IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF KENTUCKY
FRANKFORT DIVISION

UNITED STATES OF AMERICA, Plaintiff, v. U.S. Ecology, Inc., et al., Defendants.	CIVIL ACTION NO.

CONSENT DECREE

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. U.S. Ecology, Inc., et Al., relating to the Maxey Flats Disposal Superfund Site.

FOR: U.S. Department of Energy

BY: Thomas P. Grumbly Date

Title: Assistant Secretary for Environmental Management

Address: 1000 Independence Ave., S.W.
Washington, D.C. 20585

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*A separate signature page must be signed by each Settling Private Party and Settling Federal Agency.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
CERCLA CONSENT DECREE FOR REMEDIAL
DESIGN, REMEDIAL ACTION, AND
PARTIAL REIMBURSEMENT OF RESPONSE
COSTS FOR THE MAXEY FLATS DISPOSAL
SUPERFUND SITE
FLEMING COUNTY, KENTUCKY

I. BACKGROUND

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

B. The United States in its complaint seeks, inter alia: (1) reimbursement of costs incurred by EPA and the Department of Justice for response actions at the Maxey Flats Disposal Superfund Site (the "Site") in Fleming County, Kentucky, together with accrued interest; and (2) performance of studies and response work by the Settling Defendants at the Site consistent with the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 (as amended) ("NCP").

C. The Maxey Flats Disposal Site is a low-level radioactive waste site licensed under the Atomic Energy Act ("AEA"). Pursuant to the requirements of the AEA, the Site is owned by the Commonwealth of Kentucky ("Commonwealth"). The Commonwealth, through the Cabinet for Human Resources, exercises regulatory authority over the Site pursuant to its status as an "Agreement State" under the AEA and the Kentucky Cabinet for Natural Resources and Environmental Protection is the current licensee of the Site. Nuclear Engineering Company (now known as "U.S. Ecology, Inc.") operated the Site under a license granted by the

Commonwealth from 1963-1978, during which time 4-5 million cubic feet of radioactive waste was disposed of at the Site.

D. In accordance with the NCP and Section 121(f)(1)(F) of CERCLA, 42 U.S.C. § 9621(f)(1)(F), EPA notified the Commonwealth of Kentucky on June 30, 1992 of negotiations with potentially responsible parties ("PRPs") regarding the implementation of the remedial design and remedial action ("RD/RA") for the Site.

E. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C. § 9622(j)(1), EPA notified the United States Department of the Interior and the United States Department of Agriculture on June 30, 1992 of negotiations with PRPs regarding the release of hazardous substances that may have resulted in injury to the natural resources under federal trusteeship and encouraged the trustees to participate in the negotiation of this Consent Decree.

F. Participation by the Settling Defendants in the settlement represented by this Consent Decree shall not be construed as an acknowledgement by the Settling Defendants that releases or threatened releases of hazardous substances at or from the Site constitute an imminent and substantial endangerment to the public health or welfare or to the environment. Except as otherwise provided in the Federal Rules of Evidence, participation by the Settling Parties in the settlement represented by this Consent Decree shall not be considered an admission of liability for any purpose. By consenting to the entry of the Consent Decree, the Settling Defendants do not admit

any statement in the administrative record. The Settling Parties reserve their rights to raise any defense and to challenge any fact or liability in any proceeding except one to enforce this Consent Decree.

G. 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 10, 1986, at 51 Fed. Reg. 21,055 and 21,095.

H. In response to an alleged release or substantial threat of a release of hazardous substances at or from the Site, the Maxey Flats Steering Committee, composed of 82 PRPs, commenced on March 24, 1987, a Remedial Investigation and Feasibility Study ("RI/FS") for the Site pursuant to 40 C.F.R. § 300.430 under the Administrative Order by Consent ("AOC") for the Site dated March 24, 1987.

I. The Remedial Investigation ("RI") Report for the Site was finalized on July 21, 1989, and the Feasibility Study ("FS") Report was finalized, with an Addendum, on May 31, 1991. The Maxey Flats Steering Committee has completed the work required under the AOC.

J. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA published notice of the completion of the FS and of the proposed plan for remedial action on June 3 and June 4, 1991, in major local newspapers of general circulation. EPA provided an opportunity for written and oral comments from the public on the proposed plan for remedial action. A copy of the transcript of

the public meeting held on the proposed plan is available to the public as part of the administrative record upon which the Regional Administrator based the selection of the response action.

K. The decision by EPA on the remedial action to be implemented at the Site is embodied in a final Record of Decision ("ROD"), issued on September 30, 1991, (attached as Appendix A), on which the Commonwealth had a reasonable opportunity to review and comment and has given its general concurrence. The ROD includes a responsiveness summary to the public comments. Notice of the final plan was published in accordance with Section 117(b) of CERCLA.

L. Based on the information currently available to EPA, EPA believes that the Work as defined herein will be properly and promptly conducted by the Settling Defendants if conducted in accordance with the requirements of this Consent Decree and the Statement of Work ("SOW").

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

N. The Parties represent, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and implementation of this Consent Decree will expedite the cleanup of the Site and will avoid prolonged and complicated litigation among the

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

NOW, THEREFORE, 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 Parties. Solely for the purposes of this Consent Decree and the underlying complaint, Settling Parties waive all objections and defenses that they may have to jurisdiction of the Court or to venue in this District. The Settling Parties 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, the Settling Defendants, and their successors and assigns. Any reorganization, abolition, size reduction, transfer of function, or change in the existence or authority of a Settling Federal Agency or the Commonwealth, or change in ownership or corporate status of a Settling Private Party including, but not limited to, any transfer of assets or real or personal property, shall in no way alter the responsibilities under this Consent Decree of the Settling Federal Agency, Settling Private Party, or the Commonwealth.

3. Settling Private Parties shall provide a copy of this Consent Decree to each contractor hired to perform the IRP Work (as defined below) and to each person representing any Settling Private Party with respect to the Site or the IRP Work and shall condition all contracts entered into hereunder upon performance of the IRP Work in conformity with the terms of this Consent Decree. Settling Private Parties or their contractors shall provide written notice of the Consent Decree to all subcontractors hired to perform any portion of the IRP Work required by this Consent Decree. Settling Private Parties shall nonetheless be responsible for ensuring that their contractors and subcontractors perform the IRP Work in accordance with this Consent Decree. With regard to the IRP Work, each contractor and subcontractor shall be deemed to be in a contractual relationship with the Settling Private Parties within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

4. The Commonwealth shall provide a copy of this Consent Decree to each contractor hired to perform the BoRP Work (as defined below) and to each person representing the Commonwealth with respect to the Site or the BoRP Work and shall condition all contracts entered into hereunder upon performance of the BoRP Work in conformity with the terms of this Consent Decree. The Commonwealth or its contractors shall provide written notice of the Consent Decree to all subcontractors hired to perform any portion of the BoRP Work. The Commonwealth shall nonetheless be responsible for ensuring that its contractors and

subcontractors perform the BoRP Work in accordance with this Consent Decree. With regard to the BoRP Work, each contractor and subcontractor shall be deemed to be in a contractual relationship with the Commonwealth within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

IV. DEFINITIONS

5. 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 Statement of Work or appendices attached hereto and incorporated hereunder, the following definitions shall apply:

"AEA" shall mean the Atomic Energy Act of 1954, as amended, 42 U.S.C. §§ 2201 et seq.

"Balance of Remedial Phase" (BoRP) shall mean that portion of the remedy for the Site described in Tasks IV and V of Section IV of the Statement of Work for the Site (SOW), attached as Appendix B, and which is equivalent to the tasks comprising the "Interim Maintenance Period" (IMP) and "Final Closure Period" (FCP) as described in the ROD.

"BoRP Activities" shall mean those activities to be undertaken by the Commonwealth to implement the final plans and specifications submitted by the Commonwealth pursuant to the IMP and FCP work plans as described in the SOW and this Consent Decree and approved by EPA.

"BoRP Remedial Design" shall mean those activities to be undertaken by the Commonwealth to develop the final plans and specifications for the BoRP Activities as required in the SOW and this Consent Decree.

"BoRP Work" shall mean all activities the Commonwealth is required to perform under this Consent Decree, including the Commonwealth IRP Obligations and other remedial tasks and O & M (as defined below) specified in the SOW, except those required by Section XXVIII (Retention of Records).

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. §§ 9601 et seq.

"Chemical and Radiological Monitoring" shall mean all monitoring, including monitoring for RCRA hazardous wastes or hazardous constituents, as specified in Section III.A.4.e.-j. of the SOW.

"Commonwealth IRP Obligations" shall mean the Commonwealth's responsibility to perform the following tasks until Certification of Completion of the IRP: Chemical and Radiological Monitoring; access control and security; and Site maintenance, including grass cutting, fence repair, routine cap repairs, subsidence monitoring and repair, and ditch cleaning.

"Commonwealth" or "State" shall mean the Commonwealth of Kentucky, its various State cabinets and agencies, and related entities including the State university system.

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

"Construction Standards" shall mean those requirements designated as Construction Standards in the Statement of Work and those construction-related criteria and standards developed during IRP Remedial Design or BoRP Remedial Design which are consistent with the remedy outlined in the SOW.

"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.

"De Minimis Consent Decree" shall mean the consent decree lodged herewith to which the United States, the De Minimis Settlors and the Settling Privates Parties are signatories.

"De Minimis Settlors" shall mean, collectively, the "Non-Federal De Minimis Settlors" and the "Federal De Minimis Settlors," as listed in Exhibits 1 and 4 of the "De Minimis Consent Decree" for the Site lodged with this Consent Decree.

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

"Final Closure Period" (FCP) shall mean that portion of the remedy described in Section IV, Task IV.B. of the SOW and identified as the Final Closure Period in the ROD.

"Future Response Costs" shall mean the costs that EPA or the United States Department of Justice incur in reviewing or developing plans, reports and other items pursuant to this Consent Decree, verifying the Work, or otherwise overseeing this Consent Decree, including payroll costs, contractor costs, travel costs, and laboratory costs; but shall not include i) costs EPA incurs in performing Emergency Response pursuant to Section XVIII; ii) costs EPA incurs in performing Work in accordance with Paragraph 126 of Section XXIV (Covenants Not to Sue or Take Administrative Action by Plaintiff) or in performing additional response actions as provided in Section IX (Additional Response Actions) or Section X (EPA Periodic Review); or iii) any other costs which are reserved or subject to reopeners under Section XXIV (Covenants Not to Sue or Take Administrative Action by Plaintiff).

"Interim Maintenance Period" (IMP) shall mean the period of natural subsidence, and Site maintenance and monitoring, commencing upon Certification of Completion of the IRP and concluding with the attainment of the trench stabilization criteria established in accordance with the SOW.

"Initial Remedial Phase" (IRP) shall mean that portion of the remedy described in the Record of Decision as the Initial Closure Period, which consists of Tasks I-III of the SOW and the

performance monitoring requirements relating to Tasks I-III in Task V of Section IV of the SOW.

"IRP Activities" shall mean those activities to be undertaken by the Settling Private Parties to implement the final plans and specifications submitted by the Settling Private Parties pursuant to the IRP Remedial Action Work Plan and approved by EPA.

"IRP Remedial Design" shall mean those activities to be undertaken by the Settling Private Parties to develop the final plans and specifications for the IRP Activities pursuant to the IRP Remedial Design Work Plan.

"IRP Work" shall mean all activities Settling Private Parties are required to perform under this Consent Decree, including the IRP tasks specified in the SOW, except those required by Section XXVIII (Retention of Records).

"National Contingency Plan" or (NCP) shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, including, but not limited to, any amendments thereto.

"Operation and Maintenance" or (O & M) shall mean all activities to maintain the effectiveness of the remedial action which are described in the Record of Decision for the Site as the Custodial Maintenance Period, including all institutional control, perpetual care, and maintenance and monitoring activities as required under the Institutional Control Period

(ICP) and Post-Institutional Control Period Work Plans and Operation and Maintenance Manuals developed pursuant to this Consent Decree and the Statement of Work (SOW) and approved by EPA.

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

"Parties" shall mean the Plaintiff, the Settling Defendants, and the Settling Federal Agencies.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs that the United States (excluding the Settling Federal Agencies) incurred and paid with regard to the Site prior to the date of entry of this Consent Decree, plus interest on those costs.

"Performance Standards" shall mean the performance standards specifically identified in Section III of the SOW and such other cleanup standards, standards of control, and other substantive requirements, criteria or limitations that EPA identifies as a result of IRP Remedial Design or BoRP Remedial Design that are consistent with the standards specified in Section III of the SOW and are required due to significant monitoring or sampling data developed during the IRP Remedial Design or BoRP Remedial Design which are materially different from previously existing data.

"Plaintiff" shall mean the United States on behalf of EPA.

"RCRA" shall mean the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §§ 6901 et seq., which is in effect on the effective date of this Consent Decree.

"Record of Decision" (ROD) shall mean the EPA Record of Decision relating to the Site dated September 30, 1991, issued by EPA Region IV, and all attachments thereto.

"Remedial Activities" shall mean the IRP Activities and the BoRP Activities.

"Remedial Measures" shall mean the "Remedial Measures" designated in Section III of the SOW.

"Remedial Standards" shall mean the "Performance Standards" as defined in this Consent Decree and the Construction Standards and Remedial Measures described in Section III of the SOW, as may be modified by EPA during IRP Remedial Design and BoRP Remedial Design.

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

"Settlement Agreement" shall mean the agreement between the Settling Private Parties and Settling Federal Agencies, which is attached to this Consent Decree as Appendix C and which is made an enforceable part hereof.

"Settling Defendants" shall mean the Settling Private Parties and the Commonwealth.

"Settling Federal Agencies" shall mean those agencies or departments of the United States identified in Appendix D hereto.

"Settling Parties" shall mean the Settling Private Parties, the Settling Federal Agencies, and the Commonwealth.

"Settling Private Parties" shall mean those parties identified in Appendix E hereto.

"Site" shall mean the Maxey Flats Disposal Superfund Site, encompassing approximately 280 acres, located on County Road 1895, approximately 10 miles northwest of the City of Morehead, in southeastern Fleming County, Kentucky and depicted generally on the map attached as Appendix F.

"Statement of Work" (SOW) shall mean the document attached as Appendix B to this Consent Decree and any modifications made in accordance with this Consent Decree.

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

"United States" shall mean the United States of America, including its agencies, departments, and instrumentalities, except that, for purposes of Sections XIX, XX, XXIII, XXIV and XXV of this Consent Decree (Reimbursement of Response Costs, Indemnification and Insurance, Stipulated Penalties, Covenants Not to Sue or Take Administrative Action by Plaintiff, and Covenants by Settling Defendants), "United States" shall not include the Settling Federal Agencies.

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

pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

"Work" shall mean the IRP Work and the BoRP Work.

V. GENERAL PROVISIONS

6. Objectives of the Parties

The objectives of the Parties in entering into this Consent Decree are to protect public health and welfare and the environment at the Site through the funding, design and implementation of response actions at the Site by the Settling Parties and to partially reimburse response costs of the Plaintiff.

7. Commitments by Settling Parties

a. Settling Private Parties shall perform and, together with Settling Federal Agencies, shall finance the IRP Work in accordance with this Consent Decree and all plans, standards, specifications, and schedules set forth in the SOW, as well as the schedules developed and approved by EPA pursuant to this Consent Decree. Settling Private Parties and the Settling Federal Agencies shall also reimburse the United States for response costs as provided in this Consent Decree.

b. The Commonwealth shall perform and finance the BoRP Work and the Commonwealth IRP Obligations in accordance with this Consent Decree and all plans, standards, specifications, and schedules set forth in the SOW, as well as the schedules developed and approved by EPA pursuant to this Consent Decree.

This Consent Decree does not purport to settle any liability the Commonwealth may have to Plaintiff for any response costs the United States (other than the Settling Federal Agencies) has incurred as of the date of entry of the Consent Decree or which the United States will incur after the date of entry of this Consent Decree, except those costs the Commonwealth has agreed to pay under Sections XII and XVIII (Access and Emergency Response), and Paragraph 126 of Section XXIV (Covenants Not To Sue or Take Administrative Action by Plaintiff).

c. Whenever the Settling Private Parties and Settling Federal Agencies are obligated to pay money to the Plaintiff under this Consent Decree, the Settling Private Parties are jointly and severally obligated for the entire amount. The Settling Private Parties and Settling Federal Agencies have allocated the payment obligations under this Consent Decree among themselves as specified in the Settlement Agreement. The Settling Private Parties are jointly and severally obligated to perform the IRP Work and to finance all IRP Work, but the obligations to finance the IRP Work are allocated among the Settling Private Parties and the Settling Federal Agencies as specified in the Settlement Agreement.

d. Except as provided in Section XXI (Force Majeure), the failure or delay of any Settling Party to pay or otherwise perform its respective obligations shall not relieve any of the Parties of their obligations under this Consent Decree.

e. No provision of this Consent Decree shall be interpreted as or constitute a commitment or requirement that the Settling Federal Agencies obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C., §§ 1301, 1341, 1342, 1349-51, 1511-19.

8. 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 shall also comply with all applicable or relevant and appropriate requirements of all federal and state environmental laws as set forth in the ROD and the SOW. The activities conducted pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP.

9. Permits

a. As provided in Section 121(e) of CERCLA and § 300.400(e)(1) of the NCP, no permit shall be required for any portion of the Work conducted entirely on-site. In particular, the Settling Private Parties and Commonwealth agree that, by performing or paying for the IRP Work or any other response actions that are on-site, as defined at 40 C.F.R. § 300.400(e)(1)(1993), the Settling Private Parties and Settling Federal Agencies do not become subject to any existing or future State permittee or licensee obligations arising under any State statutes or regulations that implement or are the basis for delegation under the AEA, the Clean Air Act, the Clean Water Act,

RCRA, the Safe Drinking Water Act, and the Solid Waste Disposal Act; or based on any independent State statutes or regulations, existing now or in the future, that apply to the same media or Waste Material as such federal statutes. However, this Paragraph does not relieve Settling Private Parties or Settling Federal Agencies from complying with the applicable or relevant and appropriate requirements of federal and state environmental laws as set forth in the ROD. When any portion of the Work 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. Settling Defendants may seek relief under the provisions of Section XXI (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.

10. Notice of Obligations to Successors-in-Title

a. Within 15 days after the entry of this Consent Decree, the Commonwealth of Kentucky, as owner of the Site property, shall record a certified copy of this Consent Decree with the Recorder's Office (or Registry of Deeds or other appropriate office), Fleming County, Commonwealth of Kentucky. Thereafter, each deed, title, or other instrument conveying an

interest in the property included in the Site shall contain a notice stating that the property is subject to this Consent Decree and shall reference the recorded location of the Consent Decree and any restrictions applicable to the property under this Consent Decree.

b. The obligations of the Commonwealth with respect to the provision of access under Section XII (Access) and the implementation of institutional controls as required by the ROD and the SOW shall be binding upon any and all departments or agencies of the Commonwealth and any and all persons who subsequently acquire any ownership interest or portion thereof (hereinafter "Successors-in-Title"). Within 15 days after the entry of this Consent Decree, the Commonwealth shall record at the Recorder's Office (or Registry of Deeds or other appropriate office where land ownership and transfer records are maintained for the property) a notice of obligation to provide access under Section XII (Access) and related covenants. Each subsequent instrument conveying an interest to any such property included in the Site shall reference the recorded location of such notice and covenants applicable to the property.

c. The Commonwealth and any Successor-in-Title shall, at least 30 days prior to the conveyance of any such interest, give written notice of this Consent Decree to the grantee and written notice to EPA of the proposed conveyance, including the name and address of the grantee, and the date on which notice of the Consent Decree was given to the grantee. In

the event of any such conveyance, the Commonwealth's obligations under this Consent Decree, including its obligations to provide or secure access pursuant to Section XII, shall continue to be met by the Commonwealth. In addition, if the United States approves, the grantee may perform some or all of the Work under this Consent Decree. In no event shall the conveyance of an interest in property that includes, or is a portion of, the Site release or otherwise affect the liability of the Settling Parties to comply with the Consent Decree.

d. In the event that additional parcels of property are acquired for a buffer zone pursuant to the SOW, the party acquiring such property shall comply with the provisions of subparagraphs a-c above, with all obligations running from the closing date of the acquisition of any such parcel of property.

VI. DE MINIMIS CONSENT DECREE

11. In consideration of the covenants not to sue the Commonwealth of the De Minimis Settlors under the terms of the De Minimis Consent Decree, and except as specifically provided in Paragraph 12 of this Consent Decree, the Commonwealth covenants not to sue or to take administrative action against any of the De Minimis Settlors for any and all civil liability pursuant to Sections 107(a) or 113(f) of CERCLA, 42 U.S.C. §§ 9607(a) and 9613(a), and Section 7003 of RCRA, 42 U.S.C. § 6973, state law or common law, relating to the Site. The covenants not to sue or to take administrative action of the Commonwealth shall take effect for the De Minimis Settlors upon their respective payments in

accordance with the De Minimis Consent Decree. These covenants not to sue extend to the De Minimis Settlors and do not extend to any other person.

12. The covenants by the Commonwealth set forth in Paragraph 11 above do not pertain to any matters other than those expressly specified therein. The Commonwealth reserves, and this Consent Decree is without prejudice to, all rights against the De Minimis Settlors with respect to all other matters, including, but not limited to:

a. claims based on failure to make the payments required by Section XIX (Reimbursement of Response Costs) and the De Minimis Consent Decree;

b. criminal liability;

c. liability for injury to, destruction of, or loss of natural resources for which there are federal trustees.

d. liability for response costs that have been or may have been incurred by the U.S. Department of Interior or U.S. Department of Agriculture in their role as natural resource trustees.

13. Nothing in this Section or the De Minimis Consent Decree shall affect the obligations of the Settling Parties or their successors or assigns to the Plaintiff under the terms of this Consent Decree, or the rights of the Plaintiff against the Settling Parties or their successors or assigns as provided or reserved under the terms of this Consent Decree.

VII. OBLIGATIONS OWED BY THE SETTLING PRIVATE PARTIES AND THE SETTLING FEDERAL AGENCIES TO EACH OTHER

14. The Settling Private Parties and the Settling Federal Agencies have set forth their obligations to each other

in the Settlement Agreement, which is incorporated herein by reference and made an enforceable part hereof.

VIII. PERFORMANCE OF THE WORK

15. Selection of Supervising Contractor.

a. All aspects of the IRP Work to be performed by Settling Private Parties pursuant to this Section or Sections IX, X, and XI (Additional Response Actions, EPA Periodic Review, and Quality Assurance, Sampling and Data Analysis) of this Consent Decree shall be under the direction and supervision of a Supervising Contractor, the selection of which shall be subject to disapproval by EPA. Within 15 days after the entry of this Consent Decree, Settling Private Parties shall notify EPA and the Commonwealth in writing of the name, title, and qualifications of any contractor proposed to be the Supervising Contractor for the IRP Activities. EPA will issue a notice of disapproval or an authorization to proceed upon notification of the identity of the Supervising Contractor. EPA will not disapprove a proposed Supervising Contractor on the ground that the proposed Supervising Contractor is, or is affiliated with, a Settling Private Party or a De Minimis Settlor. If, at any time after a Supervising Contractor is approved, Settling Private Parties propose to change a Supervising Contractor, the Settling Private Parties shall again notify EPA and must obtain an authorization to proceed from EPA before the new Supervising Contractor performs, directs, or supervises any IRP Work under this Consent Decree.

b. If EPA disapproves a proposed Supervising Contractor, EPA will notify the Settling Private Parties in writing and the Settling Private Parties shall then submit to EPA and the Commonwealth a list of contractors, including the qualifications of each contractor, that would be acceptable to them within 30 days of receipt of EPA's disapproval of the contractor previously proposed. EPA will provide written notice of the names of any contractor that it disapproves and an authorization to proceed with respect to any of the other contractors. EPA will not disapprove a proposed Supervising Contractor on the ground that the proposed Supervising Contractor is, or is affiliated with, a Settling Private Party or a De Minimis Settlor. Settling Private Parties may select any contractor from that list that is not disapproved and shall notify EPA and the Commonwealth of the name of the contractor selected within 21 days of EPA's authorization to proceed.

c. All aspects of the BoRP Work to be performed by the Commonwealth pursuant to this Section or Sections IX, X, and XI (Additional Response Actions, EPA Periodic Review, and Quality Assurance, Sampling and Data Analysis) of this Consent Decree shall be under the direction and supervision of a Supervising Contractor or an agency or employee of the Commonwealth. The selection of a Supervising Contractor or agency or employee of the Commonwealth to serve in that capacity shall be subject to disapproval by EPA. Within 180 days prior to the scheduled completion of IRP Activities, the Commonwealth

shall notify EPA in writing of the name, title, and qualifications of any contractor, person, or agency proposed to direct and supervise the BoRP Work. EPA will issue a notice of disapproval or an authorization to proceed upon notification of the identity of the Supervising Contractor or agency or employee serving in that capacity. After EPA authorizes the BORP Work to proceed, the Commonwealth shall not replace the Supervising Contractor or agency or employee serving in that capacity without notifying EPA and obtaining a new authorization to proceed.

d. If EPA disapproves the contractor, person, or agency selected by the Commonwealth to supervise and direct the BoRP Work, EPA will notify the Commonwealth in writing. Within 30 days after receipt of EPA's disapproval, the Commonwealth shall submit to EPA a list of other contractors, persons, or agencies proposed by the Commonwealth to supervise the BoRP Work. EPA will provide written notice of the names of any contractor, person or agency that it disapproves and an authorization to proceed with respect to any of the other listed candidates. The Commonwealth may select any contractor, person or agency from that list that is not disapproved and shall notify EPA of its selection within 21 days of EPA's authorization to proceed.

e. If EPA fails to provide written notice of its authorization to proceed or disapproval as provided in this Paragraph and this failure prevents Settling Private Parties or the Commonwealth from meeting one or more deadlines in a plan approved by the EPA pursuant to this Consent Decree, Settling

Private Parties or the Commonwealth may seek relief under the provisions of Section XXI (Force Majeure) hereof.

16. Commonwealth IRP Obligations. Within 45 days after entry of this Consent Decree, the Commonwealth shall submit to EPA a work plan detailing the Commonwealth IRP Obligations (IRP Monitoring and Maintenance Plan). Upon approval of the IRP Monitoring and Maintenance Plan by EPA, the Commonwealth shall implement the plan. The fact that the IRP Monitoring and Maintenance Plan has not been submitted or approved shall not prevent the Commonwealth from performing its obligations under the AEA license for the Site.

