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Formerly Utilized Sites Remedial Action Program (FUSRAP)

Subject: **Region 7, Region VII**

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UNITED STATES ENVIRONMENTAL PROTECTION
REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

IN THE MATTER OF:

The United States Department
of Energy's FUSRAP Sites,
St. Louis and Hazelwood,
Missouri

Docket No. VII-90-F-0005

FEDERAL FACILITY AGREEMENT

TABLE OF CONTENTS

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PRELIMINARY STATEMENT

Based upon the information available to the Parties on the effective date of this FEDERAL FACILITY AGREEMENT (Agreement), and without trial or adjudication of any issues of fact or law, the Parties agree as follows:

I. JURISDICTION

Each Party is entering into this Agreement pursuant to the following authorities:

A. The U.S. Environmental Protection Agency (U.S. EPA), Region 7, enters into those portions of this Agreement that relate to the remedial investigation/feasibility study (RI/FS) pursuant to Section 120(e)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9620(e)(1), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99-499 (hereinafter jointly referred to as CERCLA/SARA or CERCLA) and Sections 6001, 3008(h) and 3004(u) and (v) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6961, 6928(h), 6924(u) and (v), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) (hereinafter jointly referred to as RCRA/HSWA or RCRA) and Executive Order 12580;

B. U.S. EPA, Region 7, enters into those portions of this Agreement that relate to operable unit remedial actions and final remedial actions pursuant to Section 120(e)(2) of CERCLA/SARA, Sections 6001, 3008(h) and 3004(u) and (v) of RCRA and Executive Order 12580;

C. The United States Department of Energy (DOE) enters into those portions of this Agreement that relate to the RI/FS pursuant to Section 120(e)(1) of CERCLA, Sections 6001, 3008(h) and 3004(u) and (v) of RCRA, and Executive Order 12580, the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, and the Atomic Energy Act of 1954 (AEA), as amended, 42 U.S.C. § 2201; and

D. DOE enters into those portions of this Agreement that relate to response actions pursuant to Section 120(e)(2) of CERCLA/SARA, Sections 6001, 3004(u) and 3008(h) of RCRA, Executive Order 12580 and the AEA.

II. PARTIES

The parties to this Agreement are DOE and U.S. EPA (hereinafter "Parties"). The terms of this Agreement shall apply to and be binding upon the Parties and upon their successors and assigns. The undersigned representative of each of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to bind legally that party to it. DOE shall provide a copy of this Agreement to all contractors and subcontractors retained to perform work pursuant to this Agreement and to the present owner of any property upon which any work under this Agreement is performed, which is not owned by DOE or the United States.

III. SCOPE OF THE AGREEMENT

This Agreement covers all response actions at the St. Louis Airport Site, the HISS/FUTURA Site, the Mallinckrodt Chemical Works Site, and Vicinity Properties, as those terms are defined in this Agreement, involving the following types of materials:

1. All wastes, including but not limited to radiologically contaminated wastes, resulting from or associated with uranium manufacturing or processing activities conducted at the St. Louis Downtown Site, and

2. Other chemical or non-radiological wastes which have been mixed or commingled with radiologically contaminated wastes resulting from or associated with uranium manufacturing or processing activities conducted at the St. Louis Downtown Site.

IV. PURPOSE

A. The general purposes of this Agreement are to:

1. Ensure that the environmental impacts associated with past and present activities at the Site are thoroughly investigated and appropriate remedial action taken as necessary to protect the public health, welfare and the environment;

2. Establish a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at the Site in accordance with CERCLA/SARA, the NCP, Superfund guidance and policy, RCRA, RCRA guidance and policy; and,

3. Facilitate cooperation, exchange of information and participation of the Parties in such actions.

B. Specifically, the purposes of this Agreement are to:

1. Identify Operable Unit Remedial Action (OURA) alternatives which are appropriate at the Site prior to the implementation of final remedial action(s) for the Site. OURA alternatives shall be identified and proposed to the Parties as early as possible prior to formal proposal of OURAs to U.S. EPA pursuant to CERCLA/SARA. This process is designed to promote cooperation among the Parties in identifying OURA alternatives prior to selection of final OURAs.

2. Establish requirements for the performance of a Remedial Investigation to determine fully the nature and extent of the threat to the public health or welfare or the environment caused by the release and threatened release of hazardous substances, pollutants or contaminants at the Site and to establish requirements for the performance of a Feasibility Study for the Site to identify, evaluate, and select alternatives for the appropriate remedial action(s) to prevent, mitigate, or abate the release or threatened release of hazardous substances, pollutants or contaminants at the Site in accordance with CERCLA/SARA.

3. Identify the nature, objective and schedule of response actions to be taken at the Site. Response actions at the Site shall attain that degree of cleanup of hazardous substances, pollutants or contaminants mandated by CERCLA/SARA.

