may then be placed and vegetated.

Capital cost: $9,204,000
Annual maintenance and monitoring cost: $69,000
Estimated present net worth: $9,854,000
Estimated time to implement: 9 months

ALTERNATIVE 9 - INSTITUTIONAL CONTROLS, CONSTRUCT RCRA SUBTITLE D (i.e., SOLID WASTE-TYPE) CAP, GROUNDWATER EXTRACTION SYSTEM, AND MONITORING

The major elements of Alternative 9 are the same as Alternative 8 with remediation of contaminated groundwater included. These elements would therefore include:

* Institutional controls
* Monitoring
* Solid waste-type cap
* Groundwater extraction, treatment, and discharge

The first three elements of this alternative were discussed in Alternative 8. The fourth element, the groundwater extraction system, would consist of installing groundwater extraction wells in the area of vinyl chloride contamination. Groundwater would then be pumped from the extraction system to the POTW. On-site treatment will be required only if pretreatment standards are exceeded during this action.

Capital cost: $9,646,000
Annual maintenance and monitoring cost: $129,000
Estimated present net worth: $11,273,000
Estimated time to implement: 9 months

ALTERNATIVE 10 - INSTITUTIONAL CONTROLS, CONSTRUCT RCRA SUBTITLE C (i.e., HAZARDOUS WASTE-TYPE) CAP, AND MONITORING

The purpose of Alternative 10 is to minimize infiltration, promote surface water runoff, eliminate leachate seeps and isolate the contaminants of concern. The major elements of this remedy include:

* Institutional controls
* Monitoring
* Hazardous waste-type cap

Institutional controls would include land use restrictions and deed restrictions to preclude groundwater usage.

The primary objectives of monitoring would be to monitor sedimentation basin and wetlands water quality, groundwater quality, and the condition of the landfill cap. Groundwater sampling and analysis would be done on a periodic basis. Periodic visual inspection of the landfill cap and monitoring for differential settlement would also be performed.

Cap construction would involve the construction of a RCRA Subtitle C hazardous waste-type cap which would seal the leachate seeps, limit infiltration, and promote surface water drainage from the landfill area. Construction of the landfill cap would begin with removal of the trees and brush on the landfill. The trees and brush removed would be appropriately disposed of, as approved by the Agencies. A borrow site would be located for fill materials, of which a clay source will be of primary importance. Fill material would be imported to provide grades suitable for positive drainage. The RCRA Subtitle C cap would generally include the following components: a 2 ft. thick compacted clay layer, a 40 ml. high density polyethylene flexible membrane liner, a 1 ft. thick drainage layer, an 18 in. rooting zone, a 6 in. topsoil layer, and a vegetative cover.

Capital cost: $12,244,000
Annual maintenance and monitoring cost: $69,000
Estimated net worth: $13,596,000
Estimated time to implement: 1 year

ALTERNATIVE 11 - INSTITUTIONAL CONTROLS, CONSTRUCT RCRA SUBTITLE C (i.e., HAZARDOUS WASTE-TYPE) CAP, GROUNDWATER EXTRACTION SYSTEM, AND MONITORING

The major elements of Alternative 11 are the same as Alternative 10 with remediation of contaminated groundwater included. These elements would therefore include:

* Institutional controls
* Monitoring
* Hazardous waste-type cap
* Groundwater extraction, treatment and discharge

The first three elements of this alternative were discussed in Alternative 10. The fourth element, the groundwater extraction system, would consist of installing groundwater extraction wells in the area of vinyl chloride contamination. Groundwater would then be pumped from the extraction system to the POTW. On-site treatment would be required only if pretreatment standards were exceeded during this action.

Capital cost: $12,686,000
Annual maintenance and monitoring cost: $129,000
Estimated present net worth: $14,313,000
Estimated time to implement: 1 year

VIII. Evaluation of Alternatives

The NCP requires that the alternatives be evaluated against nine evaluation criteria. This section summarizes the relative performance of the alternatives by highlighting the key differences among the alternatives in relation to these criteria. The nine evaluation criteria are categorized as: (1) Threshold Criteria; (2) Primary Balancing Criteria; and (3) Modifying Criteria. Each of these terms is described as follows:

- Threshold Criteria

  - **1) Overall protection of human health and the environment** addresses whether a remedy provides adequate protection of human health and the environment and describes how risks posed through each exposure pathway are eliminated, reduced or controlled through treatment and engineering controls. The selected remedy must meet this criteria.