17. Remedial Design

a. Within 60 days after EPA's issuance of an authorization to proceed to Settling Private Parties pursuant to Paragraph 15, Settling Private Parties shall submit to EPA and the Commonwealth a work plan for the design of the Initial Remedial Phase at the Site ("IRP RD Work Plan") or that portion of the work plan related to the leachate removal, solidification, and disposal. At the same time, Settling Private Parties shall also submit to EPA and the Commonwealth a health and safety plan for the IRP Remedial Design which conforms to the applicable Occupational Safety and Health Administration regulations including, but not limited to, 29 C.F.R. § 1910.120, and Commonwealth of Kentucky regulations relating to worker exposure to radiation. The health and safety plan shall specify a safety officer to ensure that work procedures are carried out in

accordance with state and federal health and safety requirements. Settling Private Parties shall submit the complete IRP RD Work Plan (or the remainder thereof, if they have submitted that portion of the IRP RD Work Plan related to leachate removal, solidification, and disposal) no later than 90 days following initiation of full scale leachate removal and solidification operations.

b. Within 60 days after EPA determines that trench stabilization criteria established in accordance with the SOW have been attained, the Commonwealth shall submit to EPA a work plan for the design of the FCP ("FCP RD Work Plan"). At the same time, the Commonwealth shall submit to EPA a health and safety plan for the FCP activities which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120, and Commonwealth regulations relating to worker exposure to radiation. To satisfy this requirement the Commonwealth may submit to EPA a supplemented version of the health and safety plan in effect for the Site under its AEA license. The FCP health and safety plan shall specify a radiation safety officer to ensure that work procedures are carried out in accordance with state and federal health and safety requirements.

c. The work plans specified in subparagraphs 17.a and 17.b above shall provide for design of the remedy set forth in the ROD in accordance with the SOW and, upon their approval by

EPA, shall be incorporated into and become enforceable under this Consent Decree.

d. The IRP RD Work Plan shall include plans and schedules for implementation of all IRP Remedial Design and pre-design tasks identified in the SOW, including, but not limited to, plans and schedules for the completion of: (1) IRP Remedial Design sampling and analysis plans including, but not limited to, an IRP Remedial Design Quality Assurance Project Plan in accordance with Section XI (Quality Assurance, Sampling and Data Analysis); (2) a preliminary IRP Remedial Design report; and (3) pre-final and final IRP Remedial Design reports. In addition, the IRP RD Work Plan shall include a schedule for completion of the IRP RA Work Plan.

e. The FCP RD Work Plan shall include, without being limited to, plans and schedules for completing: (1) design sampling and analysis plans, including but not limited to, an FCP Quality Assurance Project Plan in accordance with Section XI (Quality Assurance, Sampling, and Data Analysis); (2) an FCP preliminary Remedial Design report; and (3) FCP pre-final and final Remedial Design reports. In addition, the FCP RD Work Plan shall include a schedule for completion of the FCP RA Work Plan.

f. Upon approval of the IRP RD Work Plan and health and safety plans for all field activities by EPA, after a reasonable opportunity for review and comment by the Commonwealth, the Settling Private Parties shall implement the IRP RD Work Plan. Settling Private Parties shall submit to EPA

and the Commonwealth all plans, submittals and other deliverables required under the approved IRP RD Work Plan in accordance with the schedule for review and approval pursuant to Section XIV (Submissions Requiring Agency Approval).

g. Upon approval of the FCP RD Work Plan and health and safety plans for all field activities by EPA, the Commonwealth shall implement the FCP RD Work Plan. The Commonwealth shall submit to EPA all plans, submittals and other deliverables required under the approved FCP RD Work Plan in accordance with the schedule for review and approval pursuant to Section XIV (Submissions Requiring Agency Approval).

h. The IRP preliminary Remedial Design and FCP preliminary Remedial Design reports shall include, at a minimum, the following: (1) design criteria; (2) results of additional field sampling and pre-design work; (3) preliminary plans, drawings and sketches; (4) required specifications in outline form; and (5) a preliminary construction schedule.

i. The IRP pre-final and final Remedial Design reports shall include, at a minimum, those items specified in Section IV, Task II of the SOW, which include the following: (1) final plans and specifications; (2) a complete design analysis; (3) a final IRP construction schedule; and (4) a field sampling plan (directed at measuring attainment of Performance Standards).

j. The FCP pre-final and final Remedial Design reports shall include, at a minimum: (1) final plans and

specifications; (2) a complete design analysis; (3) a final FCP construction schedule; (4) a final overall construction cost estimate; and (5) a field sampling plan (directed at measuring attainment of Performance Standards).

18. Remedial Activities.

a. Concurrent with the submittal of the IRP final Remedial Design Report, Settling Private Parties shall submit to EPA and the Commonwealth a work plan for the performance of the IRP at the Site ("IRP RA Work Plan"). The IRP RA Work Plan shall provide for implementation of the IRP in accordance with the design plans and specifications in the IRP final Remedial Design Report. Upon its approval by EPA, the IRP RA Work Plan shall be incorporated into and become enforceable under this Consent Decree. At the same time that they submit the IRP RA Work Plan, Settling Private Parties shall submit to EPA and the Commonwealth a Construction Health and Safety Plan/Contingency Plan for field activities required by the IRP RA Work Plan which conforms to the applicable Occupational Safety and Health Administration and Commonwealth requirements including, but not limited to, 29 C.F.R. § 1910.120, and Commonwealth regulations relating to worker exposure to radiation. The health and safety plan shall specify a safety officer to ensure that work procedures are carried out in accordance with state and federal health and safety requirements. In addition to the IRP Construction Health and Safety Plan/Contingency plan, Settling Private Parties shall submit, at the same time, an IRP Construction Management Plan and

an IRP Construction Quality Assurance Plan, both of which shall encompass the tasks detailed in the IRP RA Work Plan. The Settling Private Parties may submit that portion of the IRP final Remedial Design report pertaining to leachate removal, solidification, and disposal before the complete report is due if they also submit, at the same time, those portions of the IRP RA Work Plan, Construction Health and Safety Plan/Contingency Plan, IRP Construction Management Plan, and IRP Construction Quality Assurance Plan pertaining to leachate removal, solidification, and disposal.

b. The IRP RA Work Plan shall include, or be accompanied by, the following: (1) a detailed description of the IRP tasks to be performed and deliverables to be submitted to EPA; (2) the schedule for completion of the IRP; (3) a method for selecting contractors; (4) a schedule for developing and submitting other required plans for performing IRP Activities; (5) a method for implementing the IRP Construction Quality Assurance Plan; (6) a method for implementing the IRP Health and Safety Plan/Contingency Plan; (7) a method for implementing the IRP Construction Management Plan; (8) a description of the strategy for delivery of the IRP (Project Delivery Strategy); (9) the identity of the members of an "IRP Construction Project Team" and their qualifications; and (10) procedures and plans for the decontamination of equipment and the disposal of contaminated materials. The IRP RA Work Plan also shall include a schedule

for implementing all IRP tasks identified in the IRP final Remedial Design report.

c. Within 180 days before scheduled completion of the IRP Activities, the Commonwealth shall submit to EPA a work plan for the performance of the IMP activities at the Site ("IMP Work Plan"). Upon its approval by EPA, the IMP Work Plan shall be incorporated into and become enforceable under this Consent Decree. At the same time, the Commonwealth shall submit to EPA a health and safety plan for the IMP activities which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120, and Commonwealth regulations relating to worker exposure to radiation. To satisfy this requirement the Commonwealth may submit to EPA a supplemented version of the health and safety plan in effect for the Site under its AEA license. The IMP health and safety plan shall specify a radiation safety officer to ensure that work procedures are carried out in accordance with state and federal health and safety requirements. The IMP Work Plan shall include the following: (1) a preliminary list of tasks to be performed during the IMP and major deliverables to be submitted to EPA; (2) an IMP Sampling and Analysis Plan describing the projected sample collection and analytical activities; (3) a method for implementing the IMP Quality Assurance Plan; (4) a method for implementing the IMP Health and Safety Plan; (5) a tentative schedule for completion of the IMP and development and submittal

of IMP deliverables; (6) a tentative formulation of the IMP team along with methods for replacing IMP team members and roles and responsibilities of IMP team members; and (7) procedures and plans for the decontamination of equipment and disposal of contaminated materials.

d. Concurrent with the submittal of the draft FCP Final Remedial Design report, the Commonwealth shall submit to EPA a work plan for the performance of the FCP ("FCP RA Work Plan"). The FCP RA Work Plan shall provide for implementation of the FCP in accordance with the SOW, as set forth in the design plans and specifications in the FCP pre-final Remedial Design report, as modified and approved by EPA. Upon its approval by EPA, the FCP RA Work Plan shall be incorporated into and become enforceable under this Consent Decree. At the same time that it submits the FCP RA Work Plan, the Commonwealth shall submit to EPA a FCP Construction Health and Safety Plan/Contingency Plan for field activities required by the FCP RA Work Plan which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120 and Commonwealth regulations relating to worker exposure to radiation. In addition to the FCP Construction Health and Safety Plan/Contingency Plan, the Commonwealth shall submit, at the same time, a FCP Construction Management Plan and a FCP Construction Quality Assurance Plan, both of which shall encompass the tasks detailed in the FCP RA Work Plan.

e. The FCP RA Work Plan shall include, or be accompanied by, the following: (1) a detailed description of the FCP tasks to be performed and deliverables to be submitted to EPA; (2) the schedule for completion of the FCP; (3) a procedure for selection of the contractor; (4) a schedule for developing and submitting other required plans for performing the FCP RA Work plan; (5) a method for implementing the FCP Construction Quality Assurance Plan; (6) a method for implementing the FCP Construction Health and Safety Plan/Contingency Plan; (7) a method for implementing the FCP Construction Management Plan; (8) a description of the strategy for delivering the FCP (Project Delivery Strategy); (9) methods for developing, and tasks to be included in, the Institutional Control Work Plan and Operation and Maintenance Manual; (10) tentative formulation of the FCP Construction Project Team and a description of their qualifications; and (11) procedures and plans for the decontamination of equipment and the disposal of contaminated materials. The FCP RA Work Plan also shall include a schedule for implementation of all FCP tasks identified in the FCP pre-final and final Remedial Design reports.

f. Upon approval of the IRP RA Work Plan specified in subparagraph 18.a. by EPA or that portion pertaining to leachate removal, solidification, and disposal, after a reasonable opportunity for review and comment by the Commonwealth, the Settling Private Parties shall implement the activities required under the plan. To the extent that title to

any facilities constructed as a result of the IRP Work or additional response actions under Section IX performed by or on behalf of the Settling Private Parties does not vest automatically in the Commonwealth by virtue of the Commonwealth's ownership of Site property, the Commonwealth shall, consistent with state law, take title to such facilities as the facilities are constructed. The Settling Private Parties shall submit to EPA for review and approval pursuant to Section XIV (Submissions Requiring Agency Approval), with a reasonable opportunity for review and comment by the Commonwealth, all plans, submittals, or other deliverables required under the approved work plan in accordance with the schedule therein. Unless otherwise directed by EPA, the Settling Private Parties shall not commence physical on-Site activities prior to approval of the IRP RA Work Plan by EPA or that portion pertaining to leachate removal, solidification, and disposal.

g. Upon approval of the IMP Work Plan specified in subparagraph 18.c. by EPA, the Commonwealth shall implement the activities required under the IMP Work Plan. The Commonwealth shall submit to EPA for review and approval pursuant to Section XIV (Submissions Requiring Agency Approval) all plans, submittals, or other deliverables required under the approved work plan in accordance with the schedule therein. In the event EPA has not approved the IMP Work Plan before Certification of Completion of the IRP, the Commonwealth shall undertake the activities specified in the IMP Work Plan it submitted to EPA

until EPA approves the IMP Work Plan unless directed not to do so by EPA.

h. Upon approval of the FCP RA Work Plan specified in subparagraph 18.d. by EPA, the Commonwealth shall implement the activities required under the plan. The Commonwealth shall submit to EPA all plans, submittals, or other deliverables required under the approved work plan in accordance with the schedule for review and approval pursuant to Section XIV (Submissions Requiring Agency Approval). Unless otherwise directed by EPA, the Commonwealth shall not commence activities described in the proposed FCP RA Work Plan prior to approval of the FCP RA Work Plan.

19. Operation and Maintenance. Within 180 days before the scheduled completion of FCP construction, the Commonwealth shall submit to EPA a work plan for performance of the Institutional Control Period activities (Institutional Control Work Plan) along with the Institutional Control O & M Manual, as described in the SOW, which together shall describe the nature and timing of activities to be performed during the Institutional Control Period (ICP). The Commonwealth shall implement the Institutional Control Work Plan in accordance with the Institutional Control O & M Manual upon approval by EPA. Within 180 days before the scheduled completion of the ICP, the Commonwealth shall submit to EPA a work plan for performance of the Post-Institutional Control Period activities (Post-Institutional Control Work Plan), along with the Post-

Institutional Control O & M Manual, as described in the SOW, which together shall describe the nature and timing of activities to be performed during the Post-Institutional Control Period. The Commonwealth shall implement the Post-Institutional Control Work Plan in accordance with the Post-Institutional Control O & M Manual upon approval by EPA.

20. The portion of the Work performed by Settling Private Parties pursuant to this Consent Decree shall include the obligation to achieve the Construction Standards and Performance Standards applying to the IRP Work at the time of Certification of Completion of the IRP.

21. The portion of the Work performed by the Commonwealth pursuant to this Consent Decree shall include the obligation to achieve the Construction Standards applicable to the BoRP and the Performance Standards.

22. Settling Parties acknowledge and agree that nothing in this Consent Decree, the SOW, the IRP RD or RA Work Plans, the IMP Work Plan, or the FCP RD or RA Work Plans constitutes a warranty or representation of any kind by Plaintiff that compliance with the work requirements set forth in the SOW and the work plans will achieve the Performance Standards. Moreover, compliance by Settling Defendants with their respective Work requirements shall not foreclose Plaintiff from seeking compliance with all other applicable terms and conditions of this Consent Decree, including but not limited to, the Performance Standards.

23. Settling Private Parties shall, prior to any off-Site shipment of Waste Material, other than analytical samples, from the Site, provide written notification to the EPA Project Coordinator of such shipment of Waste Material. In addition, prior to any off-Site shipment of Waste Material, other than analytical samples, from the Site to an out-of-state waste management facility, Settling Private Parties shall provide written notification to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator of such shipment of Waste Material.

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

b. The identity of the receiving facility and state will be determined by the Settling Private Parties prior to commencing IRP construction. Settling Private Parties shall provide the information required by subparagraph 23.a as soon as practicable after the receiving facility and state are determined and before the Waste Material is actually shipped.

24. The Commonwealth shall, prior to any off-Site shipment of Waste Material, other than analytical samples, from the Site, provide written notification to the EPA Project Coordinator of such shipment of Waste Material. In addition, prior to any off-Site shipment of Waste Material, other than analytical samples, from the Site to an out-of-state waste management facility, the Commonwealth shall provide written notification to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator of such shipment of Waste Material.

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

b. The identity of the receiving facility and state will be determined by the Commonwealth prior to commencing BoRP Activities. The Commonwealth shall provide the information required by subparagraph 24.a as soon as practicable after determining which facility and state will receive the Waste Material and before the Waste Material is actually shipped.

IX. ADDITIONAL RESPONSE ACTIONS

25. a. In the event that, prior to Certification of Completion of the IRP, EPA determines or the Settling Private Parties or Settling Federal Agencies propose that additional response actions are necessary to meet the Construction Standards or Performance Standards applicable to the IRP or to implement the IRP Activities, the Party that makes the determination or proposal shall notify the Project Coordinator for the other Parties.

b. In the event that, after Certification of Completion of the IRP but prior to ten years after Certification of Completion of the IRP, EPA determines or the Settling Private Parties or Settling Federal Agencies propose that additional response actions are necessary to meet the Performance Standards of the IRP due to a failure in the design or implementation of the IRP Work by the Settling Private Parties, the Party that makes the determination or proposal shall notify the Project Coordinator for the other Parties.

c. In the event that, prior to ten years after Certification of Completion of the IRP, EPA determines that a horizontal flow barrier (HFB) is necessary to prevent substantial ground water inflow, as determined by the criteria in the SOW and the criteria developed during the IRP Remedial Design, EPA shall notify the Project Coordinators for the Settling Private Parties and the Commonwealth. The design and implementation of the HFB shall be performed by the Settling Private Parties. All costs of

designing and installing the HFB shall be borne in the following manner: 70% by the Settling Private Parties and Settling Federal Agencies in the proportions specified in the Settlement Agreement, and 30% by the Commonwealth. The Settling Private Parties shall submit monthly invoices and available supporting cost documentation to the Commonwealth for payment of its 30% share of the costs, and the Commonwealth shall, as necessary, verify the amount of the costs incurred and shall make full payment of its share within 30 days after receipt of the invoice and available supporting cost documentation. In the event that the Commonwealth fails to pay an invoice within the thirty day period, the Commonwealth shall also be liable to the Settling Private Parties for interest on the unpaid balance calculated at the rate specified in Section 107(a) of CERCLA and accruing on a daily basis. The Commonwealth's obligation to pay its share of the HFB costs and any accrued interest thereon shall be enforceable by this Court upon application by the Settling Private Parties or the Settling Federal Agencies and, in any such enforcement proceeding, the Commonwealth may contest payment of such costs and interest only on the grounds that there is an accounting error or that the amount of the HFB cost is not supported by the invoice or other supporting cost documentation. The failure of the Settling Private Parties to receive payment from the Commonwealth or the Settling Federal Agencies shall not affect their obligation to construct the HFB.

26. Within 30 days of receipt of notice from EPA or Settling Private Parties pursuant to Paragraph 25 that additional response actions are necessary (or such longer time as may be specified by EPA), Settling Private Parties shall submit for approval by EPA, after reasonable opportunity for review and comment by the Commonwealth, a work plan for the additional response actions. The plan shall conform to the applicable requirements of Paragraphs 17 and 18. Upon approval of the plan pursuant to Section XIV (Submissions Requiring Agency Approval), Settling Private Parties shall implement the plan for additional response actions in accordance with the schedule contained therein.

27. Any additional response actions that Settling Private Parties or Settling Federal Agencies propose are necessary to meet the Construction Standards or Performance Standards or to implement the IRP Activities shall be subject to approval by EPA, after reasonable opportunity for review and comment by the Commonwealth and, if authorized by EPA, shall be completed by Settling Private Parties in accordance with plans, specifications, and schedules approved or established by EPA pursuant to Section XIV (Submissions Requiring Agency Approval).

28. Except as provided in Paragraphs 25-27 above, all other additional response actions required or proposed after Certification of Completion of the IRP shall be the financial responsibility of the Commonwealth and shall be performed pursuant to Paragraphs 29-31, below. These response actions

shall include construction of the HFB and response actions based upon a failure of design or implementation of the IRP if EPA's determination that such response actions are needed is made more than ten years after Certification of Completion of the IRP.

29. In the event that, after Certification of Completion of the IRP, EPA determines or the Commonwealth proposes that additional response actions are necessary to meet the Construction Standards or Performance Standards or to implement the Work, the Party that makes the determination or proposal shall notify the Project Coordinator for the other Party.

30. Within 30 days of receipt of notice from EPA or the Commonwealth pursuant to Paragraph 29 that additional response actions are necessary (or such longer time as may be specified by EPA), except as provided in Paragraphs 25-27, above, the Commonwealth shall submit for approval by EPA a work plan for the additional response actions. The plan shall conform to the applicable requirements of Paragraphs 17 and 18. Upon approval of the plan pursuant to Section XIV (Submissions Requiring Agency Approval), the Commonwealth shall implement the plan for additional response actions in accordance with the schedule contained therein.

31. Any additional response actions that the Commonwealth proposes are necessary to meet the Construction Standards or Performance Standards or to implement the Work shall be subject to approval by EPA and, if authorized by EPA, shall be

completed by the Commonwealth in accordance with plans, specifications, and schedules approved or established by EPA pursuant to Section XIV (Submissions Requiring Agency Approval).

32. Settling Defendants may invoke the procedures set forth in Section XXII (Dispute Resolution) to dispute EPA's determination that additional response actions are necessary. Such a dispute shall be resolved pursuant to Section XXII (Dispute Resolution) of this Consent Decree.

33. Notwithstanding the provisions of Paragraph 32, neither EPA's initial determination under Paragraph 25.b that a failure in the design or implementation of the IRP Work is the cause of additional response actions nor the absence of such a determination shall be subject to judicial review or dispute resolution. The Settling Parties may invoke the procedures of Paragraph 34, however, to allocate among themselves the costs of certain additional response actions that are required in the 10 year period after Certification of Completion of the IRP.

34. Regardless of EPA's initial determination under Paragraph 25.b, the Settling Private Parties' and Settling Federal Agencies' responsibility under this Consent Decree to pay for response actions under this Section (other than the horizontal flow barrier) that are required in the 10 year period after Certification of Completion of the IRP shall be limited to the costs attributable to a failure in the design or implementation of the IRP Work. The following procedures shall apply for determining the responsibilities of the Settling

Private Parties and Settling Federal Agencies or the Commonwealth to pay for response actions under this Section required within 10 years following Certification of Completion of the IRP. In any proceeding under this Paragraph, a preliminary determination by EPA to seek performance from the Settling Private Parties, Settling Federal Agencies, or the Commonwealth shall have no evidentiary weight. The preliminary determination by EPA shall initiate a 30-day period of informal negotiation between a designee of the Chairman of the Maxey Flats Steering Committee, a designee of the Secretary of the Cabinet for Natural Resources and Environmental Protection, and a designee of the Settling Federal Agencies. In the event that an informal negotiation does not result in a settlement, an aggrieved party may move this Court to resolve the dispute by filing a motion setting forth the matter in dispute, the efforts made by the parties to resolve it, and the relief requested. The other parties may file a response to the motion. In the proceeding before this Court, the Court will: (1) determine the extent to which the payment of costs or damages or the performance of additional response activities is attributable, in whole or in part, to the responsibilities imposed on the Settling Private Parties and Settling Federal Agencies due to a failure in the design or implementation of the IRP Work or is otherwise the financial responsibility of the Commonwealth; and (2) order the Commonwealth, the Settling Private Parties and the Settling Federal Agencies to pay the

costs of any shares of responsibility that may be allocated to them or to provide any other appropriate relief.

X. EPA PERIODIC REVIEW

35. Until Certification of Completion of the IRP, Settling Private Parties shall conduct any studies and investigations as requested by EPA in order to permit EPA to conduct reviews at least every five years as required by Section 121(c) of CERCLA and any applicable regulations.

36. After Certification of Completion of the IRP, the Commonwealth shall conduct any studies and investigations as requested by EPA in order to permit EPA to conduct reviews at least every five years as required by Section 121(c) of CERCLA and any applicable regulations.

37. If required by Sections 113(k)(2) or 117 of CERCLA, Settling Parties and the public will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of any review conducted pursuant to Section 121(c) of CERCLA and to submit written comments for the record during the public comment period. After the period for submission of written comments is closed, the Regional Administrator, EPA Region IV, or his or her delegate, will determine in writing whether further response actions are appropriate.

38. If, prior to Certification of Completion of the IRP, the Regional Administrator, EPA Region IV, or his or her delegate, determines that information received, in whole or in

part, during the review conducted pursuant to Section 121(c) of CERCLA, indicates that the IRP is not protective of human health and the environment, Settling Private Parties shall undertake any further response actions EPA has determined are appropriate, unless their liability for such further response actions is barred by the Covenants Not to Sue set forth in Section XXIV. Settling Private Parties shall submit a plan for such work to EPA for approval in accordance with the procedures set forth in Section VIII (Performance of the Work) and shall implement the plan approved by EPA. Settling Private Parties may invoke the procedures set forth in Section XXII (Dispute Resolution) to dispute (1) EPA's determination that implementation of the IRP Work is not protective of human health and the environment, (2) EPA's selection of the further response actions ordered as arbitrary and capricious or otherwise not in accordance with law, or (3) EPA's determination that the Settling Private Parties' liability for the further response actions requested is reserved in Paragraphs 121, 122, or 124 or otherwise not barred by the Covenants Not to Sue set forth in Section XXIV.

39. If, after Certification of Completion of the IRP, the Regional Administrator, EPA Region IV, or his delegate, determines that information received, in whole or in part, during any review conducted pursuant to Section 121(c) of CERCLA, indicates that the Work is not protective of human health and the environment, and determines that any further response actions are appropriate, the Commonwealth shall undertake any further

response actions EPA has determined are appropriate, unless its liability for such further response actions is barred by the Covenants Not to Sue set forth in Section XXIV. The Commonwealth shall submit a plan for such work to EPA for approval in accordance with the procedures set forth in Section VIII (Performance of the Work) and shall implement the plan approved by EPA. The Commonwealth may invoke the procedures set forth in Section XXII (Dispute Resolution) to dispute (1) EPA's determination that implementation of the Work is not protective of human health and the environment, (2) EPA's selection of the further response actions ordered as arbitrary and capricious or otherwise not in accordance with law, or (3) EPA's determination that the Commonwealth's liability for the further response actions requested is reserved in Paragraphs 122 or 124 or is otherwise not barred by the Covenants Not to Sue set forth in Section XXIV.

XI. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

Settling Private Parties.

40. Settling Private Parties shall use quality assurance, quality control, and chain of custody procedures for all samples in accordance with EPA's "Interim Guidelines and Specifications For Preparing Quality Assurance Project Plans," December 1980, (QAMS-005/80); "Data Quality Objective Guidance," (EPA/540/G87/003 and 004); "EPA NEIC Policies and Procedures Manual," May 1978, revised November 1984, (EPA 330/9-78-001-R); and subsequent amendments to such guidelines upon notification by

EPA to Settling Private Parties of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. Prior to the commencement of any monitoring project under this Consent Decree, Settling Private Parties shall submit to EPA for approval a Quality Assurance Project Plan ("QAPP") that is consistent with the SOW, the NCP and the EPA Region IV Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual (dated April 1, 1986). If relevant to the proceeding, the Parties agree that validated sampling data generated in accordance with the QAPP(s) and reviewed and approved by EPA shall be admissible as evidence, without objection, in any proceeding under this Decree. Settling Private Parties shall ensure that EPA and Commonwealth personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized by Settling Private Parties in implementing this Consent Decree. In addition, Settling Private Parties shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPPs for quality assurance monitoring. Settling Private Parties 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 "U.S. EPA Contract Laboratory Program Document No. OLM02.0 (for Inorganic Analyses)" and the "U.S. EPA Contract Laboratory Program Document No. OLM02.0 (for Organic Analyses)" and all revisions thereto,

including any amendments made thereto during the course of the implementation of this Decree. Settling Private Parties 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.

41. Upon request, Settling Private Parties shall allow split or duplicate samples to be taken by EPA and the Commonwealth or their authorized representatives. Settling Private Parties shall notify EPA and the Commonwealth, as appropriate, not less than 21 days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA and the Commonwealth shall have the right to take any additional samples that EPA or the Commonwealth deem necessary. Upon request, EPA and the Commonwealth shall allow the Settling Private Parties to take split or duplicate samples of any samples taken as part of Plaintiff's oversight of Settling Private Parties' implementation of the Work.

42. Settling Private Parties shall submit to EPA and the Commonwealth two copies of the results of all validated sampling and/or tests or other data obtained or generated by or on behalf of Settling Private Parties with respect to the Site and/or the implementation of this Consent Decree unless EPA agrees otherwise.

Commonwealth.