4. Implement the selected operable unit and final remedial action(s) in accordance with CERCLA.

5. Assure compliance with federal and state hazardous waste laws and regulations for matters covered by this agreement.

6. Provide for operation and maintenance of any remedial action selected and implemented pursuant to this Agreement.

V. DEFINITIONS

Except as otherwise explicitly stated herein, terms used in this Agreement which are defined in CERCLA shall have the meaning as defined in CERCLA. The following definitions shall apply for purposes of this Agreement:

A. "Agreement" means this Federal Facility Agreement, including all attachments to this Agreement.

B. "ARAR" or "Applicable or Relevant and Appropriate Requirement" shall mean "legally applicable" or "relevant and appropriate" standards, requirements, criteria or limitations as those terms are used in CERCLA Section 121(d), 42 U.S.C. § 9621(d).

C. "Authorized representative" means a person designated to act on behalf of a Party to this agreement, including, inter alia, contractors retained to perform work at or relating to the Site.

D. "CERCLA" means 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.

E. "Days" mean calendar days, unless business days are specified. Any Submittal, Written Notice of Position or written statement of dispute that, under the terms of this Agreement, would be due on a Saturday, Sunday or holiday shall be due on the next business day.

F. "DOE" means the United States Department of Energy, its employees and authorized representatives.

G. "Emergency removals" means a removal action taken because of an imminent and substantial endangerment to human health or the environment which requires implementation of a response action in such a timely manner that consultation with EPA would be impractical.

H. "Feasibility Study" or "FS" means that study which fully evaluates and develops remedial action alternatives to prevent or mitigate the migration or the release or threat of release of hazardous substances, pollutants or contaminants at and from the Site.

I. "Formerly Utilized Site Remedial Action Program" or "FUSRAP" means the Department of Energy program to develop, identify, clean up, or otherwise control sites containing residual radioactive materials from the early years of the United States' atomic energy program or from commercial operations that resulted in conditions Congress has authorized DOE to remedy.

J. "HISS/FUTURA Site" or the "9200 Latty Avenue Site" means the 11-acre property located at 9200 Latty Avenue, Hazelwood, Missouri, the location of which is shown on Attachment A to this Agreement.

K. "National Contingency Plan" or "NCP" means the implementing regulations for CERCLA found in Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300.

M. "ORNL" means Oak Ridge National Laboratory.

N. "Operable Unit" means any discrete element of the remedial action selected prior to selection of the final remedial action for the entire Site.

O. "pCi/gm" means picocurie per gram.

P. "Remedial Design" or "RD" means the technical analysis and procedures which follow the selection of a remedial action and which result in a detailed set of plans and specifications for implementation of the remedial action.

Q. "Remedial Investigation" or "RI" means that investigation conducted to fully determine the nature and extent of the release or threat of release of hazardous substances,

pollutants or contaminants and to gather necessary data to support the feasibility study and risk assessment.

R. "RCRA" means the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., as amended by the Hazardous and Solid Waste Amendments of 1984, Pub. L. 98-616.

S. "St. Louis Airport Site" or "SLAPS" means the area of 21.7 acres which lies immediately north of the Lambert-St. Louis International Airport and which is bounded by the Norfolk and Western Railroad and Banshee Road on the south, Coldwater Creek on the west, and McDonnell Boulevard and adjacent recreation fields on the north and east. The location of SLAPS is shown on Attachment A.

T. "St. Louis Downtown Site" is the forty-five acre (45) site located at 2nd and Mallinckrodt Streets, St. Louis, Missouri. The site is bounded by the Mississippi River on the East, Angelroot Street on the south, the McKinley Bridge on the north, and portions of North Broadway and 9th Street to the West.

U. "Site" or "on-site" means each of the following properties, as defined herein, either collectively or individually:

1. St. Louis Downtown Site;
2. St. Louis Airport Site;
3. 9200 Latty Avenue; and,
4. Vicinity properties.

V. "Submittal" means each document, report, schedule, deliverable, work plan or other item to be submitted to U.S. EPA pursuant to this Agreement.

W. "Timetables and Deadlines" means schedules as well as the work and those actions which are to be completed and performed in conjunction with such schedules, including performance of actions established pursuant to the dispute resolution procedures set forth in Part XXIII of this Agreement.

X. "U.S. EPA" or "EPA" means the United States Environmental Protection Agency, its employees and authorized representatives.

Y. "Vicinity Properties" mean those properties not included within the St. Louis Downtown Site, SLAPS, or HISS/FUTURA but which contain radiological or other contamination originating from these sites. Vicinity Properties do not include the West Lake Landfill.

Z. "Written Notice of Position" means a written statement by a Party of its position with respect to any matter about which any other Party may initiate dispute resolution pursuant to Part XXIII of this Agreement.