  - **2) Compliance with applicable or relevant and**

appropriate requirements (ARARs) addresses whether a remedy will meet federal and state environmental laws or justifies a waiver from such requirements. The selected remedy must meet this criteria or waiver of the ARAR must be obtained.

- o Primary Balancing Criteria

  - **3) Long-term effectiveness and permanence** refers to expected residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time, once cleanup goals have been met.

  - **4) Reduction of toxicity, mobility, and volume** through treatment is the anticipated performance of the treatment technologies a remedy may employ.

  - **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, until cleanup goals are achieved.

  - **6) Implementability** is the technical and administrative feasibility of a remedy, including the availability of materials and services needed to implement a particular option.

  - **7) Cost** includes estimated capital and operation and maintenance (O&M) costs, also expressed as net present-worth cost.

- o Modifying Criteria

  - **8) Support Agency (IEPA)** acceptance reflects aspects of the preferred alternative and other alternatives the IEPA favor or object to, and any specific comments regarding federal and state ARARs or the proposed use of waivers.

  - **9) Community acceptance** summarizes the public's general response to the alternatives described in the proposed plan and in the RI/FS, based on public comments received.

A detailed discussion of all the alternatives, including the "No Action" alternative, has been provided in the FS. This evaluation also includes an evaluation against the nine criteria. The NCP requires that the "No Action" alternative be evaluated to establish a baseline against which all other alternatives are measured. A summary of the evaluation discussion is provided below.

Overall Protection of Human Health and the Environment

Based upon the detailed analysis, it was concluded that Alternatives 1 through 5 would not satisfy the criterion of ensuring the overall protection of human health and the environment. The baseline risk assessment has documented unacceptable risks present at the site and these alternatives do not meet the criterion either because no remedial action would be taken (Alternative 1) or the remedial actions specified would not adequately address the present and future risks posed by the site, or adequately prevent further leachate generation and releases of contaminants to the environment.

The remaining Alternatives, 6 through 11, would be protective of human health and the environment in regards to exposure to surface soils. The differences in cap design among these alternatives is a function of their complexity and would not result in increased protectiveness from surface soil exposure. However, the increased cap complexity would affect leachate generation with the cap specified in Alternatives 10 and 11 yielding the least amount of leachate generation. The surface water seeps which are a result of leachate generation are expected to be eliminated through placement of a cap on the landfill. The caps for Alternatives 6 through 9 would permit slightly greater infiltration rates than the caps for Alternatives 10 and 11. This would result in slightly greater leachate generation than that provided by Alternatives 10 and 11.

The caps proposed may have the undesirable effect of trapping gas inside the landfill, resulting in a potential increase in lateral migration of landfill gas. This will be remedied through placement of a venting system in the landfill.

Alternatives 6, 8, and 10 would not be protective of human health and the environment with respect to groundwater in that no remedial activities are proposed in these alternatives to address this potential or actual risk to human health and the environment.

Compliance With ARARS

Only Alternative 7 would comply with all chemical, action, and location specific ARARs associated with the site. More specifically, Alternatives 1 through 5 would not comply with the action-specific or chemical-specific ARARs which require landfill capping (IAC 811) and remediation of the contaminated groundwater (40 CFR 141 and 35 IAC 620.410). Alternatives 6, 8, and 10 would not comply with chemical-specific ARARs since these alternatives do not require remediation of the contaminated groundwater. Alternatives 9 and 11 would not meet the location-specific ARAR (40CFR 6) since these alternatives would result in the loss of wetlands due to cap placement and other remedial alternatives exist which would not require mitigating the loss of these wetlands. If an alternative were chosen that results in a loss of wetlands, mitigating the loss of those wetlands generally requires replacement on a 2 to 1 ratio. A listing of all ARARs associated with each alternative can be found in Table 11 of the FS.