43. The Commonwealth shall use quality assurance, quality control, and chain of custody procedures for all samples

in accordance with EPA's "Interim Guidelines and Specifications For Preparing Quality Assurance Project Plans," December 1980, (QAMS-005/80); "Data Quality Objective Guidance," (EPA/540/G87/003 and 004); "EPA NEIC Policies and Procedures Manual," May 1978, revised November 1984, (EPA 330/9-78-001-R); 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. Prior to the commencement of any monitoring project under this Consent Decree, the Commonwealth shall submit to EPA for approval a Quality Assurance Project Plan ("QAPP") that is consistent with the SOW, the NCP and the EPA Region IV Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual (dated April 1, 1986). If relevant to the proceeding, the Parties agree that validated sampling data generated in accordance with the QAPP(s) and reviewed and approved by EPA shall be admissible as evidence, without objection, in any proceeding under this Decree. The Commonwealth shall ensure that EPA personnel and its authorized representatives are allowed access at reasonable times to all laboratories utilized by the Commonwealth in implementing this Consent Decree. In addition, the Commonwealth shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPPs for quality assurance monitoring. The Commonwealth shall ensure that the laboratories it utilizes 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 "U.S. EPA Contract Laboratory Program Document No. OLM02.0 (for Inorganic Analyses)" and the "U.S. EPA Contract Laboratory Program Document No. OLM02.0 (for Organic Analyses)" and all revisions thereto, including any amendments made thereto during the course of the implementation of this Decree. The Commonwealth shall ensure that all laboratories it uses for analysis of samples taken pursuant to this Consent Decree participate in an EPA or EPA-equivalent QA/QC program.

44. Upon request, the Commonwealth shall allow split or duplicate samples to be taken by EPA and other Settling Parties or their authorized representatives. When such a request is made, the Commonwealth shall give the requesting Party at least two weeks notice of the day and time of the next sampling event. In addition, EPA and other Settling Parties shall have the right to take any additional samples that they deem necessary. Upon request, EPA shall allow Settling Parties to take split or duplicate samples of any samples taken as part of the EPA's oversight of the Commonwealth's implementation of the Work.

45. The Commonwealth shall submit to EPA two copies of the results of all validated sampling and/or tests or other data obtained or generated by or on behalf of the Commonwealth with respect to the Site and/or the implementation of this Consent Decree unless EPA agrees otherwise. All sampling results, tests, and/or data obtained by or on behalf of the Commonwealth that are

subject to the Open Records Act shall be available to the Settling Parties upon request.

46. 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.

XII. ACCESS

47. Commencing upon the date of lodging of this Consent Decree, the Commonwealth agrees, without condition, qualification, or payment of any fee, cost, or charge, and subject only to the health and safety plan developed pursuant to the SOW in effect at the time access is required, to provide the Settling Private Parties and their representatives, contractors, and subcontractors, and the United States and its representatives, including EPA and its contractors, access at all reasonable times to the Site and any property to which access is required for the implementation of this Consent Decree (to the extent access to the property is controlled by the Commonwealth) for the purposes of conducting any activity related to this Consent Decree including, but not limited to:

a. Monitoring or implementing the Work;

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

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

d. Obtaining samples;

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

f. Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Settling Defendants or their agents, consistent with Section XXVIII (Retention of Records); and

g. Assessing compliance by Settling Defendants with this Consent Decree.

The Commonwealth may raise disputes concerning its obligations under this Section in accordance with Section XXII (Dispute Resolution).

48. To the extent that the Site or any other property to which access is required for implementation of this Consent Decree is owned or controlled by persons other than Settling Defendants, Settling Defendants shall use best efforts to secure from such persons access for Settling Defendants as well as for the United States and its representatives, including, but not limited to, EPA and its contractors, as necessary to effectuate their respective obligations under this Consent Decree. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Such access shall include, but is not limited to, acquiring the "buffer zone," as described in the SOW. The Commonwealth shall obtain and hold title to the buffer zone. Settling Private Parties shall fund the acquisition of the buffer zone as

specified in the SOW up to a total cost of $750,000. In the event the acquisition price for the buffer zone as specified in the SOW exceeds $750,000, the Commonwealth shall pay any amount above $750,000. If any access required to complete the Work is not obtained within 45 days of the date of entry of this Consent Decree, or within 45 days of the date EPA notifies the Settling Defendants in writing that additional access beyond that previously secured is necessary, Settling Defendants shall promptly notify the United States, and shall include in that notification a summary of the steps Settling Defendants have taken to attempt to obtain access. In the event the United States determines that the Settling Defendants have been unable to obtain access, the United States may, as it deems appropriate, assist the Settling Defendants in obtaining access. Settling Private Parties shall reimburse the United States, in accordance with the procedures in Section XIX (Reimbursement of Response Costs), for the costs incurred by the United States in obtaining access, but Settling Private Parties' obligation to pay for the buffer zone and reimburse EPA's costs hereunder shall not exceed $750,000. In the event that the cost of paying for the buffer zone and reimbursing EPA hereunder exceeds $750,000, the Commonwealth shall pay all additional costs incurred for the buffer zone or by the United States in obtaining access.

49. Notwithstanding any provision of this Consent Decree, the United States retains all of its access authorities and rights, including enforcement authorities related thereto,

under CERCLA, RCRA and any other applicable statute or regulations.

XIII. REPORTING REQUIREMENTS

Settling Private Parties

50. In addition to any other requirement of this Consent Decree, Settling Private Parties shall submit to EPA and the Commonwealth during performance of the IRP two copies of written monthly progress reports that: (a) describe the actions which have been taken toward achieving compliance with this Consent Decree during the previous month; (b) include a summary of all validated results of sampling and tests and all other data received or generated by Settling Private Parties or their contractors or agents in the previous month; (c) identify all work plans, and other plans and deliverables required by this Consent Decree completed and submitted during the previous month; (d) describe all actions including, but not limited to, data collection and implementation of work plans, which are scheduled for the next six weeks and provide other information relating to the progress of construction, including, but not limited to, critical path diagrams, Gantt charts and Pert charts; (e) include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the IRP 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 Private Parties have proposed to EPA or that have been

approved by EPA; and (g) describe all activities undertaken in support of EPA's revised Community Relations Plan during the previous month and those to be undertaken in the next six weeks. Settling Private Parties shall submit these progress reports to EPA and the Commonwealth by the tenth day of every month following the entry of this Consent Decree until the issuance of the Certification of Completion of the IRP. If requested by EPA, the Parties shall also provide briefings for EPA to discuss the progress of the Work.

51. Settling Private Parties shall notify EPA of any material change in the schedule described in the required 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.

52. Upon the occurrence of any event during performance of the Work that Settling Private Parties are required to report pursuant to Section 103 of CERCLA or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), or Kentucky statutory and regulatory requirements for the notification of releases of hazardous substances, pollutants or contaminants, Settling Private Parties shall, within 24 hours of the onset of such event, orally notify the EPA Project Coordinator or the Alternate EPA Project Coordinator (in the event of the unavailability of the EPA Project Coordinator) or, in the event that neither the EPA Project Coordinator or

Alternate EPA Project Coordinator is available, the Emergency Response Section, Region IV, United States Environmental Protection Agency. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.

53. Within 20 days of the onset of such an event, Settling Private Parties shall furnish to Plaintiff a written report, signed by the Settling Private Parties' Project Coordinator, setting forth the events which occurred and the measures taken, and to be taken, in response thereto and shall comply with Kentucky statutory and regulatory requirements for the notification of releases of hazardous substances, pollutants, or contaminants. Within 30 days of the conclusion of such an event, Settling Private Parties shall submit a report setting forth all actions taken in response thereto.

54. Settling Private Parties shall submit seven copies of all plans, reports, and data required by the SOW, the IRP RD and RA Work Plans or any other approved plans to EPA in accordance with the schedules set forth in such plans. Settling Private Parties shall simultaneously submit two copies of all such plans, reports and data to the Commonwealth.

Commonwealth.

55. In addition to any other requirement of this Consent Decree, the Commonwealth shall submit to EPA every six months during performance of the BoRP two copies of written progress reports that: (a) describe the actions which have been

taken toward achieving compliance with this Consent Decree during the previous six month period; (b) include a summary of all validated results of sampling and tests and all other data received or generated by the Commonwealth or its contractors or agents in the previous six month period; (c) identify all work plans, and other plans and deliverables required by this Consent Decree completed and submitted during the previous six month period; (d) describe all actions including, but not limited to, data collection and implementation of work plans, which are scheduled for the next six month period 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 BoRP 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 the Commonwealth has proposed to EPA or that have been approved by EPA; and (g) describe all activities undertaken in support of EPA's revised Community Relations Plan during the previous six month period and those to be undertaken in the next six month period. The Commonwealth shall submit these progress reports to EPA by the thirtieth day of every six month period following the entry of this Consent Decree until the issuance of the Certification of Completion of

the BoRP. If requested by EPA, the Parties shall also provide briefings for EPA to discuss the progress of the Work.

56. The Commonwealth shall notify EPA of any change in the schedule described in the required 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.

57. Upon the occurrence of any event during performance of the Work that the Commonwealth is required to report pursuant to Section 103 of CERCLA or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), or Kentucky statutory and regulatory requirements for the notification of releases of hazardous substances, pollutants or contaminants, the Commonwealth shall, within 24 hours of the onset of such event, orally notify the EPA Project Coordinator or the Alternate EPA Project Coordinator (in the event of the unavailability of the EPA Project Coordinator) or, in the event that neither the EPA Project Coordinator or Alternate EPA Project Coordinator is available, the Emergency Response Section, Region IV, United States Environmental Protection Agency. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.

58. Within 20 days of the onset of such an event, the Commonwealth shall furnish to Plaintiff a written report, signed by the Commonwealth's Project Coordinator, setting forth the events which occurred and the measures taken, and to be taken, in

response thereto and shall comply with Kentucky statutory and regulatory requirements for the notification of releases of hazardous substances, pollutants, or contaminants. Within 30 days of the conclusion of such an event, the Commonwealth shall submit a report setting forth all actions taken in response thereto.

59. The Commonwealth shall submit seven copies of all plans, reports, and data required by the SOW, the BoRP Work Plans or any other approved plans to EPA in accordance with the schedules set forth in such plans.

60. All reports and other documents submitted by Settling Defendants to EPA (other than the required 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 respective Settling Defendants.

XIV. SUBMISSIONS REQUIRING AGENCY APPROVAL

Settling Private Parties.

61. After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Decree, EPA, after reasonable opportunity for review and comment by the Commonwealth, 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 Private Parties modify the submission; or (e) any combination of the above.

62. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 61(a), (b), or (c), Settling Private Parties 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 XXII with respect to the modifications or conditions made by EPA. If such submission has a material defect and EPA modifies the submission to cure the deficiencies pursuant to Paragraph 61(c), EPA retains its right to seek stipulated penalties, as provided in Section XXIII.

63. a. Upon receipt of a notice of disapproval pursuant to Paragraph 61, Settling Private Parties shall, within 14 days or such other time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Except as provided in Paragraph 67, below, any stipulated penalties applicable to the submission, as provided in Section XXIII, shall accrue during the 14-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraph 61.

b. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 61, Settling Private Parties shall proceed, at the direction of EPA, to take any action

required by any non-deficient portion of the submission that does not depend upon the disapproved portion for implementation. Implementation of any non-deficient portion of a submission shall not relieve Settling Private Parties of any liability for stipulated penalties under Section XXIII.

64. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require the Settling Private Parties to correct the deficiencies, in accordance with the preceding Paragraphs. EPA shall also have the right to amend or develop the plan, report or other item. Settling Private Parties shall implement any such plan, report, or item as amended or developed by EPA subject only to their right to invoke the procedures set forth in Section XXII (Dispute Resolution).

65. If, upon resubmission, a plan, report, or item is disapproved or modified by EPA due to a material defect, Settling Private Parties shall be deemed to have failed to submit such plan, report, or item timely and adequately unless Settling Private Parties invoke the dispute resolution procedures set forth in Section XXII (Dispute Resolution) and EPA's action is overturned pursuant to that Section. The provisions of Section XXII (Dispute Resolution) and Section XXIII (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 XXIII (Stipulated Penalties).

66. 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.

67. Notwithstanding the foregoing provisions of this Section, EPA will not unilaterally modify a deficient initial submittal unless it has first given the Settling Private Parties one opportunity to correct the deficiency. Stipulated penalties shall not accrue during the period provided to Settling Private Parties in this Paragraph to correct deficiencies in an initial submittal if EPA determines that the initial submittal was made in good faith and was timely.

Commonwealth.

68. After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Decree, EPA, after reasonable opportunity for review and comment by the Commonwealth, 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 Commonwealth modify the submission; or (e) any combination of the above.

69. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 68 (a), (b), or (c), the Commonwealth shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA, subject only to its right to invoke the dispute resolution procedures set forth in Section XXIII with respect to the modifications or conditions made by EPA. If such submission has a material defect and EPA modifies the submission to cure the deficiencies pursuant to Paragraph 68(c), EPA retains its right to seek stipulated penalties, as provided in Section XXIII.

70. a. Upon receipt of a notice of disapproval pursuant to Paragraph 68, the Commonwealth shall, within 14 days or such other time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Except as provided in Paragraph 74, below, any stipulated penalties applicable to the submission, as provided in Section XXIII, shall accrue during the 14-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraph 68.

b. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 68, the Commonwealth shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission that does not depend

upon the disapproved portion for implementation. Implementation of any non-deficient portion of a submission shall not relieve the Commonwealth of any liability for stipulated penalties under Section XXIII.

71. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require the Commonwealth to correct the deficiencies, in accordance with the preceding Paragraphs. EPA shall also have the right to amend or develop the plan, report or other item. The Commonwealth shall implement any such plan, report, or item as amended or developed by EPA subject only to the Commonwealth's right to invoke the procedures set forth in Section XXII (Dispute Resolution).

72. If, upon resubmission, a plan, report, or item is disapproved or modified by EPA due to a material defect, the Commonwealth shall be deemed to have failed to submit such plan, report, or item timely and adequately unless the Commonwealth invokes the dispute resolution procedures set forth in Section XXII (Dispute Resolution) and EPA's action is overturned pursuant to that Section. The provisions of Section XXII (Dispute Resolution) and Section XXIII (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 XXIII (Stipulated Penalties).

73. 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.

74. Notwithstanding the foregoing provisions of this Section, EPA will not unilaterally modify a deficient initial submittal unless it has first given the Commonwealth an opportunity to correct the deficiency. Stipulated penalties shall not accrue during the period provided to the Commonwealth in this Paragraph to correct deficiencies in an initial submittal if EPA determines that the initial submittal was made in good faith and was timely.

XV. PROJECT COORDINATORS

75. Within 15 days of entry of this Consent Decree, Settling Defendants and EPA will notify each other, in writing, of the name, address and telephone number of their respective designated Project Coordinators and Alternate Project Coordinators. If a Project Coordinator or Alternate Project Coordinator initially designated is changed, the identity of the successor will be given to the other Parties at least five 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 Coordinators 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 Coordinators shall not be attorneys for any of the Parties in this matter. Settling Defendants' Project Coordinators may assign other representatives, including other contractors, to serve as Site representatives for oversight of performance of daily operations during Remedial Activities.

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

shall use its best efforts to avoid or minimize any work stoppage ordered under this Consent Decree.

XVI. ASSURANCE OF ABILITY TO COMPLETE WORK

77. Settling Private Parties. Within 30 days of entry of this Consent Decree, Settling Private Parties shall establish and maintain financial security of at least $18 million, in one of the following forms:

a. A surety bond guaranteeing performance of the IRP Work;

b. One or more irrevocable letters of credit;

c. A trust fund;

d. A guarantee to perform the IRP Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with at least one of the Settling Private Parties; or

e. A demonstration that one or more of the Settling Private Parties satisfies the requirements of 40 C.F.R. § 264.143(f).

78. If the Settling Private Parties seek to demonstrate financial assurance as set forth in Paragraph 77 through a guarantee by a third party, Settling Private Parties shall demonstrate that the guarantor satisfies the requirements of 40 C.F.R. § 264.143(f). If Settling Private Parties seek to demonstrate financial assurance by means of the corporate guarantee or financial test pursuant to Paragraph 77.d or 77.e,

they shall resubmit sworn statements conveying the information required by 40 C.F.R. § 264.143(f) annually, on the anniversary of the effective date of this Consent Decree. In the event that EPA determines at any time that the financial assurances provided by the Settling Private Parties pursuant to this Section are inadequate, Settling Private Parties shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 77 of this Consent Decree. Settling Private Parties' inability to demonstrate financial ability to complete the IRP Work shall not excuse performance of any activities required under this Consent Decree.

79. Obligations of the Commonwealth, DOE and DOD.

a. Pursuant to Paragraph 82.b of this Decree, in the event of any action or occurrence after Certification of Completion of the IRP which causes or threatens to cause 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, the Commonwealth shall immediately take all appropriate action to prevent, abate or minimize such release or threat of release, and to give such notifications as set forth in Paragraph 82.b.

b. Pursuant to Paragraph 39 of this Consent Decree, the Commonwealth shall, after Certification of Completion of the IRP, perform any further response actions EPA determines are appropriate in the event that EPA's review conducted pursuant

to Section 121(c) of CERCLA indicates that the Work is not protective of human health or the environment.

c. Pursuant to the terms of this Paragraph, the United States Department of Energy ("DOE") and the United States Department of Defense ("DOD") agree to provide certain financial assistance to the Commonwealth in particular circumstances arising after the Certification of Completion of the IRP. The assistance, to be described below, shall be provided by DOE and DOD only in the following circumstances (the "Circumstances"):

(1) Emergency Response: The assistance to be described below shall be made available by DOE and DOD in the event of a catastrophic emergency after Certification of Completion of the IRP which presents an immediate threat to the public health or welfare or the environment as the result of the release or threatened release of Waste Material from the Site requiring appropriate action pursuant to Paragraph 82.b. "Catastrophic emergency" shall mean an emergency which cannot be prevented by due diligence on the part of the Commonwealth, such as a natural disaster which affects the Site, including but not limited to, an earthquake, high winds, tornado, landslide, or forest fire. The term "catastrophic emergency" shall also include emergencies resulting from unforeseeable human cause which cannot be prevented by due diligence on the part of the Commonwealth, including but not limited to, vandalism, act of war, arson, or insurrection. The term "catastrophic emergency" specifically does not include emergencies that are the result of

the failure of the Commonwealth to perform its obligations under the Consent Decree due to lack of funds or for any other reason, or as the result of remedy (including design and/or implementation) failure, or the failure of O & M. The Parties agree that they intend the term "catastrophic emergency" as used in this Section to be read strictly and narrowly, in light of the purpose of the Parties that assistance be provided under the terms of this Paragraph only in the event of a truly catastrophic emergency.

(2) Periodic Review. The assistance described below shall also be made available in the event that, after Certification of Completion of the IRP, the Commonwealth is required by EPA to perform further response actions under Section X of this Consent Decree (EPA Periodic Review), and the further response actions are the direct result of a change in performance criteria applied to the Site, other than the Performance Standards, due to new federal regulations or policy. The assistance described below shall not be made available in the event that the Commonwealth is required to perform (i) any further response actions pursuant to Section IX (Additional Response Actions) based on any reason specified therein, including that the Work does not meet Performance Standards or (ii) any further response actions pursuant to Section X (EPA Periodic Review) because EPA determines that the remedy as designed or implemented is not sufficiently protective of human health or the environment based on additional site-specific data.

The Commonwealth, DOE and DOD agree that they intend that the Circumstances under which assistance will be rendered as set forth below are to be read strictly and narrowly.

d. Trust Fund.

(1) Within 180 days after the entry of the Consent Decree, the Commonwealth will establish a trust under an agreement the specific terms of which must be approved in advance by DOE, DOD and EPA ("Trust Agreement"). The Trust shall be administered by a trustee approved in advance by DOE, DOD and EPA. The corpus of the Trust shall include two separate interest-bearing accounts. One account (the "Emergency Account"), shall be used exclusively for Work performed in accordance with paragraph 79.c for catastrophic emergencies and periodic reviews until completion of the IMP. The Commonwealth shall fund the account initially with $2 million and fully fund the account as set forth in 79.d.(3), below. A second account ("the Capital Account") shall be established with $3 million, to be used to fund the cost of the FCP and any capital construction projects required of the Commonwealth by EPA that are not "catastrophic emergencies" or Work required pursuant to periodic review under subparagraph c of this Paragraph. The corpus of the Fund shall be invested in an appropriate fashion so that interest or other appropriate return on investment is earned on the amount placed in the Fund.

(2) If the Commonwealth is unable to establish the Trust Agreement within 180 days of entry of this Consent Decree

because it is unable to procure the services of an approved trustee within that time period (which shall include inability to finalize the terms of the Trust Agreement with the trustee), the Commonwealth shall promptly notify the United States, and shall include in that notification a summary of the steps the Commonwealth has taken to attempt to obtain a trustee. If the United States determines that the Commonwealth has been unable to obtain a trustee within this time period and has made reasonable efforts to do so, the United States may grant an appropriate extension of time to the Commonwealth to allow it to obtain a trustee. Whether or not the United States grants an extension to the Commonwealth to obtain a trustee, if the Trust Agreement is not established within 180 days after entry of this Consent Decree, the Commonwealth shall establish the Emergency Account and the Capital Account with the balances required in subparagraph 79.d.(1), plus interest on the balances that shall begin to accrue 180 days after entry of this Consent Decree and stop accruing on the date the accounts are funded, at the rate specified for investments of the Hazardous Substances Superfund established pursuant to Section 107 of CERCLA, 42 U.S.C. § 9607.

(3) Beginning July 1, 1996, the Commonwealth shall add $500,000, adjusted for inflation, per fiscal year to the Emergency Account (or $1 million, adjusted for inflation, per Commonwealth legislative session), until a total of $7 million, adjusted for inflation (see Subparagraph 79.m below), has been placed into the Emergency Account by the Commonwealth. The

Commonwealth may pay these amounts into the Emergency Account in advance of this schedule.

e. In the event of the occurrence of one of the Circumstances, the Commonwealth shall use the balance of the Emergency Account to fund the additional work before DOE and DOD are obligated to provide any financial assistance under this Section. If the Commonwealth performs the Work, then the Commonwealth may be reimbursed from the Emergency Account for costs, including in-kind services. In-kind services must be documented in accordance with federally approved audit procedures and approved by DOE and DOD.

f. After the Commonwealth has expended either the amounts in the Emergency Account, or $2 million, adjusted for inflation, whichever sum is greater, and after any other funding which might be available to the Commonwealth for such purposes has been expended (such as federal emergency relief funds or other grants), then DOE and DOD agree to provide up to $10 million, adjusted for inflation, per Event, to fund additional activities performed by the Commonwealth as the result of an occurrence of the Circumstances. If the Commonwealth performs work required as a result of the occurrence of one of the Circumstances, documented costs incurred in performing the work may be credited toward the Commonwealth's $2 million share. If DOD and DOE expend $10 million, adjusted for inflation, per Event as provided hereunder, any remaining costs will be borne by the Commonwealth. An "Event" shall mean that body of additional work

required as the result of an occurrence of the Circumstances. If a single body of work is required to respond to one or more of the Circumstances, that body of work shall be considered one Event.

g. The Commonwealth shall be required to perform any activities required as the result of the occurrence of the Circumstances and neither DOD or DOE nor the Settling Private Parties shall have an affirmative obligation to perform or fund such activities, except as expressly required of DOD or DOE in this Paragraph.

h. DOE and DOD shall share in any payments required of them under this Paragraph in proportion to their respective shares under Attachment 1 of the Settlement Agreement. Any such assistance is subject to the availability of appropriated funds, and is subject to the Anti-Deficiency Act. In the event either DOE or DOD is unable to provide assistance because of a lack of appropriated funds, the other shall not be obliged to fund the share of such assistance that would otherwise be required of the Party unable to provide the funds.

i. If the Commonwealth and DOE or DOD have any dispute about the interpretation or application of the terms of this Paragraph, including but not limited to whether one of the Circumstances has occurred, then the disputing parties shall enter into the following dispute resolution process:

(1) The disputing party shall serve a written statement of the disputed issue on the other party to the

dispute. The other party shall serve a written response to the disputing party within five days after actual receipt of the disputing party's written statement.

(2) The parties to the dispute shall enter into a good-faith informal negotiation period for at least five days, which may be extended by agreement of the disputing parties.

(3) At the expiration of the informal negotiation period, one or more of the disputing parties may move the Court to resolve the dispute. The disputing parties shall request that the Court give expedited consideration of the dispute. The parties shall provide the Court with written submissions, and the parties may request an evidentiary hearing. Discovery shall be strictly limited to the specific issues in dispute and shall be expedited pursuant to Court order. A decision of the Court shall be appealable to the extent provided by law.

(4) Neither DOE nor DOD shall be required to expend funds pursuant to this Section during the dispute resolution period.

j. The purpose of the Capital Account is to assure adequate funding for capital construction projects that may be required by EPA during the BoRP. The Commonwealth shall not use the Capital Account for routine maintenance and monitoring activities. The Commonwealth shall maintain a minimum of $3 million, adjusted for inflation, in the Capital Account at all times until the completion of the IMP.

k. The Trust Agreement may provide that the balance of the Emergency Account and the Capital Account may be used by the Commonwealth to perform its obligations to implement the FCP. The use of the Emergency Account for funding the implementation of the FCP shall discharge all of the obligations of DOE and DOD under this Paragraph. Monies remaining in the accounts after Certification of Completion of the BoRP shall revert to the Commonwealth.

l. In the event EPA determines that the Commonwealth has substantively failed to perform any portion of the BoRP, unless otherwise excused or modified by EPA, the Commonwealth agrees that any funds provided by DOE or DOD pursuant to this Paragraph shall be subject to repayment by the Commonwealth to the United States, and DOE and DOD reserve their rights to seek such repayment from the Commonwealth.

m. The phrase "adjusted for inflation" as used in this Section shall mean increased by the amount of the annual increase in the "Consumer Price Index, All Items, All Cities," ("Index") as published by the United States Department of Labor, beginning upon the date of the first revision of the Index following entry of this Consent Decree. If the Index ceases to exist, the most similar official index in effect at the time the adjustment for inflation is calculated shall be used.

n. The Commonwealth's inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Consent Decree.

XVII. CERTIFICATION OF COMPLETION

80. Completion of the IRP.

a. Within 90 days after Settling Private Parties and Settling Federal Agencies conclude that the IRP Activities have been fully performed, the Construction Standards and Performance Standards have been achieved, and the design and implementation of the IRP Activities is such that the Performance Standards are expected, under then existing conditions, to be attained in the future, Settling Private Parties shall schedule and conduct a pre-certification inspection to be attended by Settling Private Parties, Settling Federal Agencies, EPA, and the Commonwealth. If, after the pre-certification inspection, the Settling Private Parties and Settling Federal Agencies believe that the IRP Activities have been fully performed, the Construction Standards and Performance Standards have been achieved, and that the design and implementation of the IRP Activities is such that the Performance Standards are expected, under then existing conditions, to be attained in the future, the Settling Private Parties shall submit a written report requesting certification to EPA for approval, with a copy to the Commonwealth, pursuant to Section XIV (Submissions Requiring Agency Approval) within 30 days of the inspection. In the report, a registered professional engineer and the Settling Private Parties' Project Coordinator or Supervising Contractor shall state that the IRP Activities have been completed in full satisfaction of the requirements of this Consent Decree as

reflected in the SOW. 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 Private Party, the Settling Private Parties' Project Coordinator, or the Settling Private Parties' Supervising Contractor:

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

If EPA fails to respond to the report within 120 days, the request for Certification of Completion shall be deemed to have been rejected and the Settling Private Parties may challenge such rejection under Section XXII (Dispute Resolution); and the Settling Federal Agencies may challenge such rejection pursuant to the Memorandum of Understanding between EPA and the Settling Federal Agencies that governs disputes related to this Consent Decree (the "MOU"). If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity for review and comment by the Commonwealth, determines that the IRP Activities or any portion thereof have not been completed in accordance with this Consent Decree, that the Construction Standards and Performance

Standards have not been achieved, or that the design and implementation of the IRP Activities is such that the Performance Standards are not expected, under then existing conditions, to be attained in the future, EPA will notify Settling Private Parties, the Commonwealth, and Settling Federal Agencies in writing of the activities that must be undertaken to qualify for Certification of Completion of the IRP. 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 Private Parties to submit a schedule to EPA for approval pursuant to Section XIV (Submissions Requiring Agency Approval). Settling Private Parties 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 XXII (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion, and after a reasonable opportunity for review and comment by the Commonwealth, that the IRP Activities have been fully performed in accordance with this Consent Decree, that the Construction Standards and Performance Standards have been achieved, and that the Performance Standards are expected, under then existing conditions, to be attained in the future, EPA will so certify in writing to Settling Private Parties and Settling Federal Agencies. This certification shall constitute Certification of

Completion of the IRP for purposes of this Consent Decree, including, but not limited to, Section XXIV (Covenants Not to Sue by Plaintiff). Certification of Completion of the IRP shall not change Settling Private Parties' and Settling Federal Agencies' remaining obligations under this Consent Decree.

81. Completion of the Remedial Action .

a. Within 90 days after the Commonwealth concludes that the BoRP Activities have been fully performed and the Construction Standards and Performance Standards have been achieved, the Commonwealth shall schedule and conduct a pre-certification inspection to be attended by EPA and the Commonwealth. If, after the pre-certification inspection, the Commonwealth believes that the BoRP Activities have been fully performed and the Construction Standards and Performance Standards have been achieved, it shall submit a written report requesting certification to EPA for approval, pursuant to Section XIV (Submissions Requiring Agency Approval) within 30 days of the inspection. In the report, a registered professional engineer and the Commonwealth's Project Coordinator or Supervising Contractor shall state that the BoRP Activities have been completed in full satisfaction of the requirements of this Consent Decree as reflected in the SOW. 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 official of the Commonwealth or the Commonwealth's Project Coordinator or Supervising Contractor:

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

If EPA fails to respond to the report within 120 days, the request for Certification of Completion shall be deemed to have been rejected and the Commonwealth may challenge such rejection under Section XXII (Dispute Resolution). If, after completion of the pre-certification inspection and receipt and review of the written report, EPA determines that the BoRP Activities or any portion thereof have not been completed in accordance with this Consent Decree or that the Construction Standards and Performance Standards have not been achieved, EPA will notify the Commonwealth in writing of the activities that must be undertaken to complete the BoRP Activities and achieve the Construction Standards and Performance Standards. 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 Commonwealth to submit a schedule to EPA for approval pursuant to Section XIV (Submissions Requiring Agency Approval). The Commonwealth shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject to the Commonwealth's right to invoke the

dispute resolution procedures set forth in Section XXII (Dispute Resolution).

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

XVIII. EMERGENCY RESPONSE

82. a. Settling Private Parties. In the event of any action or occurrence prior to Certification of Completion of the IRP 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 Private Parties shall, subject to the provisions of Paragraph 83, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify EPA's Project Coordinator or, if the Project Coordinator is unavailable, EPA's Alternate Project Coordinator. If neither of these persons is available, the Settling Private Parties shall notify the EPA Emergency

Response Section, Region IV. Settling Private Parties shall take such actions in consultation with EPA's Project Coordinator or other available authorized EPA officer in accordance with all applicable provisions of applicable health and safety plans, contingency plans, and any other applicable plans or documents developed pursuant to the SOW. In the event that Settling Private Parties fail to take appropriate response action as required by this Section, and EPA takes such action instead, Settling Private Parties and Settling Federal Agencies shall reimburse EPA for all costs of the response action which are not inconsistent with the NCP pursuant to the procedures set forth in Paragraph 84.c of Section XIX (Reimbursement of Response Costs) within 90 days after being billed by EPA for such costs.

b. Commonwealth. In the event of any action or occurrence after Certification of Completion of the IRP 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, the Commonwealth shall, subject to the provisions of Paragraph 83, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify EPA's Project Coordinator or, if the Project Coordinator is unavailable, EPA's Alternate Project Coordinator. If neither of these persons is available, the Commonwealth shall notify the EPA Emergency Response Section, Region IV. The Commonwealth shall take such actions in consultation with EPA's Project

Coordinator or other available authorized EPA officer and in accordance with all applicable provisions of the applicable health and safety plans, contingency plans, and any other applicable plans or documents developed pursuant to the SOW. In the event that the Commonwealth fails to take appropriate response action as required by this Section, and EPA takes such action, the Commonwealth shall reimburse EPA for all costs of the response action which are not inconsistent with the NCP pursuant to the procedures set forth in Paragraph 84.c of Section XIX (Reimbursement of Response Costs) within 90 days after being billed by EPA for such costs.

83. Except as provided in Section XXIV (Covenants Not to Sue by Plaintiff), nothing in the preceding Paragraphs or in this Consent Decree shall be deemed to limit any authority of Plaintiff and EPA to take, direct, or order all appropriate action or to 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. In the event that Plaintiff sues the Settling Defendants or EPA takes administrative action against Settling Parties other than to enforce this Consent Decree, the Settling Parties reserve all their rights, causes of action, or defenses arising under CERCLA or any other law.

XIX. REIMBURSEMENT OF RESPONSE COSTS

84. a. Within 120 days after entry of this Consent Decree, Settling Private Parties and Settling Federal Agencies

shall cause to be paid to the United States an amount equal to the volumetric percentage attributable to the De Minimis Settlors, as set forth in Exhibits 1 and 4 of the De Minimis Consent Decree, times $5.8 million (EPA's estimated past response costs as of the June 30, 1992 special notice letter), plus $5 million dollars. Settling Private Parties and Settling Federal Agencies shall also cause to be paid to the United States an amount equal to any additional volumetric percentage attributed to De Minimis Settlors for which payment is made to the Maxey Flats De Minimis Trust pursuant to Paragraph 26 of the De Minimis Consent Decree, times $5.8 million dollars, within 120 days after such payment is made to the Maxey Flats De Minimis Trust. The payments made under this Paragraph shall be in full satisfaction of Settling Private Parties' and Settling Federal Agencies' obligation to reimburse Past Response Costs and pay Future Response Costs.

b. Payment shall be made by Electronic Funds Transfer ("EFT" or wire transfer) to the U.S. Department of Justice lockbox bank, referencing United States Attorney's Office (U.S.A.O.) file number _____, EPA Region IV Site/Spill ID number "G1", and DOJ case number 90-11-2-211A. Payment shall be made in accordance with instructions provided by EPA to the Settling Private Parties and Settling Federal Agencies upon execution of the Consent Decree. Any EFTs received at the U.S. Department of Justice lockbox bank after 4:00 p.m. (eastern time) will be credited on the next business day. The Settling Private

Parties shall send a record of the EFT to the United States as specified in Section XXIX (Notices and Submissions).

c. For costs incurred by the United States pursuant to Sections XVIII and XII (Emergency Response and Access) and Paragraph 126 of Section XXIV (Covenants Not to Sue or Take Administrative Action by Plaintiff), EPA will invoice the Settling Parties who are liable for such costs under this Consent Decree. The invoice will include a summary of the costs prepared by EPA, including direct and indirect costs incurred by EPA and its contractors in the form of an EPA "SCORES" report or its equivalent. Settling Parties may request documentation which supports items listed in the cost summary. A request for supporting documents must be made within 30 days of receipt of an invoice from EPA. Settling Parties shall make all payments within 90 days of Settling Parties' receipt of each invoice, except as otherwise provided in Paragraph 84.d. However, if Settling Parties request documents supporting the SCORES report, payment shall be made within 60 days after receipt of the documents from EPA or 90 days after receipt of the invoice, whichever is later. Settling Private Parties shall make all payments required by this Paragraph in the form of a certified check or checks made payable to "EPA Hazardous Substance Superfund" and referencing Site/Spill ID # G1 and DOJ case number 90-11-2-211A. The requirement to use a certified check for payment shall not apply to the Settling Federal Agencies or the Commonwealth. Settling Parties shall forward payment to the

United States Environmental Protection Agency, Region IV, Attention: Superfund Accounting, P.O. Box 100142, Atlanta, Georgia 30384 and shall send copies of the checks for payment to the United States as specified to Section XXIX (Notices and Submissions).

d. Settling Parties may contest payment of any cost under Paragraph 84.c if they determine that EPA 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 invoice or any requested supporting documents and must be sent to the United States pursuant to Section XXIX (Notices and Submissions). Any such objection shall specifically identify the contested costs and the basis for objection. In the event of an objection, the Settling Parties shall, within the 90-day period, pay all uncontested costs to EPA in the manner described in Paragraph 84.c. Simultaneously, Settling Defendants shall establish an interest bearing escrow account in a federally-insured bank duly chartered in the Commonwealth of Kentucky and remit to that escrow account funds equivalent to the amount of the contested cost. The requirement to deposit funds in an escrow account shall not apply to the share of the contested costs payable by the Settling Federal Agencies. Settling Defendants shall send to the United States, as provided in Section XXIX (Notices and Submissions), a copy of the transmittal letter and check paying the uncontested 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, Settling Defendants shall initiate the dispute resolution procedures in Section XXII. If the United States prevails in the dispute, within 5 days of the resolution of the dispute, Settling Parties shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 84.c. If Settling Defendants prevail concerning any aspect of the contested costs, the Settling Parties shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 84.c, and 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 XXII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding the Settling Defendants' obligation to reimburse the United States for these costs.

e. In the event that the Settling Parties do not make the payments required by Paragraph 84.a within 120 days of the effective date of this Consent Decree or the payments required by Paragraph 84.c are not made within 90 days of the Settling Parties' receipt of the invoice, or 60 days after

receipt of supporting documentation that has been requested pursuant to Paragraph 84.c, whichever is later, Settling Parties which are liable for such costs shall pay interest on the unpaid balance at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607. The interest to be paid on the costs required in Paragraph 84.a shall begin to accrue on the effective date of the Consent Decree. The interest on costs required by Paragraph 84.c shall begin to accrue on the date of the Settling Parties' receipt of the bill. Interest shall accrue at the rate specified through the date of 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 Parties' failure to make timely payments under this Section.

XX. INDEMNIFICATION AND INSURANCE

Settling Private Parties.

85. The United States does not assume any liability by entering into this agreement or by virtue of any designation of Settling Private Parties as EPA's authorized representatives under Section 104(e) of CERCLA. Settling Private Parties hereby 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, acts or omissions of Settling Private Parties, 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 Private Parties as EPA's authorized representatives under Section 104(e) of CERCLA. Further, the Settling Private Parties agree to pay the United States all costs the United States incurs 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 acts or omissions of Settling Private Parties, 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, including the Settling Federal Agencies, shall not be held out as a party to any contract entered into by or on behalf of Settling Private Parties in carrying out activities pursuant to this Consent Decree. Neither the Settling Private Parties nor any such contractor shall be considered an agent of the United States, including the Settling Federal Agencies.

86. Settling Private Parties 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 the Settling Private Parties and any person for performance of IRP Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Settling Private Parties 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 Private Parties and any person for performance of IRP Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

87. No later than 15 days before commencing any on-site Work, Settling Private Parties shall secure, and shall maintain until the completion of the IRP Work, comprehensive general liability, occurrence-based, insurance with limits of ten million dollars, combined single limit, naming as additional insured the United States. No later than 15 days before commencing any on-site IRP Work, Settling Private Parties shall secure, and shall maintain until EPA's Certification of Completion of the Initial Remedial Phase pursuant to Paragraph 80 of Section XVII (Certification of Completion), automobile liability insurance with limits of $500,000, naming as additional insured the United States. In addition, for the duration of the IRP Work performed by Settling Private Parties, Settling Private Parties shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the IRP Work on behalf of Settling Private Parties in furtherance of this Consent Decree. Prior to commencement of the IRP Work under this Consent Decree, Settling Private Parties shall provide to EPA certificates of such

insurance and a copy of each insurance policy. Settling Private Parties shall resubmit such certificates and copies of policies during each year of their performance of the IRP Work on the anniversary of the effective date of this Consent Decree. If Settling Private Parties demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to matters so insured by that contractor or subcontractor, Settling Private Parties need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

Commonwealth.

88. The United States does not assume any liability by entering into this agreement or by virtue of any designation of the Commonwealth as EPA's authorized representative under Section 104(e) of CERCLA. The Commonwealth hereby indemnifies, saves and holds harmless, to the extent not prohibited by law, 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, acts or omissions of the Commonwealth, its employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Consent Decree, including, but not limited to, any claims arising from any designation of the Commonwealth as EPA's authorized representative under Section 104(e) of CERCLA. Further, the

Commonwealth agrees to pay the United States all costs the United States incurs 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 acts or omissions of the Commonwealth, its employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its 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 the Commonwealth carrying out activities pursuant to this Consent Decree. Neither the Commonwealth nor any such contractor shall be considered an agent of the United States.

89. The Commonwealth waives 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 the Commonwealth 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, the Commonwealth shall indemnify and hold harmless, to the extent not prohibited by law, 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 with the Commonwealth and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

90. For the duration of the Work performed by the Commonwealth, the Commonwealth shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of workers' compensation insurance for all persons performing the Work on behalf of the Commonwealth in furtherance of this Consent Decree.

XXI. FORCE MAJEURE

91. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the Settling Parties or of any entity controlled by such Settling Parties whose performance is delayed, including, but not limited to, their contractors and subcontractors, that delays or prevents the performance of any obligation under this Consent Decree, despite such Settling Parties' best efforts to fulfill the obligation. The requirement that such Settling Parties 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 achieve the Performance Standards, or increased costs.

92. 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

Party whose performance is delayed shall notify orally EPA's Project Coordinator or, in his or her absence, EPA's Alternate Project Coordinator or, in the event both of EPA's designated representatives are unavailable, the Director of the Waste Management Division, EPA Region IV, within 48 hours of when the Settling Party first knew or should have known that the event might cause a delay. Within five business days thereafter, the Settling Party shall provide in writing to EPA an explanation and description of the reasons for the delay; the obligations and deadlines the Settling Party claims are affected by the delay; the anticipated duration of the delay; 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 Party's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of the Settling Party, such event may cause or contribute to an endangerment to public health, welfare or the environment. The Settling Party shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. The Settling Party shall supplement this written statement with new information, statements, or plans as they become available. Failure to comply with the above requirements shall preclude the Settling Party from asserting any claim of force majeure for that event. Settling Defendants shall be deemed to have notice of a

circumstance of which their contractors or subcontractors had or should have had notice.

93. 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 Party in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify the Settling Party in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

94. A Settling Defendant which invokes the dispute resolution procedures set forth in Section XXII to dispute EPA's determination under Paragraph 93 shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, the Settling Defendant 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 the Settling Defendant complied with the requirements of Paragraphs 91 and 92, above. If the Settling Defendant carries this burden, the delay at issue shall be deemed not to be a violation by the Settling Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

XXII. DISPUTE RESOLUTION

95. a. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism available to Settling Defendants to resolve disputes arising under or with respect to this Consent Decree between the United States (excluding the Settling Federal Agencies) and the Settling Defendants. The provisions of the MOU shall govern disputes between EPA and the Settling Federal Agencies under or with respect to this Consent Decree. Notwithstanding the provisions of CERCLA §§ 121 and 122, 42 U.S.C. §§ 9621 and 9622, Settling Defendants agree that the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes concerning the scope of the obligations under this Consent Decree or the implementation of this Consent Decree, and the standards, requirements, criteria or limitations to which the remedial action must conform, and that the only relief which will be sought by the Settling Defendants in dispute resolution will be a determination of the obligation in dispute and not the recovery of civil or stipulated penalties. 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.

b. Notwithstanding any provision in this Consent Decree, the following governs the serving of a Notice of Dispute (as described in Paragraph 96) or filing a motion for judicial review (as described in Paragraph 98.c or 99.a):

(1) A Settling Defendant may not serve a Notice of Dispute or file a motion for judicial review concerning the performance of ongoing, on-site Work if it is not obligated to perform the Work in dispute, except that any Settling Defendant may dispute EPA's Certification of Completion of the IRP and Certification of Completion of the Remedial Action. This provision shall not affect the Commonwealth's ability to raise disputes regarding its access obligations under Section XII or regarding EPA's determination concerning the need for a horizontal flow barrier.

(2) A Settling Defendant may not serve a Notice of Dispute or file a motion for judicial review concerning a plan, report, or other item that it is not obligated to submit to EPA under this Consent Decree, except to dispute EPA approval of the following deliverables or modifications thereof:

(a) IRP RD Work Plan or a portion thereof;

(b) IRP Sampling and Analysis Plan;

(c) IRP Health and Safety Plan;

(d) IRP Quality Assurance Project Plan;

(e) IRP Prefinal and Final Remedial Design reports;

(f) IRP RA Work Plan or a portion thereof;

(g) IRP Construction Health and Safety Plan;

(h) IRP Construction Quality Assurance Plan;

(i) IRP Construction Management Plan;

(j) Deliverables associated with the horizontal flow barrier that are required within the ten years after Certification of Completion of the IRP;

(k) IMP Work Plan;

(l) IMP Sampling and Analysis Plan;

(m) IMP Quality Assurance Plan;

(n) IMP Health and Safety Plan;

(o) FCP Work Plan;

(p) FCP Sampling and Analysis Plan;

(q) FCP Health and Safety Plan;

(r) FCP Quality Assurance Project Plan;

(s) FCP Prefinal and Final Remedial Design reports;

(t) FCP RA Work Plan;

(u) FCP Construction Health and Safety Plan/Contingency Plan;

(v) FCP Construction Management Plan;

(w) FCP Construction Quality Assurance Plan.

96. 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, including any affected Settling Defendant. The dispute shall be

considered to have arisen when one Settling Defendant sends the other Parties written notice of the dispute (Notice of Dispute). The Settling Defendant who serves the Notice of Dispute shall be called the "disputing Settling Defendant." The period for informal negotiations shall not exceed 20 days from the time the dispute arises, unless EPA and the disputing Settling Defendant agree in writing to extend the time period. A Settling Defendant may not serve a Notice of Dispute contesting EPA approval of a deliverable listed in Paragraph 95.b, or a modification thereof, unless the Notice of Dispute is served within 15 days of EPA approval.

97. a. In the event that the disputing Settling Defendant and EPA cannot resolve a dispute by informal negotiations under the preceding Paragraph, then the position advanced by EPA shall be considered binding unless, within 10 days after the conclusion of the informal negotiation period, the disputing Settling Defendant invokes the formal dispute resolution procedures of this Section by serving on EPA and the other Settling Parties a written Statement of Position on the matter in dispute, including, but not limited to, any factual data, analysis, argument, or opinion supporting that position and any supporting documentation relied upon by the disputing Settling Defendant. The Statement of Position shall specify the disputing Settling Defendant's position as to whether formal dispute resolution should proceed under Paragraph 98 or 99.

b. Within 14 days after receipt of the disputing Settling Defendant's Statement of Position, EPA will serve on the disputing Settling Defendant and all other Settling Parties its Statement of Position, including, but not limited to, any factual data, analysis, argument, 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 98 or 99. Within 14 days after receipt of the disputing Settling Defendant's Statement of Position, any other Settling Defendant may serve on EPA and the disputing Settling Defendant a Statement of Position, including but not limited to any factual data, analysis, argument, or opinion supporting its position, and all supporting documentation.

c. If there is disagreement between EPA and the disputing Settling Defendant as to whether dispute resolution should proceed under Paragraph 98 or 99, the parties to the dispute shall follow the procedures set forth in the Paragraph determined by EPA to be applicable. However, if a Settling Defendant ultimately appeals 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 98 and 99.

98. 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 under this Consent Decree by Settling Parties regarding the validity of the ROD's provisions.

a. An administrative record of the dispute shall be maintained by EPA and shall contain all Statements of Position, including supporting documentation, submitted pursuant to this Paragraph. When appropriate, EPA may allow a Settling Defendant to submit a supplemental Statement of Position or the Settling Federal Agencies to submit statements or other documents.

b. The Director of the Waste Management Division, EPA Region IV, will issue a final administrative decision resolving the dispute based on the administrative record described in Paragraph 98.a. This decision shall be binding upon the Settling Defendants, subject only to the right to seek judicial review pursuant to Paragraph 98.c and 98.d.

c. Any administrative decision made by EPA pursuant to Paragraph 98.b shall be reviewable by this Court,

provided that a motion for judicial review is filed by a Settling Defendant with the Court and served on all Settling Parties and EPA within 10 days of receipt of EPA's decision. The motion for judicial review 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 and any other Settling Defendant may file a response to the motion for judicial review.

d. In proceedings on any dispute governed by this Paragraph, the Settling Defendant(s) disputing EPA's decision shall have the burden of demonstrating that the decision of the Waste Management Division Director is arbitrary and capricious or otherwise not in accordance with law. Judicial review of EPA's decision shall be on the administrative record compiled pursuant to Paragraph 98.a.

99. 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 the Settling Defendants' Statement of Position submitted pursuant to Paragraph 97, the Director of the Waste Management Division, EPA Region IV, will issue a final decision resolving the dispute. The Waste Management Division Director's decision shall be binding on the

Settling Defendants unless, within ten days of receipt of the decision, a Settling Defendant files with the Court and serves on the Parties a motion for judicial review 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 or any other Settling Defendant may file a response to the Settling Defendant's motion for judicial review.

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

100. a. The invocation of the dispute resolution procedures of this Section shall not extend, postpone, or affect in any way any obligation of the Settling Parties under this Consent Decree not directly in dispute, unless EPA or the Court agrees otherwise. Stipulated penalties related to the disputed obligation shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 117. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of the Consent Decree, except as provided in Paragraphs 67, 74, or 100.b.

b. When a Settling Defendant serves a Notice of Dispute or files a motion for judicial review contesting EPA approval of a deliverable listed in Paragraph 95 or a modification thereof that the Settling Defendant is not obligated to submit to EPA, EPA shall extend by the length of the dispute any deadline that depends on approval of the disputed portions of the deliverable or modification. Unless such Settling Defendant prevails in the dispute, such Settling Defendant shall be liable for stipulated penalties applying to the disputed deliverable or modification as set forth in Section XXIII as if it were obligated to submit the deliverable or modification and had failed to do so, except that stipulated penalties shall begin to accrue on the date such Settling Defendant served the Notice of Dispute or filed the motion for judicial review, whichever is earlier, and stop accruing on the date the dispute is withdrawn or otherwise concluded.

101. The sole procedures for determining the relative responsibility of the Settling Parties to pay for additional response actions performed under Section IX (Additional Response Actions) during the first 10 years after Certification of Completion of the IRP are found at Paragraph 34 of Section IX.

102. The sole procedures for determining the responsibility of the United States Department of Energy and the United States Department of Defense to provide certain financial assistance to the Commonwealth under Section XVI (Assurance of

Ability to Complete Work) are found at Paragraph 79.i of Section XVI.

103. Except as otherwise provided in Paragraphs 101 and 102, enforcement of the Consent Decree by a Settling Party against another Settling Party or resolution of a dispute between one or more Settling Parties regarding their respective obligations under the Consent Decree are governed by Section XXXI (Retention of Jurisdiction) and general principles of law.

XXIII. STIPULATED PENALTIES

Settling Private Parties.

104. Settling Private Parties shall be liable for stipulated penalties in the amounts set forth in Paragraphs 105-107 to the United States for failure to comply with the requirements of this Consent Decree specified below, unless excused under Section XXI (Force Majeure). The Commonwealth may instead be liable to the United States for the stipulated penalties set forth in Paragraphs 105-107 as provided in Paragraph 100.b of Section XXII (Dispute Resolution). "Compliance" by Settling Private Parties shall include completion of the IRP Work under this Consent Decree or any work plan or other plan approved under this Consent Decree for IRP Work identified below in accordance with all applicable requirements of law, this Consent Decree, the SOW, and any plans or other documents approved by EPA pursuant to this Consent Decree and within the specified time schedules established by and approved under this Consent Decree.

105. a. The following stipulated penalties shall be payable per violation per day by the Settling Private Parties or the Commonwealth to the United States for any noncompliance identified in subparagraph 105.b below:

Penalty Per Violation Per Day	Period of Noncompliance
$1,000	1st through 14th day
$3,000	15th through 30th day
$5,000	31st day and beyond

b. Failure to timely or adequately comply with the following requirements of this Consent Decree:

(1) Submittal and, if necessary, modification of any and all draft and final IRP RD and RA Work Plans;

(2) Submittal and, if necessary, modification of the final IRP Remedial Design report;

(3) Hiring a Supervising Contractor.

106. a. The following stipulated penalties shall be payable per violation per day by Settling Private Parties or the Commonwealth to the United States for any noncompliance identified in subparagraph 106.b, below:

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$1,000	15th through 30th day
$2,500	31st day and beyond

b. Failure to timely or adequately comply with the following requirements of this Consent Decree:

(1) Submittal of and, if necessary, modification of, any IRP RD and RA deliverables not identified in Paragraph 105.b;

(2) Payment of all monies required to be paid pursuant to Section XIX (Reimbursement of Response Costs);

(3) Submittal and, if necessary, modification of any Work Plans for further response actions pursuant to Sections IX and X (Additional Response Actions and EPA Periodic Review), hereof;

(4) Failure to achieve any other major scheduled milestones identified under the approved IRP RA Work Plan.

107. Settling Private Parties or the Commonwealth shall be liable for stipulated penalties of $250 per violation for each day of non-compliance with requirements of this Consent Decree or the SOW, other than those specified in the prior subparagraphs, which are due by a deadline approved by EPA.

Commonwealth.

108. The Commonwealth shall be liable for stipulated penalties in the amounts set forth in Paragraphs 109-111 to the United States for failure to comply with the requirements of this Consent Decree specified below, unless excused under Section XXI (Force Majeure). Settling Private Parties may instead be liable to the United States for the stipulated penalties set forth in Paragraphs 109-111 as provided in Paragraph 100.b of Section XXII (Dispute Resolution). "Compliance" by the Commonwealth shall

include completion of the BoRP Work and Commonwealth IRP Obligations under this Consent Decree or any work plan or other plan approved under this Consent Decree for BoRP Work or Commonwealth IRP Obligations identified below in accordance with all applicable requirements of law, this Consent Decree, the SOW, and any plans or other documents approved by EPA pursuant to this Consent Decree and within the specified time schedules established by and approved under this Consent Decree.