Long-term Effectiveness and Permanence

Capping the landfill would contain the surface soils, sediments, sludges and wastes effectively. A cap would permanently reduce infiltration into the landfill therefore reducing leachate generation to the maximum extent practicable. Alternatives 10 and 11 would provide the most effective infiltration reduction option of all the alternatives. However, since the waste mass is in contact with groundwater, the more effective infiltration reduction achieved by Alternatives 10 and 11 is not considered to be significant in comparison to either of the caps specified in Alternatives 6 and 7 or 8 and 9. All the capping alternatives (4 through 11) would eliminate human exposure to the contaminated surface soils and would also minimize the ecological risks posed by this media with Alternatives 10 and 11 being most protective due to the thickness of the cap.

The alternatives addressing groundwater extraction (3, 5, 7, 9, and 11) would be effective in preventing further migration of the vinyl chloride and would ultimately eliminate the threat posed by this media through extraction and treatment.

Reduction of Toxicity, Mobility or Volume

None of the alternatives would reduce toxicity or volume of the in-situ landfill wastes. Alternatives 1 through 3 would only require monitoring and institutional controls. Alternatives 4 through 11 are containment alternatives and

would also not reduce the toxicity and volume of in-situ wastes. However, the capping alternatives would reduce the volume of leachate being produced by minimizing infiltration. This would also reduce the mobility of the contaminants. Alternatives 5, 7, 9, and 11 would reduce the toxicity, mobility and volume of contaminants in the groundwater through an active groundwater extraction system.

Short-term Effectiveness

Alternatives 5, 7, 9, and 11 would result in compliance with groundwater standards through extraction of the contaminated groundwater and treatment at the POTW. A higher level of risk is associated with these alternatives due to the potential dewatering of the wetlands. Design of the system must preclude this from occurring. In addition, erosion controls, drainage swales, and sedimentation basins are necessary to protect the wetlands during construction as well as after construction is complete. Remediation activities would also result in increased risk of injury due to increased truck traffic on other related construction activities. The increase in dust generation must also be minimized through dust control measures or the use of personal protective equipment by workers. It is expected that the duration of capping activities specified in Alternatives 4 through 11 will not exceed one year. Remediation of the contaminated groundwater as called for in Alternatives 3, 5, 7, 9, and 11 is not expected to exceed five years.

Implementability

All the alternatives are readily implementable. The capping alternatives and those alternatives specifying groundwater extraction have been proven to be an effective technology in remediating similar threats on other sites. Technologies for constructing a groundwater extraction system are relatively easy to implement, well developed, and are reliable. If treatment is required before discharge, the technologies for treatment are proven and readily implementable.

Cost

The costs for the eleven identified alternatives range from $37,000 (Alternative 1) up to $14,313,000 (Alternative 11) in terms of present net worth. The capital costs range from $0 (Alternative 1) up to $12,686,000 (Alternative 11). The following summary table lists each alternative and the associated costs:

ALTERNATIVE	COSTS Capital	O&M	PNW
1. No Action	$0	$10,000	$37,000
2. Access Restrictions and Monitoring	$124,000	$25,000	$614,000
3. Access Restrictions, Groundwater Extraction System, and Monitoring	$576,000	$101,000	$1,414,000
4. Access Restrictions, Reconstruct Existing Cover, and Monitoring	$$3,935,000	$69,000	$$5,287,000
5. Access Restrictions, Reconstruct Existing Cover, Groundwater Extraction System, and Monitoring	$4,378,000	$129,000	$6,005,000
6. Access Restrictions, Construct Geosynthetic Clay Cover, and Monitoring	$6,612,000	$69,000	$7,964,000
7. Access Restrictions, Construct Geosynthetic Clay Cover, Groundwater Extraction System, and Monitoring	$7,054,000	$129,000	$8,681,000
8. Access Restrictions, Construct RCRA Subtitle D (i.e., solid waste-type) Cover, and Monitoring	$9,204,000	$69,000	$9,854,000
9. Access Restrictions, Construct RCRA Subtitle D (i.e., solid waste-type) Cover, Groundwater Extraction System, and Monitoring	$9,646,000	$129,000	$11,273,000
10. Access Restrictions, Construct RCRA Subtitle C (i.e., hazardous waste-type) Cover, and Monitoring	$12,244,000	$69,000	$13,596,000