109. a. The following stipulated penalties shall be payable per violation per day by the Commonwealth or the Settling Private Parties to the United States for any noncompliance identified in Subparagraph 109.b below:

Penalty Per Violation Per Day	Period of Noncompliance
$1,000	1st through 14th day
$3,000	15th through 30th day
$5,000	31st day and beyond

b. Failure to timely or adequately comply with the following requirements of this Consent Decree:

(1) Submittal and, if necessary, modification of any and all draft and final BoRP work plans;

(2) Hiring of a Supervising Contractor or designating an agency or employee(s) to serve the equivalent function;

(3) Providing access as required by Section XII.

110. a. The following stipulated penalties shall be payable per violation per day by the Commonwealth or the Settling Private Parties to the United States for any noncompliance identified in subparagraph 110.b, below:

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$1,000	15th through 30th day
$2,500	31st day and beyond

b. Failure to timely or adequately comply with the following requirements of this Consent Decree:

(1) Submittal of and, if necessary, modification of, any deliverables identified in the EPA-approved BoRP work plans;

(2) Recording of Consent Decree and Notice in Registry of Deeds and notifying EPA of property transfers;

(3) Submittal and, if necessary, modification of any work plans for further response actions pursuant to Sections IX and X (Additional Response Actions and EPA Periodic Review), hereof.

(4) Failure to achieve any other major scheduled milestones identified under the approved BoRP work plans.

(5) Timely establishment of the Trust Fund required by Paragraph 79.

111. The Commonwealth or the Settling Private Parties shall be liable for stipulated penalties of $250 per violation

for each day of non-compliance with requirements of this Consent Decree or the SOW, other than those specified in the prior subparagraphs, which are due by a deadline approved by EPA.

112. The penalty amounts set forth in paragraphs 109 - 111 above shall be increased annually, beginning in January of the year following entry of the Consent Decree, by the amount of annual increase in the "Consumer Price Index, All Items, All Cities," as published by the United States Department of Labor, or, if the Consumer Price Index does not exist, the most similar official index in effect at the time the penalties are imposed.

Settling Defendants

113. All penalties imposed by this Section shall begin to accrue on the day after 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. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Decree.

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

115. All penalties owed to the United States under this Section shall be due and payable within 30 days of a Settling Defendant's receipt from EPA of a demand for payment of the penalties, unless the Settling Defendant invokes the Dispute Resolution procedures under Section XXII (Dispute Resolution). All payments under this Section shall be paid by certified check made payable to "EPA Hazardous Substances Superfund," shall be mailed to

U.S. Environmental Protection Agency
Region IV
Attention: Superfund Accounting
P.O. Box 100142
Atlanta, Georgia 30384

and shall reference the EPA Region IV Site/Spill ID number (which is "G1" for this Site) and DOJ Case Number 90-11-2-211A. Copies of checks paid pursuant to this Section, and any accompanying transmittal letters, shall be sent to the United States as provided in Section XXIX (Notices and Submissions).

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

117. Penalties shall continue to accrue as provided in Paragraph 113 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.

118. a. If Settling Defendants fail to pay stipulated penalties when due, the United States may institute proceedings to collect the penalties, as well as interest. Settling Defendants shall pay interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 114 at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607.

b. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States to seek any other remedies or sanctions available by virtue of Settling 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.

c. EPA may, in its unreviewable discretion, forgive all or a portion of any stipulated penalties which accrue pursuant to this Section, considering the good faith efforts of the respective Settling Parties to comply, or such other factors as EPA deems appropriate.

119. No payments made under this Section which are penalties under Section 169 of the Internal Revenue Code shall be tax deductible for federal tax purposes.

XXIV. COVENANTS NOT TO SUE OR TAKE ADMINISTRATIVE ACTION BY PLAINTIFF

120. a. Settling Private Parties and Settling Federal Agencies. In consideration of the actions that will be performed and the payments that will be made by the Settling Private Parties and Settling Federal Agencies under the terms of the Consent Decree, and except as specifically provided in Paragraphs 122 and 124 of this Section, the United States covenants not to sue or to take administrative action against Settling Private Parties, and EPA covenants not to take administrative action against Settling Federal Agencies pursuant to Sections 106 and 107(a) of CERCLA relating to the Site. With respect to liability for Past Response Costs, Future Response Costs, IRP Remedial Design, IRP Activities, additional response actions required pursuant to Sections IX and XII (Additional Response Actions and Access), BoRP Remedial Design, BoRP Activities, Commonwealth IRP Obligations, and O & M, these covenants not to sue or take

administrative action shall take effect upon receipt by EPA of the payments required by Section XIX (Reimbursement of Response Costs). With respect to all other liability under Sections 106 and 107(a) of CERCLA relating to the Site, these covenants not to sue or take administrative action shall take effect upon Certification of Completion of Remedial Action pursuant to Paragraph 81 of Section XVII. These covenants not to sue or take administrative action are conditioned upon the complete and satisfactory performance by Settling Private Parties and Settling Federal Agencies of their obligations under this Consent Decree. These covenants not to sue or take administrative action extend only to the Settling Private Parties and Settling Federal Agencies and do not extend to any other person.

b. Commonwealth. In consideration of the actions that will be performed by the Commonwealth under the terms of the Consent Decree, and except as specifically provided in Paragraphs 122 and 124 of this Section, the United States covenants not to sue or to take administrative action against the Commonwealth pursuant to section 106 of CERCLA relating to the Site for performance of IRP Work and BoRP Work upon Certification of Completion of the Remedial Action. These covenants not to sue are conditioned upon the complete and satisfactory performance by the Commonwealth of its obligations under this Consent Decree. These covenants not to sue extend only to the Commonwealth and do not extend to any other person.

121. United States' Pre-Certification Reservations. 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 Private Parties or Settling Federal Agencies (1) to perform further response actions relating to the Site or (2) to reimburse the United States for additional costs of response if, prior to Certification of Completion of the IRP:

(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 these previously unknown conditions or information, together with any other relevant information, indicate that performance of the IRP Work is not protective of human health or the environment.

122. United States' Post-Certification Reservations.

a. Settling Private Parties and Settling Federal Agencies. 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 Private Parties and Settling Federal Agencies (1) to perform further response actions relating to the Site or (2) to reimburse the United States for additional costs

of response if, subsequent to Certification of Completion of the IRP:

(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 these previously unknown conditions or information, together with other relevant information, indicate that performance of the IRP Work is not protective of human health or the environment.

b. Commonwealth. 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 the Commonwealth to perform further response actions relating to the Site 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 these previously unknown conditions or this information together with other relevant information indicate that performance of the Work is not protective of human health or the environment.

123. For purposes of Paragraph 121, the information and the conditions known to EPA shall include only that

information and those conditions set forth in the Record of Decision for the Site and the administrative record which serves as a basis for the Record of Decision. For purposes of Paragraph 122.a, the information and the conditions known to EPA shall include only that information and those conditions set forth in the Record of Decision, the administrative record which serves as the basis for the Record of Decision, and any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of the IRP. For purposes of Paragraph 122.b, the information and the conditions known to EPA shall include only that information and those conditions set forth in the Record of Decision, the administrative record which serves as the basis for the Record of Decision, and any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of Remedial Action.

124. General Reservations of Rights. The covenants not to sue or take administrative action set forth above do not pertain to any matters other than those expressly specified in Paragraph 120.a and 120.b. The United States reserves, and this Consent Decree is without prejudice to, all rights against Settling Parties with respect to all other matters, including but not limited to, the following:

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

b. liability arising from the past, present, or future disposal, release, or threat of release of Waste Materials outside of the combined area of the Site and the contiguous area within which Site-derived contaminants exist as evidenced in the administrative record which serves as a basis for the remedy selection decision for the Site;

c. liability for damages for injury to, destruction of, or loss of natural resources for which there are United States natural resources trustees;

d. liability for response costs that have been or may be incurred by the United States Department of the Interior or the United States Department of Agriculture in their role as a natural resources trustee;

e. criminal liability; and

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

125. The United States reserves, and this Consent Decree is without prejudice to, all rights against the Commonwealth for recovery of response costs related to the Site that the United States has incurred and will incur in the future.

126. In the event EPA determines that Settling Defendants have failed to implement any provisions of the Work in an adequate or timely manner, EPA may perform any and all portions of the Work as EPA determines necessary. Settling Defendants may invoke the procedures set forth in Section XXII

(Dispute Resolution) to dispute EPA's determination that the Settling Defendants failed to implement a provision of the Work in an adequate or timely manner as arbitrary and capricious or otherwise not in accordance with law. Such disputes shall be resolved on the administrative record. If EPA performs the IRP Work or any portion thereof, the Settling Private Parties and Settling Federal Agencies shall reimburse the United States for costs incurred by the United States in performing the IRP Work pursuant to this Paragraph in accordance with the payment procedures set forth in Paragraph 84.c of Section XIX (Reimbursement of Response Costs). If EPA performs the BoRP Work or any portion thereof, the Commonwealth shall reimburse the United States for costs incurred by the United States in performing the BoRP Work pursuant to this Paragraph in accordance with the payment procedures set forth in Paragraph 84.c of Section XIX (Reimbursement of Response Costs).

127. 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.

XXV. COVENANTS BY SETTLING DEFENDANTS

128. a. 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 or this Consent Decree, including, but not limited to, any direct or indirect claim for reimbursement from the Hazardous Substance Superfund

(established pursuant to the Internal Revenue Code, 26 U.S.C. §9507) through CERCLA Sections 106(b)(2), 111, 112, 113 or any other provision of law or any claims arising out of response activities at the Site. The Settling Defendants reserve, and this Consent Decree is without prejudice to, actions against the United States based on negligent actions taken directly by the United States (not including oversight or approval of the Settling Defendants' plans or activities) after entry of this Consent Decree that are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in any statute other than CERCLA. Settling Defendants also reserve, and this Consent Decree is without prejudice to, actions against the Hazardous Substances Superfund for reimbursement of costs incurred by the Settling Defendants as a result of performing obligations not imposed on them by the terms of this Consent Decree, if those obligations have been performed in compliance with an administrative order issued under Section 106 of CERCLA after entry of this Consent Decree. 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).

b. The covenants not to sue and reservations between Settling Private Parties and Settling Federal Agencies contained in Sections 5 and 7 of the Settlement Agreement are incorporated by reference herein and are made an enforceable part of this Consent Decree.

c. In consideration of the payments made, obligations undertaken, and covenants provided by the Settling Private Parties and Settling Federal Agencies under this Consent Decree, the Commonwealth covenants not to sue Settling Private Parties and Settling Federal Agencies for any and all civil liability pursuant to CERCLA, state law, and common law relating to the Site, including any liability for Past Response Costs, Future Response Costs, BORP Work, response costs previously incurred by the Commonwealth, natural resource damage claims of the Commonwealth (which shall not affect any rights the United States may have as a natural resource trustee), and response costs which are incurred by the Commonwealth to perform its obligations under Sections IX, X, XII, XVII, XVIII, XX, XXVIII, and XXXIII (Additional Response Actions, EPA Periodic Review, Access, Certification of Completion, Emergency Response, Indemnification and Insurance, Retention of Records, and Community Relations). The Commonwealth further covenants not to sue the Settling Private Parties or Settling Federal Agencies for civil liability, if any, arising from their conduct prior to entry of the Consent Decree relative to the Site under the AEA, the Resource Conservation and Recovery Act, the Safe Drinking Water Act, the Solid Waste Disposal Act, the Clean Water Act, the Clean Air Act (all as amended) or any state law or regulation implementing such federal statutes or covering the same Waste Materials or media as such federal statutes. The covenant by the Commonwealth is subject to the following reservations: (1) any

disputes raised under Paragraphs 101, 102 or 103 of this Consent Decree or raised in any of the procedures referred to in those Paragraphs; (2) actions against the Settling Private Parties or Settling Federal Agencies as a result of paying for or performing obligations not imposed on the Commonwealth by the terms of this Consent Decree (other than payment of Past Response Costs or Future Response Costs); and (3) actions by the Commonwealth against U.S. Ecology specifically to resolve disputes under or to enforce the Agreed Order of Settlement dated July 7, 1994 in U.S. Ecology, Inc. v. Bradley, Case No. 88-72, and entered in the United States District Court for the Eastern District of Kentucky, Frankfort Division, on July 14, 1994. This covenant not to sue is conditioned upon compliance by Settling Private Parties and Settling Federal Agencies with their respective obligations under this Consent Decree.

d. In consideration of the obligations undertaken and covenants provided by the Commonwealth under this Consent Decree, the Settling Private Parties and Settling Federal Agencies covenant not to sue the Commonwealth for any and all civil liability under Sections 107 or 113 of CERCLA, state law, and common law relating to the Site, including any liability for Past Response Costs, Future Response Costs, IRP Work, response costs previously incurred by the Settling Private Parties or Settling Federal Agencies, and response costs which are incurred by the Settling Private Parties or Settling Federal Agencies to perform their respective obligations under Sections IX, X, XII,

XVII, XVIII, XX, XXVIII, and XXXIII (Additional Response Actions, Periodic Review, Access, Certification of Completion, Emergency Response, Indemnification and Insurance, Retention of Records, and Community Relations). The covenants by Settling Private Parties and Settling Federal Agencies are subject to the following reservations: (1) any disputes raised under Paragraph 101, 102 or 103 of this Consent Decree, or raised in any of the procedures referred to in those Paragraphs; (2) actions against the Commonwealth as a result of the Settling Private Parties or the Settling Federal Agencies paying for or performing obligations not imposed on them by the terms of this Consent Decree; (3) actions against the Commonwealth by the United States on behalf of DOE and DOD to recover amounts expended by them pursuant to Paragraph 79; and (4) actions by U.S. Ecology against the Commonwealth specifically to resolve disputes under or to enforce the Agreed Order of Settlement dated July 7, 1994 in U.S. Ecology, Inc. v. Bradley, Case No. 88-72, and entered in the United States District Court for the Eastern District of Kentucky, Frankfort Division, on July 14, 1994. This covenant not to sue is conditioned upon compliance by the Commonwealth with its obligations under this Consent Decree.

e. With respect to any of the claims reserved in this Paragraph, in the Settlement Agreement, or in Section XXIV (Covenants Not to Sue or Take Administrative Action by Plaintiff), each Settling Party agrees not to assert the running of any statute of limitations, laches, or similar bars or

defenses to any action arising out of or related to the Site filed against it by another Settling Party or by EPA; provided, however, that any Settling Party may assert such a defense that was available to it on the date of lodging of this Consent Decree and has not been tolled by agreement of the Parties.

XXVI. EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION

129. Nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree. The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this decree may have under applicable law. Each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto except for the claims by the Commonwealth against the De Minimis Settlors that are subject to the Commonwealth's covenant not to sue set forth in Section VI of this Consent Decree.

130. With regard to claims for contribution against Settling Parties for matters addressed in this Consent Decree, the Parties hereto agree that the Settling Parties are entitled to such protection from contribution actions or claims as provided by CERCLA Sections 113(f)(2), 42 U.S.C. § 9613(f)(2). As to all Settling Parties except for the Commonwealth, the

matters addressed in this Consent Decree are liability arising under Sections 106, 107(a), and 113 of CERCLA, 42 U.S.C. §§ 9606, 9607(a) and 9613, relating to the Site, including liability for Past Response Costs; Future Response Costs; IRP Work and BoRP Work; response costs previously incurred by the Settling Private Parties Settling Federal Agencies, or the Commonwealth; natural resource damage claims of the Commonwealth; and response costs incurred by the Settling Private Parties, Settling Federal Agencies, or the Commonwealth to perform their respective obligations under Sections IX, X, XII, XVII, XVIII, XX, XXVIII, and XXXIII (Additional Response Actions, Periodic Review, Access, Certification of Completion, Emergency Response, Indemnification and Insurance, Retention of Records, and Community Relations). As to the Commonwealth, the matters addressed in this Consent Decree are liability arising under Sections 106, 107(a), and 113 of CERCLA, 42 U.S.C. §§ 9606, 9607(a) and 9613, relating to the Site for IRP Work and BoRP Work; response costs previously incurred by the Settling Private Parties, Settling Federal Agencies, and the Commonwealth; and response costs incurred by the Settling Private Parties, Settling Federal Agencies, and the Commonwealth to perform their respective obligations under Sections IX, X, XII, XVII, XVIII, XX, XXVIII, and XXXIII (Additional Response Actions, Periodic Review, Access, Certification of Completion, Emergency Response, Indemnification and Insurance, Retention of Records, and Community Relations), but not including liability for any response costs incurred by

EPA or the United States Department of Justice which the Commonwealth is not specifically required to reimburse under this Consent Decree. Notwithstanding the provisions of this Section or CERCLA, a Settling Party is not entitled to and will not claim contribution protection on behalf of itself or its indemnitees for the claims reserved in Sections XXIV, XXV, or XVI ("Covenants Not to Sue or Take Administrative Action by Plaintiff", "Covenants by Settling Defendants", and "Assurance of Ability to Complete Work") and the Settlement Agreement or in the event that a Settling Party is not in compliance with its obligations under this Consent Decree.

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

132. Settling Defendants also agree that with respect to any suit or claim for contribution brought against them for matters related to this Consent Decree, they will notify in writing the United States 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.

133. 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, 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 XXIV (Covenants Not to Sue or Take Administrative Action by Plaintiff).

XXVII. ACCESS TO INFORMATION

134. Settling Parties 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, validated 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 Parties 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.

135. a. Settling Defendants may assert business confidentiality claims covering part or all of the documents or

information submitted to Plaintiff 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 Parties that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA, the public may be given access to such documents or information without further notice to Settling Parties.

b. Settling Parties 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 Settling Parties 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 Parties. 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.

136. 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.

XXVIII. RETENTION OF RECORDS

137. Until 10 years after the Settling Private Parties' receipt of EPA's notification pursuant to Paragraph 80.b of Section XVII (Certification of Completion), each Settling Party shall preserve and retain all records and documents now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or liability of any person for response actions conducted and to be conducted at the Site, regardless of any corporate retention policy to the contrary. Settling Parties shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to the performance of the Work for the same period of time.

138. At the conclusion of this document retention period, Settling Parties shall notify the United States and the Commonwealth at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States or the Commonwealth, Settling Parties shall deliver any such records or documents to EPA or the Commonwealth. The Commonwealth shall continue to preserve any or all such documents if requested to do so by the United States. The Settling Parties

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 Parties 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 Parties. 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.

139. Each Settling Party hereby certifies, individually, that it has not knowingly altered, mutilated, discarded, destroyed, or otherwise disposed of any records, documents or other information relating to its potential liability regarding the Site since notification of potential liability by the United States or the Commonwealth 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 and Section 3007 of RCRA.

XXIX. NOTICES AND SUBMISSIONS

140. 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 in this Consent Decree. 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 and the Settling Parties, respectively.

As to the United States, on behalf of EPA:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, D.C. 20044
Re: DOJ # 90-11-2-211A

and

Director, Waste Management Division
United States Environmental Protection Agency
Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365
Re: EPA ID # G1

As to EPA:

David Kluesner
Maxey Flats Project Coordinator
United States Environmental Protection Agency
Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365
Re: EPA ID # G1

As to the Settling Private Parties:

Lee B. Zeugin
2000 Pennsylvania Avenue, N.W.
Ninth Floor
Washington, D.C. 20006

and

Gary E. Parker
De Maximus, Incorporated
Cedar Avenue Business Center
103 North 11th Avenue
Suite 210
Saint Charles, Illinois 60174

As to the Settling Federal Agencies:

Chief
Environmental Defense Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 23986
Washington, D.C. 20026-3986

As to the Commonwealth of Kentucky:

Russell Barnett
Deputy Commissioner
Commonwealth of Kentucky
Natural Resources and Environmental
Protection Cabinet
Frankfort Office Park
18 Reilly Road
Frankfort, Kentucky 40601

XXX. EFFECTIVE DATE

141. 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.

XXXI. RETENTION OF JURISDICTION

142. This Court retains jurisdiction over the subject matter of this Consent Decree and the Settling Parties 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 XXII (Dispute Resolution) hereof. The Settling Parties agree that the respective obligations undertaken by each of the Settling Parties are intended to benefit each of the other Settling Parties and may be enforced by the Settling Parties against each other subject to any applicable procedures and limitations in Section XXII (Dispute Resolution). In an enforcement action by one Settling Party against another Settling Party that does not proceed under Section XXII, a Settling Party shall not seek relief that compels the Plaintiff or EPA to perform any action or refrain from performing any action, or that supplants, constrains, or imposes conditions upon EPA's authority under CERCLA and this Consent Decree to take response actions or to determine the need for or appropriateness of the Work or response action to be performed under the Consent Decree or under CERCLA at the Site. Notwithstanding the provisions of CERCLA Sections 121 and 122, 42 U.S.C. §§ 9621 and 9622, Settling Parties agree that the relief sought by a Settling Party in any such enforcement action against another Settling Party will not include the recovery of civil or stipulated penalties.

XXXII. APPENDICES

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

"Appendix A" is the ROD.

"Appendix B" is the SOW.

"Appendix C" is the Settlement Agreement.

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

"Appendix E" is the complete list of Settling Private Parties.

"Appendix F" is the map of the Site.

XXXIII. COMMUNITY RELATIONS

144. Settling Parties shall propose to EPA their participation in the Revised Community Relations Plan developed by EPA. EPA will determine the appropriate role for the Settling Parties under the Plan. Settling Parties shall also cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, Settling Parties shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site.

XXXIV. MODIFICATION

145. Schedules specified in this Consent Decree or documents approved pursuant to this Consent Decree for implementation of the Work may be modified by agreement of EPA

and the Settling Parties that are subject to the schedule. All such modifications shall be made in writing.

146. No material modifications shall be made to the SOW without written notification to and written approval of the United States on behalf of EPA, the Settling Parties that are performing or paying for the affected obligation, and the Court. Prior to providing its approval to any modification, the United States will provide the Commonwealth with a reasonable opportunity to review and comment on the proposed modification. Modifications to the SOW that do not materially alter that document may be made by written agreement between EPA and the Settling Parties that are performing or paying for the affected obligation after providing the Commonwealth with a reasonable opportunity to review and comment on the proposed modification.

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

XXXV. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

148. This Consent Decree shall be lodged with the Court for a period of not less than 30 days for public notice and comment in accordance with Section 122(d)(2) of CERCLA, 42 U.S.C. § 9622(d)(2), and 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent to entry of the Consent Decree if the comments regarding the Consent Decree disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. Settling

Parties consent to the entry of this Consent Decree without further notice.

149. If for any reason the Court should fail to enter this Consent Decree or the De Minimis Consent Decree as lodged with the Court, 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.

XXXVI. SIGNATORIES/SERVICE

150. Each undersigned representative of a Settling Party to this Consent Decree and the Assistant Attorney General for Environment and Natural Resources of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such Party to this document. The Secretary of the Kentucky Cabinet for Natural Resources and Environmental Protection certifies that he is fully authorized pursuant to statute and the Constitution of the United States and the Commonwealth of Kentucky to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Commonwealth to this document.

151. Each Settling Private Party and the Commonwealth 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.

152. The signature of a Settling Private Party shall also constitute execution by such Party of the Settlement Agreement if the signing Party is a party to the agreement.

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

SO ORDERED THIS _____ DAY OF _____, 19__.

_____
United States District Judge

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States v. U.S. Ecology, Inc., et al., relating to the Maxey Flats Disposal Site Superfund Site.

FOR THE UNITED STATES OF AMERICA

Date: _____

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

Date: _____

Paul G. Wolfteich
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Washington, D.C. 20530

Date: _____

Daniel Pinkston
Environmental Defense Section
Environment and Natural Resources Division
9th and Pennsylvania Ave.
U.S. Department of Justice
Washington, D.C. 20503

Date: _____

[Name]
Assistant United States Attorney
Eastern District of Kentucky
U.S. Department of Justice
[Address]

Date: _____

_____
[Name]
Assistant Administrator for
Enforcement
U.S. Environmental Protection
Agency
401 M Street, S.W.
Washington, D.C. 20460

Date: _____

_____
Cindy Ann Coldiron
Office of Enforcement and
Compliance Assurance
U.S. Environmental Protection
Agency
401 M Street, S.W.
Washington, D.C. 20460

Date: _____

_____
John H. Hankinson, Jr.
Regional Administrator, Region IV
U.S. Environmental Protection
Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Date: _____

_____
Richard Glaze, Jr.
Assistant Regional Counsel
U.S. Environmental Protection
Agency
Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Date: _____

_____
Mary Wilkes
Associate Regional Counsel
U.S. Environmental Protection
Agency
Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

United States v. U.S. Ecology, Inc., et al.
Consent Decree Signature Page

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. U.S. Ecology, Inc., et al., relating to the Maxey Flats Disposal Superfund Site.

FOR THE COMMONWEALTH OF KENTUCKY

Date: _____

_____
Philip J. Shepherd
Secretary, Natural Resources and
Environmental Protection Cabinet
Office of the Secretary
Frankfort, Kentucky 40601

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. U.S. Ecology, Inc., et al., relating to the Maxey Flats Disposal Superfund Site.

FOR: _____
(name of private or federal agency party)

BY: _____
(name of representative authorized to sign for party)

Title: _____

Address: _____

_____

_____

Agent authorized to accept service on behalf of party:

Name: _____

Title: _____

Address: _____

_____

Tel. Number: _____

---

*A separate signature page must be signed by each Settling Private Party and Settling Federal Agency.

STATEMENT OF WORK
FOR REMEDIAL DESIGN/REMEDIAL ACTION
EPA - Region IV

APPENDIX B

STATEMENT OF WORK FOR THE MAXEY FLATS DISPOSAL SUPERFUND SITE

FLEMING COUNTY, KENTUCKY

********** FINAL **********

Enclosure 3

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STATEMENT OF WORK FOR
REMEDIAL DESIGN AND REMEDIAL ACTION
AT THE MAXEY FLATS DISPOSAL SUPERFUND SITE

I. INTRODUCTION

This Statement of Work (SOW) outlines the Work Settling Defendants shall perform at the Maxey Flats Disposal Superfund Site in Fleming County, Kentucky ("the Site") to implement the remedy for the Site as described in the Record of Decision (ROD), dated September 30, 1991, and to achieve the cleanup levels and other Remedial Standards set forth in the ROD, Consent Decree, and this SOW. The requirements of this SOW will be further detailed in work plans and other documents Settling Defendants shall submit for approval as required in the Consent Decree and in this SOW. It is not the intent of this document to provide task-specific engineering or geological guidance. The terms defined in the Consent Decree shall have the same meanings when used in this SOW unless expressly provided otherwise herein.

The Work shall be performed in five tasks:

Task I	Project Planning
Task II	Initial Remedial Phase Remedial Design
Task III	Initial Remedial Phase Remedial Action
Task IV	Interim Maintenance Period, Final Closure Period and Associated Remedial Activities
Task V	Performance Monitoring

Except for the Commonwealth's Initial Remedial Phase Obligations, tasks I, II and III of the Work to implement the remedy required in the Consent Decree shall be performed by the Settling Private Parties[1]. Task IV of the Work shall be performed by the

[1]As part of Task I, the Commonwealth shall prepare and submit to EPA for review and approval an Initial Remedial Phase Monitoring and Maintenance Plan which describes the Commonwealth's monitoring and maintenance obligations during the Initial Remedial Phase.

Commonwealth of Kentucky[2]. Task V will be performed by the Commonwealth , except as otherwise specified in Task V. The Settling Private Parties and the Commonwealth shall assist EPA in conducting oversight activities of their respective tasks.

EPA review or approval of a task or deliverable shall not be construed as a guarantee as to the adequacy of such task or deliverable. If EPA modifies a deliverable pursuant to Section XIV of the Consent Decree, such deliverable as modified shall be deemed approved by EPA for purposes of this SOW. A summary of the major deliverables that Settling Defendants shall submit for the Work is attached.

II. OVERVIEW OF THE REMEDY

The objectives of the remedy for the Site are to:

Prevent or mitigate the continued release of hazardous substances, pollutants and contaminants from the Site to underlying bedrock formations and groundwater aquifers;

Prevent or mitigate the continued release of hazardous substances, pollutants and contaminants from the Site to surface water bodies and sediments;

Reduce the risks to human health associated with direct contact with hazardous substances, pollutants or contaminants within the Site;

Eliminate or reduce the risks to human health from inhalation of hazardous substances, pollutants or contaminants from the Site;

Eliminate or minimize the threat posed to human health and the environment from current and potential migration of hazardous substances from the Site in the surface water, ground water, and subsurface and surface soil and rock;

Minimize the infiltration of rainwater and ground water into the trench areas and migration from the trenches;

Allow natural stabilization of the Site to provide a foundation for a final cap over the trench disposal area

---

[2]In the event that, after EPA issuance of the Certificate of Completion of the Initial Remedial Phase but prior to 10 years after EPA issuance of the Certificate of Completion of the Initial Remedial Phase, EPA determines that a Horizontal Flow Barrier is necessary, the design and implementation of the Horizontal Flow Barrier shall be performed by the Settling Private Parties.

that will require minimal care and maintenance over the long term;

Minimize the mobility of trench contaminants by extracting trench leachate to the extent practicable and by solidifying the leachate in earth mounded concrete bunkers;

Control Site drainage and minimize the potential for erosion to protect against natural degradation;

Implement institutional controls to permanently prevent unrestricted use of the Site;

Implement a Site performance and environmental monitoring program.

III. REMEDY COMPONENTS

This Statement of Work shall include the following three categories of Remedial Standards which shall be achieved by the Settling Defendants in performing the Work: 1) "Remedial Measures[3]"; 2) "Construction Standards"; and, 3) "Performance Standards", as described below. In addition, the remedy shall achieve all ARARs. All ARARs expressed in dose or numeric concentrations of particular hazardous substances or radiation, as set forth in Section 8.0 of the Record of Decision, shall be Performance Standards.

A. SOURCE CONTROL

1. The major source control components of the remedy to be performed pursuant to the Consent Decree shall include:

Extraction of trench leachate for treatment and disposal pursuant to general dewatering guidelines for the Site such as described in Reference 29;

Solidification of extracted and stored trench leachate using a grout mix from a topical report that has been approved for commercial application by the U.S. Nuclear Regulatory Commission;

Disposal of solidified leachate in earth mounded concrete (EMC) bunkers, such as described in Reference 27, on-Site within the area of contamination;

---

[3]Installation of remedial measures constitutes compliance with the "as low as reasonably achievable" (ALARA) principle of 902 KAR 100:015 Section 2.

Installation of an initial cap to prevent infiltration of precipitation into the trench disposal area. The initial cap will consist of compacted soil and a synthetic liner and shall be contoured to provide drainage, in conjunction with the alignment of perimeter drainage channels and pipes, to assure cap drainage and to eliminate channeled high velocity flows that could potentially cause a cap failure;

Installation of a final cap during the Final Closure Period (FCP) to minimize, to the extent practicable, water infiltration into the disposal area.

2. Treatment of contaminated liquids

Extracted leachate shall be treated as follows:

The solidification process shall commence upon accumulation of a sufficient volume of extracted trench leachate. Leachate shall be extracted simultaneously from multiple trench sumps and batched. Once batched in tanks (25,000 gallons or less in leachate volume) on-Site, representative samples of the batched leachate shall undergo testing that meets the process control program of the topical report. Once analyzed, the leachate shall be solidified using a grout mix from a topical report that has been approved for commercial application by the U.S. Nuclear Regulatory Commission.

Liquids containing radioactive contaminants, other than leachate extracted from existing trenches, may be released from the area of contamination without treatment if the release complies with the requirements of 10 CFR §§ 20.1301 and 20.1302 (902 KAR 100:015 Section 2 and 100:019 Sections 10 and 11 (as amended))[4]. If it does not, then the liquid will be treated in the manner described in the preceding paragraph.

3. Remedial Standards

All Remedial Standards related to source control shall be met. Those Remedial Standards that have been

---

[4] The Record of Decision identifies the federal standards for protection against radiation in unrestricted areas as the governing ARARs, since at the time of issuance of the ROD those standards were more stringent than the corresponding Kentucky requirements. In early 1994, Kentucky amended its radiation protection standards to match the federal ones. For convenience, both regulations are cited.

identified are as follows:

a. Leachate Extraction:

Performance Standards

Trench leachate shall be extracted from all Site trenches where extraction is determined by EPA, after a reasonable opportunity for review and comment by the Commonwealth, to be necessary and technically feasible. The trench leachate extraction program shall, to the extent practicable, feasible and necessary as determined by EPA, after a reasonable opportunity for review and comment by the Commonwealth, and in keeping with general dewatering guidelines in Reference 29, mitigate continued releases of hazardous constituents to underlying bedrock and ground water aquifer formations.

b. Leachate Solidification:

Construction Standards

Extracted leachate shall be mixed with solidification agents to form a grout which meets the requirements of 902 KAR 100:021 Sections 6 and 7 (Kentucky Standards for the Disposal of Radioactive Material as amended) and 10 CFR Parts 61.55 - .56 (Federal Licensing Requirements for Land Disposal of Radioactive Waste as amended) and the NRC Branch Technical Position on Waste Form dated January 1991.

Solidified leachate shall be in a form that meets the requirements of 902 KAR 100:021 Section 8(2)(b). In no case shall the free-standing liquid in the solidified form exceed five-tenths percent of the volume of the waste when the waste is processed in stable form.

In keeping with 902 KAR 100:021 Section 8(2)(c) void spaces within the waste and between the waste and its package shall be reduced to the extent practicable.

c. Leachate Disposal:

Construction Standards

EMC bunkers constructed for the purpose of solidified leachate disposal shall meet the

requirements of 902 KAR 100:022, Sections 19, 20, 21, and 24(1) - (11) (Kentucky Licensing Requirements for Land Disposal of Radioactive Waste). These requirements specify that closure shall be designed to achieve long-term stability and isolation of the radioactive waste, to protect against inadvertent intrusion, and to eliminate, to the extent practicable, the need for on-going, active maintenance of the disposal Site so that only surveillance, monitoring, and minor custodial care is required. The EMC bunkers described in Reference 27 satisfy these regulatory requirements.

d. Initial Cap:

Remedial Measures

Upon completion of the leachate extraction, solidification, and disposal operation, an initial cap ("cap") shall be placed over the trench and EMC bunker disposal area. The initial cap shall be maintained and repaired during the Interim Maintenance Period so as to assure proper drainage away from the trenches and to provide an effective infiltration barrier. Cap maintenance shall include backfilling to maintain proper grade and repairing and replacing the synthetic liner, as needed.

Replacement of the synthetic liner shall be conducted as the liner condition requires. Any rips, tears or cracks shall be repaired promptly upon detection. Likewise, subsided areas, which may allow ponding on the cap, shall be repaired promptly upon detection.

Construction Standards

The design criteria presented in Reference 28 shall be applied to aid in the determination of the areal extent of the cap.

A soil fill of suitable quality compacted to approximately 85 percent ASTM Proctor density shall be placed over the trench disposal area. A synthetic liner shall be placed over this compacted soil having a minimum manufacturer's warranty of 20 years and a permeability no greater than 1×10^{-7} cm/sec. The synthetic liner shall be installed in accordance with the manufacturer's specifications. The liner shall be

tested in accordance with quality assurance procedures developed during the Remedial Design.

The initial cap shall be designed and constructed with drainage contouring, in conjunction with the alignment of perimeter drainage channels and pipes, to provide finished grades that assure cap drainage and eliminate channeled high velocity flows that could potentially cause a cap failure. The drainage contouring will be designed utilizing the criteria presented in Reference 28.

The cap will be designed to eliminate, to the extent practicable, the flow of ground water to the disposal trenches by extending the cap beyond the trench area and by contouring and vegetating the unlined ground surface at the perimeter of the cap to drain surface water away from the cap. This cap will be designed such that it intercepts the Lower Marker Bed along its north side (North Channel) unless there is a sound technical basis for not doing so.

Performance Standards

The cap shall cover the trench disposal area and adjacent areas and eliminate, to the extent practicable, recharge of the disposal trenches.

The cap shall assure proper drainage away from the trenches.

e. Horizontal Flow Barrier:

Remedial Measures

Ground water modeling and analysis studies shall be performed during IRP Remedial Design to determine whether the cap extends far enough to minimize the likelihood that ground water will infiltrate the disposal trenches.

If it is determined that ground water is re-entering the disposal trenches in such significant amounts that a barrier to such recharge is required, a horizontal ground water flow barrier shall be installed to mitigate the flow of ground water to the trenches. The determination as to whether a horizontal flow barrier is necessary shall be made by EPA, after a reasonable opportunity for review and

comment by the Commonwealth, based on factors such as infiltration monitoring system data, trench water level data, historical trench leachate level monitoring data maintained by the Commonwealth, ground water modeling and criteria established during the Remedial Design. Such determination shall be made by EPA no later than 10 years after EPA issues the Certificate of Completion for the IRP.

Performance Standards

The Horizontal Flow Barrier, if constructed, shall mitigate the flow of ground water to the disposal trenches such that static trench leachate levels in trench sumps do not rise 25% or more of the level at the time of sump pumping termination, in accordance with the general trench dewatering guidelines in Reference 29, or other alternative Horizontal Flow Barrier Performance Standards as may be developed during the Initial Remedial Phase Remedial Design or Performance Standards as may be developed at the time the Horizontal Flow Barrier is designed.

f. Final Cap:

Remedial Measures

The trench stabilization criteria, to be defined in the Interim Maintenance Period Work Plan, shall be achieved. Upon achieving the trench stabilization criteria, a final cap shall be designed and constructed to optimize drainage away from the trench disposal area, to eliminate erosion of the cover to the extent practicable, and to eliminate trench leachate migration to the extent practicable.

Performance Standards

The final cap shall cover the trench disposal area and adjacent areas and eliminate, to the extent practicable, recharge of the disposal trenches.

The final cap shall assure proper drainage away from the trenches and provide an effective infiltration barrier.

The final cap shall be designed and constructed in accordance with all ARARs.

4. Compliance Testing/Monitoring

The following testing, monitoring and review shall be conducted to ensure that all Construction and Performance Standards related to source control are met:

a. Waste form testing for criteria such as compressibility, leachability, free-standing liquids, and chemical and microbial degradation parameters to demonstrate compliance with the NRC Branch Technical Position on Waste Form dated January 1991;

b. Initial cap testing for physical soil properties such as gradation, moisture and maximum densities to demonstrate compliance with gradation, maximum density and moisture requirements;

c. Initial cap liner testing in accordance with the manufacturer's recommendations;

d. Final cap testing for physical soil properties such as permeability, gradation and maximum density and moisture requirements to demonstrate compliance with those requirements developed during the Balance of Remedial Phase, if applicable;

e. Surveillance monitoring to ensure detection of radionuclide releases within the Site boundary prior to release beyond the Site boundary as required by 902 KAR 100:022 Section 25(2);

f. Well monitoring at the base of the hillslopes surrounding the Site for chemical constituents or suitable indicators using appropriate data evaluation methods to ensure compliance with Kentucky Hazardous Waste Management Regulations (401 KAR Chapter 34:060) and chemical and radionuclide testing to determine compliance with Kentucky Drinking Water Standards - Maximum Contaminant Levels (401 KAR 6:015) and Federal Drinking Water Regulations (40 CFR Parts 141, 142, and 143). The Settling Private Parties will install 15 wells at the base of the hillslope for monitoring chemical and radiological constituents. The location of these wells will be established during the IRP Remedial Design. If it is determined that more than 15 wells should be installed at the base of the hill, the Commonwealth will install any additional wells.

The Commonwealth will be responsible for performing the chemical and radiological sampling and analysis at all of these wells, including those installed by Settling Private Parties;

g. Surface water and air monitoring at appropriate locations to demonstrate compliance with 10 CFR §§ 20.1301, 20.1302 and 10 CFR Part 20, Appendix B, Table II (902 KAR 100:019 Sections 10 and 11 and Table II of KAR Section 44 (as amended)) regarding general and isotope-specific radiation protection standards for individuals in unrestricted areas;

h. Surface water testing of waters of the Commonwealth as defined by 401 KAR 5:029 Section 1(bb), to determine compliance with Kentucky Surface Water Quality Standards (401 KAR 5:031) and the criteria established under Section 304(a)(1) of the Clean Water Act. Waters of the Commonwealth are Drip Springs Hollow, No Name Hollow, Rock Lick Creek and the discharge channel below the East Detention Basin. Samples will be taken within the defined banks of the stream. Intermittent streams will be sampled during those periods of time when discernible flows occur at least 30 minutes following rainfall of 0.1 inches;

i. Air monitoring to determine compliance with the 10 mrem/year effective dose equivalent standard contained in the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Part 61);

j. Air, surface water, ground water and soil monitoring at the current licensed Site property boundary to determine compliance with the 25 mrem/year dose limit found in Section 18 of 902 KAR 100:022. (Monitoring will be performed to assess whether the combined effective dose equivalent from these pathways exceeds 25 mrem/year.)

B. <u>SURFACE WATER AND EROSION CONTROL</u>

1. <u>Surface water and erosion control measures shall include the following major components:</u>

a. Lined drainage ditches shall be incorporated in the initial cap to channel all surface water runoff to the east detention basin (See Section III. A ("Source Control") of this SOW).

b. Improvements to and maintenance of the existing east main drainage channel shall also be performed as necessary. Measures for drainage channel stabilization shall include, but not be limited to:

The discharge flow from the east detention basin (and any other designed channel outlet) will be controlled to be equal to or less than the discharge for the pre-development condition for all storms up to and including the 100-year 24-hour design storm (100-year event). (The pre-development flows are discussed in Reference 28.) The outlet structure will be designed so that adjustments can be made in the discharge controls if deemed necessary during the Interim Maintenance Period.

From the discharge side of the east detention basin principal spillway at approximately elevation 1000 feet mean sea level (MSL) to the ledge rock at approximately elevation 975 feet MSL, the outlet channel (i.e., the east main drainage channel) will be designed to be rock-lined. Below elevation 975 feet MSL, the existing steeply-sloped, rock-paved outlet channel will not be disturbed and will serve as the design channel.

At approximately elevation 760 feet MSL, the potential for a concentrated overfall or headcut exists at the termination of the shale in the channel. The potential for this erosive condition will be mitigated by the installation of a small headwall structure across the channel at the termination of shale rock.

In the valley portion of the east main drainage channel, the existing sandstone armored channel will be used without modification to its existing condition except for approximately a 200-foot length that shall be improved in either of the following ways as determined during the IRP Remedial Design. From a point approximately 200 feet upstream from the confluence of the east main drain and No-Name Creek, the channel may be improved by either: (1) redirecting the channel to its previous natural course, if the natural course is determined to be stable; or (2) fully riprapping this 200-foot length of the channel, if the natural course is determined to be unstable.

c. The existing east detention basin shall be enlarged and modified to provide for an increased volume of storm water runoff which will result from installation of the initial cap and to control the discharge to the east main drainage channel to flows less than pre-development flows (defined in Reference 28) for storms up to and including a 100-year event.

d. Permanent surface water and erosion control features to be installed during Remedial Action to control surface water runoff and to minimize hillslope and cap erosion shall include:

The flows from the drainage channels and pipes along the cap perimeter will be discharged into the east detention basin by the use of paved chutes, with energy dissipators, that carry the flows to the bottom of the basin and dissipate the flow energy to minimize soil erosion in the basin.

The east detention basin will be designed for all storms up through the 100-year event as tabulated in the U.S. Weather Bureau Technical Report No. 40. The hydrograph distribution will be the SCS Type II that includes short duration storms (such as 30 minutes, 1 hour, etc.) as specified in the U.S. Soil Conservation Service National Engineering Handbook, Section 4, Hydrology.

The east detention basin embankment design will consist of compacted soil fill and rock fill, or equivalent design, with a multi-stage reinforced concrete principal spillway. The structure will be designed for at least a 100-year life with minimal maintenance. The principal spillway will consist of a multi-stage rectangular drop inlet, pipe conduit, and an energy dissipation outlet structure. A means will be included in the principal spillway to measure discharge flows.

The emergency spillway crest elevation will be set at the routed basin water level for the 100-year event. The size of the emergency spillway will be based on the routing of the Standard Project Storm rainfall of 15 inches within a 24-hour duration (reference Army Corps of Engineers CE Bulletin 52-8) and the SCS Type II distribution.

2. Remedial Standards

All Remedial Standards related to surface water and erosion control shall be met. Those Remedial Standards that have been identified are as follows:

Performance Standards

The initial cap and surface water and erosion control features, such as the east detention basin and east main drainage channel, shall be designed and maintained such that the erosion of the trench disposal area and the surrounding hillslopes is eliminated to the extent practicable so that slope stability and the integrity of the remedy is maintained over the long term.

The initial cap and surface water and erosion control features, such as the east detention basin and east main drainage channel, shall be designed and maintained such that downslope surface water runoff velocities do not exceed pre-development velocities, and siltation is eliminated to the extent practicable throughout the Interim Maintenance Period. The detention basin shall be designed to detain storm water runoff which would result from a 100-year, 24-hour storm.

The existing west detention basin and the south weir shall be closed. Cap runoff shall primarily flow to the east detention basin for controlled release into the east main drainage channel at a rate that does not exceed pre-development flows from the area of the cap.

3. Compliance Testing/Monitoring

The following testing, monitoring and review shall be conducted to ensure that all Performance Standards related to surface water and erosion control are met:

a. General Erosion Monitoring:

Erosion control monitoring shall consist of implementing a formal program of measurements and observations to determine erosion of the east, west and south main drainage channels and mass material movement in the adjacent hillsides that drain toward the channels (hereinafter called "drainage basins"). The purpose of erosion control monitoring is to establish a data base for determining potential ramifications in the event there is (1) a statistically valid trend toward an unacceptable erosive condition and (2) a

statistically valid upward trend in the concentration of radioactive materials detected in soil or soil moisture samples within the area being monitored for erosion such that the 25 millirem site boundary release limit of 902 KAR 100:022 Section 18 may be exceeded.[5] If these two conditions exist, an engineering evaluation of the measured data and site conditions will be performed to determine if any adjustments to a drainage channel or associated drainage basin is warranted. The plans and procedures for the monitoring program shall be a part of the Initial Remedial Phase Remedial Design to be prepared in Task II.

Erosion control monitoring of the drainage channels shall include the installation of surveyed monuments to provide fixed points for measuring the drainage channel profile and cross sections. The number and location of the surveyed monuments shall be determined during the IRP Remedial Design. Erosion control monitoring of mass material movement shall include the placement of known reference points for detecting mass material movement in the drainage basins. In selected locations where radiological monitoring is performed with soil moisture collectors (lysimeters), a secondary function of the lysimeters will be to provide the known reference points. Alternative methods may be used to monitor mass material movement if the use of lysimeters at selected locations is determined to be inadequate. The number and location of the selected lysimeters, or other indicators of mass material movement, will be determined during the IRP Remedial Design. Monuments and mass material movement indicators shall be surveyed annually. The resulting data base shall be evaluated as part of each five-year review by comparing mass material movement indicator positions and drainage channel profile/cross section data with baseline measurements taken before the completion of the IRP Remedial Action.

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[5]"Site boundary " or "current licensed Site property boundary" means the area delineated in the map which serves as Appendix H to the Consent Decree.

b. East Main Drainage Channel and Drainage Basin:

Since the cap will be designed to drain all cap runoff to the east detention basin, the majority of the erosion control monitoring will be of the east main drainage channel and its associated basin. The east main drainage channel and drainage basin monitoring area shall extend from the outlet of the east detention basin to the confluence of the east main drainage channel with No-Name Creek.

c. West and South Drainage Channels and Drainage Basins:

Since only minimal runoff from the area of contamination will drain down the south and west hillsides, a formal, but less extensive program of measurements and observations will be performed along the principal drainage channels of these areas. Along the south drainage channel and its associated drainage basin, monitoring shall extend from the point where the drainage from the south perimeter road flows into the south drainage channel to the point where the south drainage channel crosses Rock Lick Creek Road.

On the west hillside, monitoring shall be performed along two drainage channels and their associated drainage basins. One channel extends from the west perimeter road of the restricted area, at a point adjacent to Trench 33, to the access road of the Lambert property in a direction approximately perpendicular to the west perimeter road[6]. The other channel extends from the outlet of the existing west detention basin to Drip Springs Creek on the Lambert property.

C. ACCESS CONTROL, SECURITY AND NOTIFICATION

1. The major components of access control, security and notification to be implemented by Settling Defendants shall include the following:

a. Access to the disposal area shall be physically controlled to prevent inadvertent intrusion onto the Site;

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[6] The Lambert property is Parcel #36 on Fleming County Property Identification Map No. 97, Revised June 1981.

b. Acquisition and establishment of a buffer zone adjacent to the Site, as described more fully in Section 10.0 of the ROD;

c. Installation of permanent surface monuments and markers warning against intrusion;

d. In conjunction with fulfillment of Section V.10 of the Consent Decree, notification of the approximate quantity and nature of the waste disposed of at the Site and general description of the Restricted Area shall be submitted to the Fleming County Judge/Executive within 15 days of entry of the Consent Decree and this SOW.

2. Performance Standards

Access control and buffer zone acquisition measures shall be implemented, as required by the ROD, Consent Decree and this SOW.

IV. TASKS AND DELIVERABLES

The specific scope of the Work to be performed by the Settling Defendants shall be documented in the Initial Remedial Phase Monitoring and Maintenance Plan, Initial Remedial Phase Remedial Design (IRP RD) Work Plan, Initial Remedial Phase Remedial Action (IRP RA) Work Plan, Interim Maintenance Period Work Plan, Final Closure Period Work Plan, Final Closure Period RA Work Plan, Institutional Control Work Plan, and Post-Institutional Control Work Plan. Plans, specifications, submittals, and other deliverables shall be subject to EPA review and approval in accordance with Section XIV of the Consent Decree. Upon approval, all deliverables and the approved schedules contained therein shall be deemed incorporated by reference into the Consent Decree and this SOW, as binding requirements upon the Settling Defendants.

In the interest of facilitating the timely implementation of the leachate removal/disposal (LR/D) activities, one or more portions of the IRP RD/RA deliverables, which are described in Tasks II and III below, may be submitted in advance of the complete deliverables. EPA will review and comment on or approve these deliverables as they are submitted.

Settling Defendants shall perform the following tasks:

TASK I - PROJECT PLANNING

A. IRP MONITORING AND MAINTENANCE PLAN

Within 45 days of the entry of the Consent Decree, the Commonwealth shall submit an IRP Monitoring and Maintenance Plan to EPA for review and approval. The IRP Monitoring and Maintenance Plan shall describe the specific tasks to be performed by the Commonwealth during the IRP RD and RA, frequency of task, and proposed location of sample collection. Sample collection procedures, laboratory identification, analysis procedures and designated Commonwealth personnel performing these tasks shall also be specified in the plan. This plan shall include, but not be limited to, the following tasks:

- Chemical and radiological monitoring of ground water and surface water
- Airborne radioactivity monitoring
- Gamma radiation monitoring
- Vegetation monitoring
- Colluvial soil monitoring
- Site surveillance
- Site maintenance activities such as grass cutting, ditch cleaning, fence repair, routine cap repair, and subsidence monitoring and repair
- Access control and security

B. SITE BACKGROUND

Settling Private Parties shall gather and evaluate the existing relevant information regarding the Site and shall conduct a visit to the Site, as necessary, to assist in planning the IRP RD/RA as follows:

1. Collect and Evaluate Existing Data and Document the Need for Additional Data

Before planning IRP RD/RA activities, relevant, existing Site data shall be thoroughly compiled and reviewed by Settling Private Parties. Specifically, this shall include the ROD, RI/FS, and other available data related to the Site. Based on this information, the Settling Private Parties shall prepare and submit a technical memorandum documenting any need, or lack thereof, for additional data needed for implementation of the IRP along with the proposed Data Quality Objectives (DQOs). Final decisions on the necessary data, DQOs and verification studies shall be made by EPA. Implementation of Task II below by Settling

Private Parties shall not be contingent upon EPA approval of the technical memorandum.

2. Conduct Site Visit

If determined to be necessary by EPA, Settling Private Parties shall visit the Site with the EPA Remedial Project Manager (RPM) during the project planning phase to assist in developing a conceptual understanding of the requirements for performing the IRP. Information gathered during this visit shall be utilized to plan the project and to determine the extent of the additional data necessary to implement the IRP.

C. PROJECT PLANNING

Once Settling Private Parties have collected and evaluated existing data and visited the Site, the specific project scope shall be planned in accordance with Task II below. Settling Private Parties shall meet with EPA during this evaluation regarding the remaining Work under this SOW.

TASK II - IRP REMEDIAL DESIGN

The IRP Remedial Design (IRP RD) shall provide the technical details for implementation of the IRP Remedial Action (IRP RA) in accordance with currently accepted environmental protection technologies and standard professional engineering and construction practices. The IRP RD shall include clear and comprehensive design plans and specifications.

A. IRP REMEDIAL DESIGN PLANNING

At the conclusion of the project planning activities, Settling Private Parties shall submit an IRP RD Work Plan, which shall include a Sampling and Analysis Plan (SAP). These two plans are described in more detail in Paragraphs 1 and 2 below, respectively. The IRP RD Work Plan shall include, but not be limited to:

- leachate removal
- leachate temporary storage
- leachate solidification
- solidified leachate disposal
- trench design and construction (for other than solidified leachate disposal)
- EMC bunker design and construction
- on-Site facilities for RD and RA data acquisition
- initial cap design and construction
- grading and contouring of initial cap to enhance surface water flow

- cap and hillslope surface water control and erosion control measures
- demolition and disposal of structures, equipment, and solid waste
- institutional control measures
- Site monitoring
- establishment of monitoring/surveillance systems

Upon approval of the IRP RD Work Plan, Settling Private Parties shall implement the IRP RD Work Plan in accordance with the design management schedule contained therein.

In the interest of facilitating timely implementation of the leachate removal/disposal (LR/D) activities, one or more portions of the IRP RD Work Plan may be submitted in advance of the complete IRP RD Work Plan. Should Settling Private Parties submit some deliverables in advance of the complete IRP RD Work Plan, Settling Private Parties shall submit the complete IRP RD Work Plan no later than 90 days following initiation of leachate removal and solidification.

In conjunction with each partial submittal of the IRP RD Work Plan, Settling Private Parties shall submit a corresponding partial Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP) and Health and Safety Plan (HASP), which shall be sufficient to cover the planned Work. The IRP RD Work Plan, HASP, SAP and the QAPP must be reviewed and approved by EPA, and a reasonable opportunity provided for review and comment by the Commonwealth, prior to the initiation of field activities. Plans, specifications, submittals, and other deliverables shall be subject to EPA review and approval in accordance with Section XIV of the Consent Decree. Review and/or approval of design submittals shall only permit Settling Private Parties to proceed to the next step of the design process. Approval does not imply acceptance of later design submittals that have not been reviewed, nor does it imply that the remedy, when constructed, will meet Performance Standards.

1. <u>IRP RD Work Plan</u>

Settling Private Parties shall submit a IRP RD Work Plan to EPA for review and approval. The IRP RD Work Plan shall be developed in conjunction with the IRP Health and Safety Plan (HASP), IRP Sampling and Analysis Plan (SAP) and an IRP Quality Assurance Project Plan (QAPP), although each plan may be delivered under separate cover. The IRP RD Work Plan shall include a comprehensive description of the additional data collection and evaluation activities to be performed, and the plans and specifications to be

prepared pertaining to trench leachate removal, temporary leachate storage, leachate solidification, earth mounded concrete bunker design and construction, trench design and construction, solidified leachate disposal, on-Site facilities for RD and RA data acquisition, initial cap construction, grading and contouring of initial cap to enhance surface water flow, cap and hillslope surface water control features and erosion control measures, demolition and disposal of structures, equipment and solid waste, institutional controls, and monitoring systems and maintenance and surveillance activities. A comprehensive design management schedule for completion of these major activities shall also be included.

Specifically, the IRP RD Work Plan shall include the following:

a. A statement of the problems and potential problems posed by the Site and the objectives of the IRP phase of the RD/RA.

b. An updated version of the background summary in the RI Report, including:

   - A brief description of the Site including the geographic location and the physiographic, hydrologic, geologic, demographic, ecological, and natural resource features;

   - A brief synopsis of the history of the Site including a summary of past disposal practices and a description of previous responses that have been conducted by local, State, Federal, or private parties;

   - A summary of the existing data, including physical, radiological and chemical characteristics of the contaminants identified and their distribution among the environmental media at the Site.

c. A list and detailed description of the tasks to be performed to complete the IRP, information needed for each task, information to be produced during and at the conclusion of each task, and a description of the Work products that shall be submitted to EPA and the Commonwealth in connection with those tasks. This description shall include the deliverables set forth in the remainder of Task II which are related to IRP

Activities.

d. A schedule with specific dates for completion of each required activity and submission of each deliverable required by the Consent Decree and this SOW for performance of the IRP. This schedule shall also include information regarding timing, initiation and completion of all critical path milestones for each such activity and/or deliverable.

e. A project management plan, including a data management plan, and provision for monthly reports to EPA and the Commonwealth, and meetings and presentations to EPA and the Commonwealth at the conclusion of each major phase of the overall IRP RD/RA. The data management plan shall address the requirements for project management systems, including tracking, sorting, and retrieving the data along with an identification of the software to be used, minimum data requirements, data format and backup data management. The plan shall address both data management and document control for all activities conducted during the IRP RD/RA.

f. A description of the on-Site office and facilities provided by Settling Private Parties for use by EPA and the Commonwealth during the IRP.

g. A description of the community relations support activities to be conducted during the RD. At EPA's request, Settling Private Parties shall assist EPA in preparing and disseminating information to the public regarding the RD Work to be performed.

2. Sampling and Analysis Plan (SAP)

The Sampling and Analysis Plan (SAP) required to be prepared by Settling Private Parties shall ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data generated will meet the DQOs established in the SAP. The SAP shall include a Quality Assurance Project Plan (QAPP) for the portion of the RD/RA addressed by the SAP.

The SAP shall define in detail the sampling and data gathering methods that shall be used on the project. They shall include sampling objectives, sample locations (horizontal and vertical) and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP shall describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that shall be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytical methods for obtaining data of sufficient quality to meet National Contingency Plan (NCP) requirements as identified at 300.435(b) of the NCP. In addition, the QAPP shall address personnel qualifications, sampling procedures, sample custody, analytical procedures, and data reduction, validation, and reporting. All other procedures must be consistent with the Region IV Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual and the guidances specified in Section XI of the Consent Decree.

Settling Private Parties shall demonstrate in advance and to EPA's satisfaction that each laboratory it may use is qualified to conduct the proposed Work and meets the requirements specified in Section XI of the Consent Decree. EPA may require Settling Private Parties to submit detailed information to demonstrate that the laboratory is qualified including information on personnel qualifications, equipment and material specification, and laboratory analyses of performance samples (blank and/or spike samples). In addition, EPA may require submittal of data packages equivalent to those generated by the EPA Contract Laboratory Program (CLP). Laboratories conducting radionuclide analyses shall participate in the U.S. EPA cross-check program.

3. Health and Safety Plan

A HASP shall be developed for the remedial activities at the Site. The HASP shall be prepared in conformance with Settling Private Parties health and safety program, and in compliance with OSHA regulations and all Kentucky regulations relating to worker exposure to radiation. The HASP shall include a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and provisions for Site control. EPA, after a reasonable

opportunity for review and comment by the Commonwealth, will review and approve the HASP to ensure that all necessary elements are included and to ensure that all health and safety procedures are fully described and in compliance with OSHA and Commonwealth regulations relating to worker exposure to radiation and hazardous substances, including the Commonwealth's Site-specific safety training and monitoring requirements.

B. IRP REMEDIAL DESIGN FIELD DATA ACQUISITION

Prior to commencement of the IRP, and concurrent with performance of the IRP RD, Settling Private Parties shall conduct field data acquisition in accordance with the approved IRP RD Work Plan and Sampling and Analysis Plan described above. Field data shall include, but not be limited to:

1. Geophysical Surveys

   a. Prepare field survey specifications;
   b. Perform surveys.

2. Topographic Survey

   Prepare a topographic map from aerial photographs of the Site taken in March 1992.

3. Site Equipment Inventory

   Log the location, physical dimensions, radiological characteristics and condition of:

   - wells
   - trench sumps
   - lysimeters
   - buildings and structures
   - equipment
   - drummed waste and uncontained solid waste.

4. Baseline Radiological/Chemical Sampling and Analysis Program

   Sampling of:

   - trench leachate
   - food crops and trees
   - surface water, soil water, and ground water
   - stream sediment and soil
   - air

to the extent necessary to supplement information already available as a result of the Remedial Investigation and the Commonwealth's ongoing monitoring at the Site.

C. IRP PRELIMINARY REMEDIAL DESIGN

IRP Preliminary Remedial Design shall begin with initial design and shall end with the completion of approximately 30 percent of the design effort. At this stage, Settling Private Parties shall field verify, as necessary, the existing conditions of the Site. The technical requirements of the IRP RA shall be addressed and outlined so that they may be reviewed to determine if the final design will provide an effective remedy. Supporting data and documentation shall be provided with the design documents defining the functional aspects of the project. EPA, after a reasonable opportunity for review and comment by the Commonwealth, shall review and comment on the IRP Preliminary Remedial Design Report. In accordance with the design management schedule established in the approved IRP Remedial Design Work Plan, Settling Private Parties shall submit to EPA and the Commonwealth the IRP Preliminary RD which shall consist of the following:

1. Results of IRP Data Acquisition Activities

Data gathered during the project planning phase shall be compiled, summarized, and submitted along with an analysis of the impact of the results on remedial design activities. In addition, surveys conducted to establish topography, rights-of-way, easements, and utility lines shall be documented. Utility requirements and acquisition of access, through purchases or easements, that are necessary to implement the IRP shall also be discussed.

2. IRP Remedial Design Criteria Report

The concepts supporting the technical aspects of the remedial design shall be defined in detail and presented in this report. Specifically, the IRP Remedial Design Criteria Report shall include the preliminary design assumptions and parameters, including:

a. Batched leachate characterization
b. Pumping rate, volume, and storage capacity requirements
c. Waste form, mixing/pumping rate and volume
d. Earth mounded concrete bunker design,

quantity, and location
e. Trench design, quantity and location
f. Initial cap design parameters including cap materials, permeabilities, thicknesses and liner requirements and surface water and erosion control measures
g. Monitoring systems
h. Performance standards

3. IRP Preliminary Remedial Design Plans and Specifications

Settling Private Parties shall submit to EPA and the Commonwealth an outline of the required drawings, including preliminary sketches and layouts, describing conceptual aspects of the IRP RD, unit processes, etc. In addition, an outline of the required specifications, including Performance Standards, shall be submitted. Construction drawings shall reflect organization and clarity, and the scope of the technical specifications shall be outlined in a manner reflecting the final specifications.

D. IRP PREFINAL AND FINAL REMEDIAL DESIGN

Settling Private Parties shall submit the IRP Prefinal Remedial Design Report when it is approximately 90 percent complete in accordance with the approved design management schedule. Settling Private Parties shall address comments generated from the review of the IRP Preliminary Remedial Design Report and subsequent review comments in meetings and informal reviews by EPA and the Commonwealth and clearly show any modification of the design resulting from incorporation of the comments. The IRP Prefinal Remedial Design Report shall function as the draft version of the IRP Final Remedial Design Report. After EPA review and comment on the IRP Prefinal Remedial Design Report, Settling Private Parties shall submit the IRP Final Remedial Design Report along with a memorandum indicating how the IRP Prefinal Remedial Design Report comments were incorporated into the IRP Final Remedial Design Report. All IRP Final Remedial Design documents shall be certified by a Professional Engineer registered in the Commonwealth of Kentucky. EPA must approve the IRP Final Remedial Design Report before Settling Private Parties may initiate the IRP, unless specifically authorized by EPA. Settling Private Parties shall submit the following with, or as part of, the IRP Prefinal and Final Remedial Design Reports:

1. Complete Remedial Design Analyses

   The selected IRP RD along with an analysis supporting the IRP RD approach. Design calculations shall be included.

2. Final IRP RD Plans and Specifications

   A complete set of construction drawings and specifications which describe the selected remedial design.

3. Final IRP RA Construction Schedule

   A final IRP RA construction schedule for EPA approval.

TASK III - IRP REMEDIAL ACTION

The IRP Remedial Action performed by Settling Private Parties pursuant to the Consent Decree shall include the following components: trench leachate removal and solidification, trench construction, earth mounded concrete bunker construction, solidified leachate disposal, surface water and erosion control measures, initial cap construction, initial cap grading and contouring, demolition and disposal of structures and equipment and solid waste, and establishment of maintenance, monitoring and surveillance systems.

A. IRP REMEDIAL ACTION PLANNING

Concurrent with the submittal of the draft IRP final Remedial Design Report, Settling Private Parties shall submit a draft IRP RA Work Plan, an IRP Construction Management Plan, an IRP Construction Quality Assurance Plan, and an IRP Construction Health and Safety Plan/Contingency Plan for review and comment by EPA, and a reasonable opportunity provided for review and comment by the Commonwealth. Within 30 days after approval of the IRP Final Remedial Design Report, Settling Private Parties shall submit a final IRP RA Work Plan, IRP Construction Management Plan, IRP Construction Health and Safety Plan/Contingency Plan and IRP Construction Quality Assurance Plan for review and approval prior to initiation of the IRP Work.

Upon approval of the IRP Final Remedial Design Report and the IRP RA Work Plan, Settling Private Parties shall implement the IRP RA Work Plan in accordance with the approved construction management schedule. Significant field changes to the IRP as set forth in the IRP RA Work Plan and IRP Final Remedial Design Report shall not be undertaken without the approval of EPA, after a reasonable

opportunity for review and comment by the Commonwealth. The IRP shall be documented in enough detail to produce as-built construction drawings after the IRP is complete. Deliverables shall be submitted to EPA for review and approval in accordance with Section XIV of the Consent Decree. Review and/or approval of IRP submittals shall only permit Settling Private Parties to proceed to the next step of the remedial action process. Approval does not imply acceptance of later IRP submittals that have not been reviewed, nor does it imply that the remedy, when constructed, will meet Performance Standards.

1. IRP RA Work Plan

Settling Private Parties shall submit a Work Plan which provides a detailed plan of action for completing the IRP RA activities to EPA for review and approval. This Work Plan shall provide for the safe and efficient completion of the IRP. The Work Plan shall be developed in conjunction with the IRP Construction Management Plan, the IRP Construction Quality Assurance Plan, and the IRP Construction Health and Safety Plan/Contingency Plan, although each plan may be delivered under separate cover. The IRP RA Work Plan shall include a comprehensive description of the IRP activities to be performed and a construction schedule for completion of each major IRP activity and submission of each IRP deliverable.

Specifically, the IRP RA Work Plan shall include the following:

a. A detailed description of the IRP tasks to be performed and a description of the work products to be submitted to EPA, including the deliverables set forth in the remainder of Task III which pertain to IRP activities;

b. A schedule for completion of each required activity and submission of each IRP deliverable required by this Consent Decree, including those in this SOW;

c. A project management plan, including provision for monthly reports to EPA and the Commonwealth and joint meetings and presentations to EPA and the Commonwealth at the conclusion of each major phase of the IRP (EPA's Project Coordinator, the Settling Private Parties Project Coordinator and a representative of the Commonwealth will meet, at a minimum, on a quarterly basis, unless EPA determines that such meeting is unnecessary);

d. A description of the community relations support activities to be conducted during the IRP. At EPA's request, Settling Private Parties shall assist EPA in preparing and disseminating information to the public regarding the IRP to be performed.

e. A description of the strategy for delivering the project. This section shall address the management approach for implementing the IRP, including procurement methods and contracting strategy, phasing alternatives, and contractor and equipment availability concerns.

2. IRP Construction Management Plan

Settling Private Parties shall develop an IRP Construction Management Plan to indicate how the construction activities are to be implemented and coordinated with EPA and the Commonwealth during the IRP. Settling Private Parties shall designate a person to be an on-Site Project Coordinator and their representative on-Site during the IRP, and identify this person in the Construction Management Plan. The Construction Management Plan shall also identify other key project management personnel comprising the IRP Construction Project Team along with the lines of authority, and provide descriptions of the duties of the key personnel along with an organizational chart. In addition, a plan for the administration of construction changes and EPA review and approval of those changes shall be included.

3. IRP Construction Quality Assurance Plan

Settling Private Parties shall develop and implement an IRP Construction Quality Assurance Program to ensure, with a reasonable degree of certainty, that the completed IRP meets or exceeds all design criteria, plans and specifications, and Remedial Standards. At a minimum, the IRP Construction Quality Assurance Plan shall include the following elements:

a. A description of the quality control organization, including a chart showing lines of authority, identification of the members of the Independent Quality Assurance Team (IQAT), and acknowledgment that the IQAT will implement the control system for all aspects of the Work specified and shall report to the project coordinator and EPA. The IQAT members shall be representatives from testing

and inspection organizations and/or the Supervising Contractor and shall be responsible for the QA/QC of the IRP RA. The members of the IQAT shall have a good professional and ethical reputation, previous experience in the type of QA/QC activities to be implemented, and demonstrated capability to perform the required activities. They shall also be independent of the construction contractor.

b. The name, qualifications, duties, authorities, and responsibilities of each person assigned a QC function.

c. Description of the observations and control testing that will be used to monitor the construction and/or installation of the components of the IRP. This includes information which certifies that personnel and laboratories performing the tests are qualified and the equipment and procedures to be used comply with applicable standards. Any laboratories to be used shall be specified. Criteria for acceptance or rejection of laboratories shall be listed and plans for implementing corrective measures shall be addressed.

d. A schedule for managing submittals, testing, inspections, and any other QA functions (including those of contractors, subcontractors, fabricators, suppliers, purchasing agents, etc.) that involve assuring quality workmanship, verifying compliance with the plans and specifications, or any other QC objectives. Inspections shall verify compliance with all environmental requirements and include, but not be limited to, air quality and emissions monitoring records and waste disposal records.

e. Reporting procedures and reporting format for QA/QC activities including such items as daily summary reports, schedule of data submissions, inspection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation. Documents prepared by IQAT members shall be made available to representatives of EPA, the Commonwealth and Settling Private Parties.

f. A list of definable features of the Work to be performed. A definable feature of Work is a task which is separate and distinct from other tasks and has separate control requirements.

4. IRP Construction Health and Safety Plan/Contingency Plan

Settling Private Parties shall prepare a IRP Construction Health and Safety Plan/Contingency Plan in conformance with Settling Private Parties' health and safety program, and in compliance with OSHA regulations as well as Kentucky regulations relating to worker exposure to radiation. The IRP Construction Health and Safety Plan/Contingency Plan shall include a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and Site control. EPA will review, and provide a reasonable opportunity for review and comment by the Commonwealth, the Construction Health and Safety Plan/Contingency Plan to ensure that all of the necessary elements are included and to ensure that all health and safety procedures are fully described and in compliance with OSHA and Commonwealth regulations relating to worker exposure to radiation and hazardous substances, including the Commonwealth's Site-specific safety training and monitoring requirements. This plan shall include a Contingency Plan and incorporate Air Monitoring and Spill Control and Countermeasures Plans. The Contingency Plan shall be written to ensure protection of on-Site construction workers and the local population potentially affected. It shall include the following items:

a. Name of person who will be responsible in the event of an emergency incident, as well as at least two alternates.

b. Plan for Site safety indoctrination and training for all employees, name of the person who will give the training and the topics to be covered.

c. Plan and date for meeting with the local community, including local, state and federal agencies involved in the cleanup, as well as the local emergency squads and the local hospitals.

d. A list of the first aid and medical facilities including location of first aid kits, names of personnel trained in first aid, a clearly marked map with the route to the nearest medical facility, all necessary emergency phone numbers conspicuously posted at the Site (i.e., fire, rescue, and the Kentucky Disaster Emergency Services (KDES)).

e. Plans for protection of public and visitors to the Site.

f. Air and Radiation Monitoring Plan which incorporates the following requirements:

- Air and radiation monitoring shall be conducted on-Site, at the restricted area boundary and at the Site boundary. The radiological constituents that were identified during the Risk Assessment shall serve as a basis of the sampling and measurement of pollutants in the atmosphere and radiological control areas. Settling Private Parties shall clearly identify these compounds along with the required detection and notification levels for the restricted and unrestricted areas. Air and radiation monitoring shall include personnel monitoring where applicable.

- Personnel monitoring shall be conducted according to 10 CFR §§ 20.1501 and 20.1502 (902 KAR 100:019 Sections 12 and 13), OSHA, NIOSH and NRC regulations (as amended).

- On-Site area monitoring shall consist of continuous real-time monitoring performed immediately adjacent to any waste excavation areas, treatment areas, and any other applicable areas when work is occurring. Measurements shall be taken in the radiological control areas to include, but not be limited to: on-Site worker bioassays, contamination surveys, radiation surveys, high volume air sample surveys, and tritium air sample surveys. Additionally, the breathing zones of personnel immediately upwind and downwind of the work areas shall be surveyed for hazardous chemical constituents. Equipment shall include the following, at a minimum: self reading dosimeters, portable alpha, beta and gamma radiation survey meter, scintillation probes (alpha and gamma detector), hand probe (beta detector), tritium monitor, organic vapor meter, explosivity meter, particulate monitoring equipment, and on-Site windsock.

- Monitoring shall consist of monitoring airborne radiological contaminants at the boundary of the restricted area and

the Site boundary to determine whether harmful concentrations of toxic constituents are migrating off-Site. EPA approved methods shall be used for sampling and analysis of air. The results of the air monitoring and the on-Site meteorological monitoring shall be used to assess the potential for off-Site exposure to toxic materials. The air monitoring program shall include provisions for notifying nearby residents, local, state and federal agencies in the event that unacceptable concentrations of airborne contaminants are migrating off-Site. Settling Private Parties shall report detection of levels of airborne contaminants above the limits of 40 CFR Part 61 to EPA in accordance with Section XVIII of the Consent Decree.

g. A plan for instituting a medical surveillance program which shall address medical requirements for Site workers, physician examinations, personnel dosimetry records and summary reports, and transfer of personnel monitoring records to the appropriate state and federal agencies.

h. A Spill Control and Countermeasures Plan which shall include the following:

- Contingency measures for potential spills and discharges from materials handling and/or transportation.

- A description of the methods, means, and facilities required to prevent contamination of soil, water, atmosphere, and uncontaminated structures, equipment, or material by spills or discharges which could potentially occur during the pumping and solidification operations.

- A description of the equipment and personnel necessary to perform emergency measures required to contain any spillage and to remove spilled materials and soils or liquids that become contaminated due to spillage. This collected spill material must be properly disposed of.

- A description of the equipment and personnel to perform decontamination measures that may be required for previously

uncontaminated structures, equipment, or material.

B. PRECONSTRUCTION CONFERENCE

Settling Private Parties and federal, state and local government agencies shall hold a Preconstruction Conference which shall take place after selection of the construction contractor but before initiation of IRP construction. The Preconstruction Conference agenda shall include:

1. Defining the roles, relationships, and responsibilities of all parties;

2. Reviewing methods for documenting and reporting inspection data;

3. Reviewing methods for distributing and storing documents and reports;

4. Reviewing work area security and safety protocols;

5. Reviewing the approved construction schedules;

6. Conducting a Site reconnaissance to verify that the design criteria and the plans specifications are understood and to review material and equipment storage locations.

The Preconstruction Conference must be documented, including, at a minimum, names of people in attendance, issues discussed, clarifications made, special instructions issued.

C. IRP PREFINAL CONSTRUCTION INSPECTION

Upon preliminary completion of the IRP, Settling Private Parties shall notify EPA for the purpose of conducting a Prefinal Construction Inspection. Participants should include the Project Coordinators, Supervising Contractor, Construction Contractor, and other federal, state, and local agencies with a jurisdictional interest. The Prefinal Construction Inspection shall consist of a walk-through inspection of the entire project Site. The objective of the inspection is to determine whether the IRP is complete and consistent with the Consent Decree. Any outstanding construction items discovered during the inspection shall be identified and noted on a punch list. Additionally, monitoring equipment shall be operationally tested by Settling Private Parties. Settling Private Parties shall certify that the equipment has performed to effectively meet the purpose and intent of the specifications. Retesting

shall be completed where the initial testing reveals deficiencies. A Prefinal Construction Inspection Report shall be submitted by Settling Private Parties for the Prefinal Construction Inspection which outlines the outstanding construction items, actions required to complete the items, completion date for the items, and an anticipated date for the IRP Final Construction Inspection.

D. IRP FINAL CONSTRUCTION INSPECTION

EPA will perform a Final Construction Inspection for the IRP, consisting of a walk-through inspection of the entire project Site. Upon Settling Private Parties' completion of all outstanding construction items for the IRP, Settling Private Parties shall notify EPA for the purpose of conducting a Final Construction Inspection. The IRP Prefinal Construction Inspection Report shall be used as a checklist with the Final Construction Inspection focusing on the outstanding construction items identified in the Prefinal Construction Inspection. All tests that were originally unsatisfactory shall be conducted again. Confirmation shall be made during the IRP Final Construction Inspection that all outstanding items have been resolved. Any outstanding construction items discovered during the inspection still requiring correction shall be identified and noted on a punch list. If any items are found unresolved during the IRP Final Construction Inspection, then that inspection shall be considered to be a Prefinal Construction Inspection, requiring another IRP Prefinal Construction Inspection Report and subsequent IRP Final Construction Inspection.

E. IRP FINAL CONSTRUCTION INSPECTION REPORT

Within sixty (60) days following the conclusion of the IRP Final Construction Inspection, Settling Private Parties shall submit an IRP Final Construction Inspection Report for the IRP. EPA, after a reasonable opportunity for review and comment by the Commonwealth, will provide comments to Settling Private Parties. The IRP Final Construction Inspection Report shall include the following:

1. Brief description of how outstanding items noted in the Prefinal Inspection were resolved;

2. Explanation of modifications made during the IRP Work to the original IRP RD and IRP RA Work Plans and why these changes were made;

3. As-built drawings;

4. Synopsis of the construction work defined in the SOW and certification that the construction work has been completed.

F. IRP REMEDIAL ACTION REPORT

As provided in Section XVII of the Consent Decree, within 90 days after Settling Private Parties conclude that the IRP has been fully performed and the Performance Standards have been achieved, Settling Private Parties shall so certify to the United States and shall schedule and conduct a pre-certification inspection to be attended by EPA, the Commonwealth and Settling Private Parties. If after the pre-certification inspection Settling Private Parties still believe that the IRP has been fully performed and the Performance Standards have been achieved, Settling Private Parties shall submit an IRP RA Report to EPA in accordance with Section XVII of the Consent Decree. The IRP RA Report shall include the following:

1. A copy of the IRP Final Construction Inspection Report;

2. A synopsis of the Work defined in this SOW and a demonstration in accordance with the Performance Standards Verification Plan that Performance Standards have been achieved; and

3. Certification that the IRP has been completed in full satisfaction of the requirements of the Consent Decree.

After review by EPA, and after a reasonable opportunity for review and comment by the Commonwealth, Settling Private Parties shall address any comments and submit a revised report. As provided in Section XVII of the Consent Decree, the IRP shall not be considered complete until EPA approves the IRP RA Report.

TASK IV - INTERIM MAINTENANCE PERIOD, FINAL CLOSURE PERIOD, AND ASSOCIATED REMEDIAL ACTIVITIES

The remainder of the selected remedy includes the Interim Maintenance Period and Final Closure Period, collectively referred to as the Balance of Remedial Phase (BoRP). The BoRP contains two separate and distinct periods of action: 1) an Interim Maintenance Period (IMP), which commences upon issuance of the Certificate of Completion for the IRP and ends when EPA concludes, in consultation with the Commonwealth, that the trench stabilization criteria have been achieved. The IMP includes initial cap maintenance, trench leachate management, installation of a horizontal flow barrier, if necessary, and site maintenance and monitoring; and, 2) a Final Closure Period (FCP), which commences upon EPA determination that the trench stabilization

criteria, as defined in the IMP Work Plan, have been achieved and concludes when EPA issues the Certificate of Completion for the BoRP. The FCP includes installation of the final cap and burial of remaining Site waste and debris.

A. INTERIM MAINTENANCE PERIOD

Six months prior to completion of the IRP RA, the Commonwealth shall submit to EPA the Interim Maintenance Period (IMP) Work Plan. A copy of the IMP Work Plan shall also be provided to the Settling Parties. Settling Parties shall provide technical assistance to the Commonwealth in preparing the IMP Work Plan. Because of the 100-year period estimated for completion of the IMP, all work plans and schedules must be considered preliminary and tentative. All Work conducted during the IMP shall be based on the most appropriate technology then available. For example, it will be impossible to determine a schedule for subsidence repair, additional pumping, and cap replacement; therefore, all elements and schedules of the IMP Work Plan, if appropriate, shall be considered of a preliminary nature. All documents must be dynamic and clearly reflect current scientific and technical approaches required to protect human health and the environment. The IMP shall include, but not be limited to, the following activities:

- Periodic surveys and subsidence monitoring
- Initial cap maintenance and replacement as necessary
- Improvements to, and maintenance of, Site drainage and erosion control features, as needed
- Trench leachate management and monitoring
- Installation of a horizontal flow barrier (if necessary)
- Waste burial
- Maintenance and monitoring activities

Upon approval of the IMP Work Plan, the Commonwealth shall implement the IMP Work Plan. In the event EPA has not approved the IMP Work Plan before Certification of Completion of the IRP, the Commonwealth shall undertake the activities specified in the IMP Work Plan it submitted to EPA, until EPA approves an IMP Work Plan, and upon approval of the IMP Work Plan, shall continue such activities as finally approved in the IMP Work Plan.

In conjunction with submittal of the IMP Work Plan, the Commonwealth shall submit a IMP Quality Assurance Project Plan (IMP QAPP), IMP Sampling and Analysis Plan (SAP) and a IMP Health and Safety Plan (IMP HASP), all of which will essentially be revised versions of the Initial Remedial Phase QAPP and HASP. The IMP QAPP and SAP shall follow the format outlined in Section IV, Task II.A of

this SOW for SAPs and QAPPs and the IMP HASP shall follow the format for HASPs outlined in Section IV, Task III.A of this SOW. The IMP Work Plan and the IMP QAPP must be reviewed and approved by EPA and the IMP Health and Safety Plan must be reviewed and commented on by EPA. Plans, specifications, submittals, and other deliverables shall be subject to EPA review and approval in accordance with Section XIV of the Consent Decree. Review and/or approval of design submittals only allows the Commonwealth to proceed to the next step of the design process. Approval does not imply acceptance of later design submittals that have not been reviewed, nor does it imply that the remedy, when constructed, will meet Performance Standards.

1. Interim Maintenance Period Work Plan

Six months prior to scheduled completion of the IRP RA, the Commonwealth shall submit a IMP Work Plan to EPA for review and approval. The IMP Work Plan shall be developed in conjunction with the IMP QAPP, SAP and HASP. The IMP Work Plan shall include a description of the potential data collection and evaluation activities that may be necessary during the IMP. The IMP Work Plan should conceptually address IMP data acquisition and analysis, initial cap maintenance, leachate management, installation of a horizontal flow barrier (if determined to be necessary), equipment, and solid waste disposal, and improvements to, or construction of, permanent surface water and erosion control measures. The IMP Work Plan should also conceptually address maintenance, monitoring and surveillance systems.

The IMP Work Plan shall be revised, as necessary, as part of EPA's five-year review or more frequently if it is determined to be necessary. Modifications will be made to reflect the changing Site conditions and changes in available technologies. The IMP Work Plan should address the following:

a. A statement of the problems and potential problems posed by the Site following completion of the IRP RA and the objectives of the IMP;

b. An abbreviated background summary setting forth the following:

- A brief description of the Site after completion of the IRP;

- As-built drawings and documents from the IRP RA;

- A summary of the existing data including physical, radiological and chemical characteristics of the contaminants identified and their distribution among the environmental media at the Site.

c. A preliminary list of the tasks to be performed during the IMP, information needed for each task if available, information which may be produced during and at the conclusion of each task, and a description of Work products that will be submitted to EPA;

d. Because of the 100-year period of time estimated to implement the IMP, submission of deliverables will be established and/or adjusted by the Commonwealth, as approved by EPA, at the time of EPA's five-year reviews of the remedy.

e. Project management plans, including data management plans and provision for periodic reports to EPA, shall be revised at EPA's direction in conjunction with EPA five-year reviews. Data management plans shall address the requirements for project management including sorting and retrieving the data. The best available data analysis techniques will be utilized.

f. Community relations support activities to be conducted during the IMP should be addressed as part of each five-year review. The Commonwealth shall assist EPA in preparing and disseminating information to the public regarding IMP Work.

g. Methodologies included in the IMP Work Plan should be reviewed as part of the five-year review. Methodologies chosen at those times should describe start-up procedures, operation, troubleshooting, training, and evaluation activities to be carried out by the Commonwealth during the IMP;

h. The IMP Work Plan shall be a flexible document anticipating possible changes in scientific and technical information available throughout the estimated 100-year period of the IMP.

2. Interim Maintenance Period Operations

The initial IMP Work Plan shall also include start-up procedures, operations, troubleshooting,

training, and evaluation activities. The initial IMP Work Plan shall address the following elements:

a. Custodial care activities including grass cutting, ditch cleaning, fence repairing, and minor repair of the erosion control systems, trench cap, and monitoring instruments.

b. Equipment start-up and operator training:

- Technical specifications governing monitoring and erosion control systems;

- Requirements for providing appropriate visits by experienced personnel to oversee installation, adjustment, start-up and operation of systems; and,

- Training personnel regarding appropriate operational procedures once start-up has been successfully completed.

c. Description of normal operation and maintenance:

- Description of tasks required for system operation;

- Description of tasks required for system maintenance;

- Description of prescribed treatment or operating conditions; and

- Frequency for each IMP operations task, if appropriate.

d. Description of potential operating problems:

- Description and analysis of potential operating problems;

- Sources of information regarding problems; and

- Common remedies or anticipated corrective actions.

e. Description of routine monitoring and laboratory testing:

- Description of monitoring tasks;

- Description of required laboratory tests and

their potential interpretation;

- Required QA/QC; and

- Monitoring frequency.

f. Description of alternate IMP procedures:

- Should systems fail, alternate procedures; and,

- Analysis of vulnerability of the system and a description of additional resource requirements should systems fail.

g. Safety Plan:

- Description of precautions to be taken and required health and safety equipment, etc., for personnel protection.

h. Description of equipment:

- Equipment identification;

- Installation of monitoring components;

- Maintenance of Site equipment; and

- Equipment replacement, as necessary, and its installation components.

i. Records and reporting:

- Daily field logs;

- Laboratory records;

- Database for Site records;

- Mechanisms for reporting emergencies;

- Database for personnel and maintenance records; and

- Yearly reports to state/federal agencies.

j. Description of access control, security and notification measures;

- Description of institutional control requirements to be performed during the IMP;

- Description of the legal procedures and mechanisms for administering deed and notice requirements of access control, security and notification requirements of this SOW as well as the location of storing legal notices and Site conditions.

B. FINAL CLOSURE PERIOD

1. Final Closure Period Remedial Design Work Plan

A Final Closure Period (FCP) Remedial Design Work Plan shall be developed by the Commonwealth and submitted to EPA within 60 days of EPA determination that the trench stabilization criteria have been achieved (the Interim Maintenance Period has concluded).

The FCP RD Work Plan shall be developed in conjunction with the FCP QAPP, SAP and HASP. The QAPP and SAP shall follow the format outlined in Section IV, Task II.A for SAPs and QAPPs and the IMP HASP shall follow the format for HASPs outlined in Section IV, Task III.A of this SOW. The FCP RD Work Plan shall include a description of the potential data collection and evaluation activities that may be necessary during the FCP. The FCP RD Work Plan should conceptually address FCP data acquisition and analysis, final cap maintenance, improvements to surface water and erosion control measures (as needed), leachate management, equipment, and solid waste disposal. The FCP RD Work Plan should also conceptually address maintenance, monitoring and surveillance systems.

The FCP RD Work Plan should address the following:

a. A statement of the problems and potential problems posed by the Site and the objectives of the Final Closure Period;

b. An abbreviated background summary setting forth the following:

- A brief description of the Site;

- As-built drawings and documents from the IRP;

- A summary of the existing data including physical, radiological and chemical characteristics of the contaminants identified and their distribution among the environmental media at the Site.

c. A preliminary list of the tasks to be performed during the Final Closure Period, information needed for each task if available, information which may be produced during and at the conclusion of each task, and a description of work products that will be submitted to EPA;

2. Final Closure Period Preliminary Design

FCP Preliminary Remedial Design shall begin with initial remedial design and shall end with the completion of approximately 30 percent of the remedial design effort. At this stage, the Commonwealth shall field verify, as necessary, the existing conditions of the Site. The technical requirements of the IRP shall be addressed and outlined so that they may be reviewed to determine if the final remedial design will provide an effective remedy. Supporting data and documentation shall be provided with the design documents defining the functional aspects of the project. EPA approval of the FCP Preliminary Remedial Design Report is required before the Commonwealth may proceed with further design work, unless specifically authorized by EPA. In accordance with the design management schedule established in the approved FCP RD Work Plan, the Commonwealth shall submit to EPA the FCP Preliminary Remedial Design Report which shall consist of the following:

a. Results of Data Acquisition Activities

Data gathered during the project planning phase shall be compiled, summarized, and submitted along with an analysis of the impact of the results on design activities.

b. Final Closure Period Preliminary Remedial Design Plans and Specifications

The Commonwealth shall submit to EPA an outline of the required drawings, including preliminary sketches and layouts, describing conceptual aspects of the design, unit processes, etc. In addition, an outline of the required specifications, including Performance Standards, shall be submitted. Construction drawings shall reflect organization and clarity, and the scope of the technical specifications shall be outlined in a manner reflecting the final specifications.

3. Final Closure Period Prefinal and Final Remedial Design

The Commonwealth shall submit the FCP Prefinal Remedial Design Report when the design work is approximately 90 percent complete in accordance with the approved design management schedule. Concurrent with submittal of the FCP Prefinal Remedial Design Report, the Commonwealth shall also submit an Institutional Control Work Plan and Institutional Control Operations and Maintenance Manual. The Commonwealth shall address comments generated from the FCP Preliminary Remedial Design Report review and subsequent comments in meetings and informal reviews by EPA and the Commonwealth and clearly show any modification of the design as a result of incorporation of the comments. The FCP Prefinal Remedial Design Report shall function as the draft version of the FCP Final Remedial Design Report. After EPA review and comment on the FCP Prefinal Remedial Design Report, the FCP Final Remedial Design Report shall be submitted along with a memorandum indicating how the Prefinal Remedial Design Report comments were incorporated into the Final Remedial Design Report. All FCP Final Remedial Design documents shall be certified by a Professional Engineer registered in the Commonwealth of Kentucky. EPA written approval of the FCP Final Remedial Design Report is required before initiating construction of the final cap, unless specifically authorized by EPA. The following items shall be submitted with or as part of the FCP Prefinal and Final Remedial Design Reports:

a. Complete Final Closure Period Design Analyses

The selected design shall be presented along with an analysis supporting the FCP design approach. Design calculations shall be included.

b. Final Closure Period Final Plans and Specifications

A complete set of construction drawings and specifications shall be submitted which describe the selected design.

c. Final Construction Schedule

A final construction schedule shall be submitted for EPA approval.

d. Final Overall Construction Cost Estimate

An estimate within +15 percent to -10 percent of

actual, overall remedial construction costs shall be submitted.

4. FCP RA Planning

Concurrent with the submittal of the FCP Prefinal Remedial Design Report, the Commonwealth shall submit a draft FCP RA Work Plan for review and comment by EPA. Within 30 days after approval of the FCP Final Remedial Design Report, the Commonwealth shall submit a final FCP RA Work Plan which must be reviewed and approved by EPA prior to construction of the final cap.

Upon approval of the FCP Final Remedial Design Report and the FCP RA Work Plan, the Commonwealth shall implement the FCP Work Plan in accordance with the approved construction management schedule.. Significant field changes to the construction as set forth in the FCP RA Work Plan shall not be undertaken without the approval of EPA. The construction shall be documented in enough detail to produce as-built construction drawings after the construction is complete. Deliverables shall be submitted to EPA for review and approval in accordance with Section XIV of the Consent Decree. Review and/or approval of submittals only allows the Commonwealth to proceed to the next step of the remediation process. Approval does not imply acceptance of later project submittals that have not been reviewed, nor does it imply that the remedy, when constructed, will meet Performance Standards.

a. FCP RA Work Plan

The Commonwealth shall submit a Work Plan which provides a detailed plan of action for completing the FCP RA activities to EPA for review and approval. This Work Plan shall provide for the safe and efficient completion of the FCP. The Work Plan shall be developed in conjunction with the FCP Construction Management Plan, the FCP Construction Quality Assurance Plan, and the FCP Construction Health and Safety Plan/Contingency Plan, although each plan may be delivered under separate cover. The FCP RA Work Plan shall include a comprehensive description of the FCP activities to be performed and a construction schedule for completion of each major FCP activity and submission of each FCP deliverable.

Specifically, the FCP RA Work Plan shall include the following:

- A detailed description of the FCP tasks to be performed and a description of the work products to be submitted to EPA, including the deliverables set forth in the remainder of Task IV which pertain to FCP activities;

- A schedule for completion of each required activity and submission of each FCP deliverable required by the Consent Decree, including those in this SOW;

- A project management plan, including provision for monthly reports to EPA;

- A description of the community relations support activities to be conducted during the FCP. At EPA's request, the Commonwealth shall assist EPA in preparing and disseminating information to the public regarding the FCP to be performed.

- A description of the strategy for delivering the project. This section shall address the management approach for implementing the FCP, including procurement methods and contracting strategy, phasing alternatives, and contractor and equipment availability concerns.

b. FCP Construction Management Plan

The Commonwealth shall develop an FCP Construction Management Plan (Plan) to indicate how the construction activities are to be implemented and coordinated with EPA during the FCP. The Commonwealth shall designate a person to be an on-Site Project Coordinator and their representative on-Site during the FCP, and identify this person in the Work Plan. The Work Plan shall also identify other key project management personnel comprising the FCP Construction Project Team along with the lines of authority, and provide descriptions of the duties of the key personnel along with an organizational chart. In addition, a plan for the administration of construction changes and EPA review and approval of those changes shall be included.

c. FCP Construction Quality Assurance Plan

The Commonwealth shall develop and implement an FCP Construction Quality Assurance Program to ensure, with a reasonable degree of certainty, that the completed FCP meets or exceeds all design criteria, plans and specifications, and Performance Standards.

At a minimum, the FCP Construction Quality Assurance Plan shall include the following elements:

- The name, qualifications, duties, authorities, and responsibilities of each person assigned a quality control function.

- Description of the observations and control testing that will be used to monitor the construction and/or installation of the components of the FCP. This includes information which certifies that personnel and laboratories performing the tests are qualified and the equipment and procedures to be used comply with applicable standards. Any laboratories to be used shall be specified. Criteria for acceptance or rejection of laboratories shall be listed and plans for implementing corrective measures shall be addressed.

- A schedule for managing submittals, testing, inspections, and any other QA functions (including those of contractors, subcontractors, fabricators, suppliers, purchasing agents, etc.) that involve assuring quality workmanship, verifying compliance with the plans and specifications, or any other QC objectives. Inspections shall verify compliance with all environmental requirements and include, but not be limited to, air quality and emissions monitoring records and waste disposal records.

- Reporting procedures and reporting format for QA/QC activities including such items as daily summary reports, schedule of data submissions, inspection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation.

- A list of definable features of the Work to be performed. A definable feature of Work is a task which is separate and distinct from other tasks and has separate control requirements.

d. <u>FCP Construction Health and Safety Plan/Contingency Plan</u>

The Commonwealth shall prepare a FCP Construction Health and Safety Plan/Contingency Plan in conformance with the Commonwealth's health and safety program administered under the Site license, and in compliance with OSHA regulations. The FCP Construction Health and Safety Plan/Contingency Plan shall include a health

and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and Site control. EPA will not approve the Commonwealth's FCP Construction Health and Safety Plan/Contingency Plan, but rather EPA will review it to ensure that all necessary elements are included and safety procedures are fully described. This plan shall include a Contingency Plan and incorporate Air Monitoring and Spill Control and Countermeasures Plans. The Contingency Plan shall be written to ensure protection of on-Site construction workers and the local population potentially affected. It shall include the following items:

- Name of person who will be responsible in the event of an emergency incident, as well as at least two alternates.

- Plan for Site safety indoctrination and training for all employees, name of the person who will give the training and the topics to be covered.

- Plan and date for meeting with the local community, including local, state and federal agencies involved in the cleanup, as well as the local emergency squads and the local hospitals.

- A list of the first aid and medical facilities including location of first aid kits, names of personnel trained in first aid, a clearly marked map with the route to the nearest medical facility, all necessary emergency phone numbers conspicuously posted at the Site (i.e., fire, rescue, and the Kentucky Disaster Emergency Services (KDES)).

- Plans for protection of public and visitors to the Site.

- Air and Radiation Monitoring Plan which incorporates the following requirements:

  i) Air and radiation monitoring shall be conducted on-Site, at the restricted area boundary and at the Site boundary. The radiological constituents that were identified during the Risk Assessment shall serve as a basis of the sampling and measurement of pollutants in the atmosphere and radiological control areas. Settling Private Parties shall clearly identify these compounds along with the required detection

and notification levels for the restricted and unrestricted areas. Air and radiation monitoring shall include personnel monitoring where applicable.

ii) Personnel monitoring shall be conducted according to 10 CFR §§ 20.1501 and 20.1502 (902 KAR 100:019 Sections 12 and 13), OSHA, NIOSH and NRC regulations (as amended).

iii) On-Site area monitoring shall consist of continuous real-time monitoring performed immediately adjacent to any waste excavation areas, treatment areas, and any other applicable areas when work is occurring. Measurements shall be taken in the radiological control areas to include, but not be limited to: on-Site worker bioassays, contamination surveys, radiation surveys, high volume air sample surveys, and tritium air sample surveys. Additionally, the breathing zones of personnel immediately upwind and downwind of the work areas shall be surveyed for hazardous chemical constituents. Equipment shall include the following, at a minimum: self reading dosimeters, portable alpha, beta and gamma radiation survey meter, scintillation probes (alpha and gamma detector), hand probe (beta detector), tritium monitor, organic vapor meter, explosivity meter, particulate monitoring equipment, and on-Site windsock.

iv) Monitoring shall consist of monitoring airborne radiological contaminants at the boundary of the restricted area and the Site boundary to determine whether harmful concentrations of toxic constituents are migrating off-Site. EPA approved methods shall be used for sampling and analysis of air. The results of the air monitoring and the on-Site meteorological monitoring shall be used to assess the potential for off-Site exposure to toxic materials. The air monitoring program shall include provisions for notifying nearby residents, local, state and federal agencies in the event that unacceptable concentrations of airborne contaminants are migrating off-Site. The Commonwealth shall report detection of levels of airborne contaminants above the limits of 40 CFR Part 61, Subpart H to EPA in

accordance with Section XVIII of the Consent Decree.

- A plan for instituting a medical surveillance program which shall address medical requirements for Site workers, physician examinations, personnel dosimetry records and summary reports, and transfer of personnel monitoring records to the appropriate state and federal agencies.

- A Spill Control and Countermeasures Plan which shall include the following:

  i) Contingency measures for potential spills and discharges from materials handling and/or transportation.

  ii) A description of the methods, means, and facilities required to prevent contamination of soil, water, atmosphere, and uncontaminated structures, equipment, or material by spills or discharges which could potentially occur during the pumping and solidification operations.

  iii) A description of the equipment and personnel necessary to perform emergency measures required to contain any spillage and to remove spilled materials and soils or liquids that become contaminated due to spillage. This collected spill material must be properly disposed of.

  iv) A description of the equipment and personnel to perform decontamination measures that may be required for previously uncontaminated structures, equipment, or material.

5. Preconstruction Conference

The Commonwealth and federal, state and local government agencies shall hold a Preconstruction Conference prior to initiation of FCP construction. The Preconstruction Conference agenda shall include:

a. Defining the roles, relationships, and responsibilities of all parties;

b. Reviewing methods for documenting and reporting inspection data;

c. Reviewing methods for distributing and storing documents and reports;

d. Reviewing work area security and safety protocols;

e. Reviewing the approved construction schedules;

f. Conducting a Site reconnaissance to verify that the design criteria and the plans specifications are understood and to review material and equipment storage locations.

The Preconstruction Conference must be documented, including, at a minimum, names of people in attendance, issues discussed, clarifications made, special instructions issued.

6. Final Closure Period Prefinal Construction Inspection

Upon preliminary completion of the FCP construction, the Commonwealth shall notify EPA for the purpose of conducting a Prefinal Construction Inspection. Participants should include the Project Coordinators, Supervising Contractor, Construction Contractor, and other federal, state, and local agencies with a jurisdictional interest. The Prefinal Construction Inspection shall consist of a walk-through inspection of the entire project Site. The objective of the inspection is to determine whether the construction is complete and consistent with the Consent Decree. Any outstanding construction items discovered during the inspection shall be identified and noted on a punch list. Additionally, monitoring equipment shall be operationally tested by the Commonwealth. The Commonwealth shall certify that the equipment has performed to effectively meet the purpose and intent of the specifications. Retesting shall be completed where the initial testing reveals deficiencies. A Prefinal Construction Inspection Report shall be submitted by the Commonwealth for the Prefinal Construction Inspection which outlines the outstanding construction items, actions required to complete the items, completion date for the items, and an anticipated date for the Final Construction Inspection.

7. Final Closure Period Final Construction Inspection

EPA will perform a Final Construction Inspection for the FCP, consisting of a walk-through inspection of the entire project Site. Upon the Commonwealth's completion of all outstanding construction items, the Commonwealth shall notify EPA for the purpose of

conducting a Final Construction Inspection. The Prefinal Construction Inspection Report shall be used as a check list with the Final Construction Inspection focusing on the outstanding construction items identified in the Prefinal Construction Inspection. All tests that were originally unsatisfactory shall be conducted again. Confirmation shall be made during the Final Construction Inspection that all outstanding items have been resolved. Any outstanding construction items discovered during the inspection still requiring correction shall be identified and noted on a punch list. If any items are found unresolved during the Final Inspection, then that inspection shall be considered to be a Prefinal Construction Inspection, requiring another Prefinal Construction Inspection Report and subsequent Final Construction Inspection.

8. Final Closure Period Final Construction Inspection Report

Within sixty (60) days following the conclusion of the Final Construction Inspection, the Commonwealth shall submit a Final Construction Inspection Report for the FCP. EPA will review the draft report and will provide comments to the Commonwealth. The Final Construction Inspection Report shall include the following:

a. Brief description of how outstanding items noted in the Prefinal Construction Inspection were resolved;

b. Explanation of modifications made during the FCP construction to the original FCP Design and FCP Construction Work Plan and why these changes were made;

c. As-built drawings;

d. Synopsis of the construction work defined in the SOW and certification that the construction work has been completed.

C. BoRP REMEDIAL ACTION REPORT

As provided in Section XVII of the Consent Decree, within 90 days after the Commonwealth concludes that the Remedial Action has been fully performed and the Performance Standards have been achieved, the Commonwealth shall so certify to the United States and shall schedule and conduct a pre-certification inspection to be attended by EPA and the Commonwealth. If after the pre-certification inspection the Commonwealth still believes that the Remedial Action has been fully performed and the Performance

Standards have been achieved, the Commonwealth shall submit a BoRP RA Report to EPA in accordance with Section XVII of the Consent Decree. The BoRP RA Report shall include the following:

1. A copy of the BoRP Final Construction Inspection Report;

2. A synopsis of the Work defined in this SOW and a demonstration in accordance with the Performance Standards Verification Plan that Performance Standards have been achieved; and

3. Certification that the BoRP has been completed in full satisfaction of the requirements of the Consent Decree.

After review by EPA, the Commonwealth shall address any comments and submit a revised report. As provided in Section XVII of the Consent Decree, the BoRP shall not be considered complete until EPA approves the BoRP RA Report.

D. INSTITUTIONAL CONTROL PERIOD

1. Institutional Control Work Plan

An Institutional Control Work Plan shall be developed by the Commonwealth during the FCP and submitted to EPA for approval no later than six months prior to scheduled completion of FCP construction. Implementation of the Institutional Control Work Plan shall commence upon completion of the FCP Final Construction Inspection and EPA approval of the Institutional Control Work Plan. Operation and Maintenance activities under the Institutional Control Work Plan shall be conducted in accordance with the Institutional Control Operations and Maintenance Manual which shall be submitted in conjunction with the Institutional Control Work Plan. The Institutional Control O & M Manual will, in essence, be a revised version of the Interim Maintenance Period Operations specified in Section IV, Task IV.A.2 of this SOW. Operation and Maintenance under the Institutional Control Work Plan shall be conducted for 100 years following EPA issuance of the Certification of Completion of the Remedial Action. This period for Institutional control conforms to 902 KAR 100:022 Section 27. Work Plans for this period will be dynamic documents which shall reflect the most appropriate technologies then available.

E. POST-INSTITUTIONAL CONTROL PERIOD

1. Post-Institutional Control Work Plan

A Post-Institutional Control Work Plan shall be developed by the Commonwealth during the Institutional Control Period and submitted to EPA for approval no later than six months prior to conclusion of the Institutional Control Period. Implementation of the Post-Institutional Control Work Plan shall commence upon completion of the Institutional Control Period and EPA approval of the Post-Institutional Control Work Plan. Operation and Maintenance activities under the Post-Institutional Control Work Plan shall be conducted in accordance with the Post-Institutional Control Operations and Maintenance Manual which shall be submitted in conjunction with the Post-Institutional Control Work Plan. The Post-Institutional Control O & M Manual will, in essence, be a revised version of the Institutional Control O & M Manual specified above. Operation and Maintenance under the Post-Institutional Control Work Plan shall be conducted in perpetuity. Work Plans for this period will be dynamic documents which shall reflect the most appropriate technologies then available.

TASK V - PERFORMANCE MONITORING

Performance monitoring shall be conducted by the Commonwealth throughout the Initial Remedial Phase, Balance of Remedial Phase and Institutional Control Period to ensure that all Performance Standards are met.

A. PERFORMANCE STANDARDS VERIFICATION PLANS

The purpose of the Performance Standards Verification Plans is to provide a mechanism to ensure that both short-term and long-term Performance Standards for the Remedial Action are met. Guidances used in developing the Sampling and Analysis Plans during the Initial Remedial Phase Remedial Design and Balance of Remedy Phase shall be used. Settling Private Parties shall submit a Performance Standards Verification Plan with the Initial Remedial Phase Prefinal and Final Remedial Design Reports. The Commonwealth shall submit a Performance Standards Verification Plan with the Interim Maintenance Period Work Plan and with the FCP Prefinal and Final Remedial Design Reports. Once approved, the Performance Standards Verification Plans shall be implemented by the Commonwealth on the approved schedule. The Performance Standards Verification Plans shall include:

1. The Performance Standards Verification Field Sampling and Analysis Plan that provides guidance for all field work by defining in detail the sampling and data gathering methods to be used.

2. The Performance Standards Verification Quality Assurance/Quality Control Plan that describes the quality assurance and quality control protocols which will be followed in demonstrating achieving Performance Standards and that the remedy is expected to continue to achieve all Performance Standards.

3. Specification of those tasks to be performed to demonstrate compliance with the Performance Standards and a schedule for the performance of these tasks.