VI. STATUTORY COMPLIANCE/RCRA CERCLA INTEGRATION

A. The Parties intend to integrate DOE's CERCLA response obligations and RCRA corrective action obligations which relate to the release(s) of hazardous substances, hazardous wastes, pollutants or contaminants covered by this Agreement into this comprehensive Agreement. Therefore, the Parties intend that activities covered by this Agreement will be deemed to achieve compliance with CERCLA, 42 U.S.C. § 9601 et seq.; to satisfy corrective action requirements of section 3004(u) and (v) of RCRA, 42 U.S.C. §§ 6924(u) and (v), for a RCRA permit, and Section 3008(h), 42 U.S.C. § 6928(h), for interim status facilities; and to meet or exceed all applicable or relevant and appropriate Federal and State laws and regulations, to the extent required by Section 121 of CERCLA, 42 U.S.C. § 9621.

B. Based upon the foregoing, the Parties intend that any remedial action selected, implemented and completed under this Agreement will be protective of human health and the environment such that remediation of releases covered by this agreement shall obviate the need for further corrective action under RCRA. The Parties agree that with respect to releases of hazardous waste covered by this agreement, RCRA shall be considered an applicable or relevant and appropriate requirement pursuant to Section 121 of CERCLA.

C. If a permit is issued to DOE for on-going hazardous waste management activities at the Site, U.S. EPA shall reference and incorporate any appropriate provisions, including appropriate schedules (and the provision for extension of such schedules), of this Agreement into such permit. The Parties intend that the judicial review of any permit conditions which

reference this Agreement shall, to the extent authorized by law, only be reviewed under the provisions of CERCLA.

VII. FINDINGS AND CONCLUSIONS

The following facts form the basis of this Agreement.

A. General

1. During the 1940s and 1950s the Manhattan Engineering District (MED), and its immediate successor the Atomic Energy Commission (AEC), conducted several programs involving research, development, processing, and production of uranium and thorium and the storing of their processing residues. Nearly all of this work involved some participation by private contractors and/or institutions. Generally, privately-owned and institutionally-owned sites that became contaminated during this early period of the nuclear program, and have since been converted to other use, were decontaminated or stabilized in accordance with the guidelines and survey methods then in existence.

2. However, radiological guidelines have since become more stringent. As a result, the Department of Energy (DOE) initiated the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 with the singular mission of identifying, decontaminating, or otherwise controlling sites where low activity radioactive contamination (exceeding current guidelines) remains from the early years of the nation's atomic energy program or commercial operations causing conditions that Congress has authorized DOE to remedy.

3. DOE has authority under the Atomic Energy Act of 1954, as amended, to conduct remedial actions under the FUSRAP at 26 sites around the country. In addition to its authority under the Atomic Energy Act, the FY 1984 and FY 1985 Energy and Water Appropriations Acts (PL 98-50 and PL 98-360) and the appropriations acts for subsequent years, and accompanying Congressional Committee Reports, authorized DOE to reacquire the SLAPS property from the City of St. Louis for use as a permanent disposal site for contaminated materials currently at SLAPS and vicinity properties, and waste from the Hazelwood Interim Storage Site (HISS) in a manner acceptable to the City.

4. In 1942, under the jurisdiction of the U.S. Army, the Manhattan Engineer District (MED) was established as the agency responsible for the development of nuclear materials for national defense and security.

5. On December 31, 1946, MED was deactivated and its responsibilities were transferred to the newly constituted U.S. Atomic Energy Commission (AEC).

6. On January 19, 1975, the AEC was abolished and its programmatic responsibilities were transferred to the Energy Research and Development Administration (ERDA).

7. Pursuant to the Department of Energy (DOE) Organization Act of 1977, the functions and authority of the ERDA were transferred to DOE.

B. Origin of the Contamination

1. In August 1942, under contract to MED, the Destrehan Street Refinery and Metal Plant, which later became the Mallinckrodt Chemical Works, began production of uranium dioxide and trioxide from uranium ore.

2. Four plants containing approximately 60 buildings were in existence during the period when Mallinckrodt Chemical Works was under contract to MED. The Main Plant was used as a refinery for uranium trioxide (U3O8) feed and for development work on the processing of pitchblende until 1945, when these operations were ended.

3. A new refinery at Plant Number 6, located at 65 Destrehan Street, began operations in 1946 to process pitchblende ore and produce uranium dioxide.

4. Additional plants began performing AEC contract activities during 1950 and 1951 and were known as Plant Number 6E and Plant Number 7. Plant 6E produced uranium metal and Plant Number 7 produced green salt (UF4).

5. Plant Number 4 (presently Plant Number 10) was utilized for uranium processing until 1950. It was closed in 1956.

6. All AEC operations in downtown St. Louis were closed in 1957. Operations were then transferred to the new AEC feed material processing center located in Weldon Spring, Missouri, which Mallinckrodt operated for the AEC.

7. Between 1942 and 1957, more than 50,000 tons of natural uranium products were processed.

C. St. Louis Airport Site (SLAPS)

1. SLAPS occupies 21.7 acres north of the Lambert - St. Louis International Airport and is bordered by McDonnell Road on the north and east, Coldwater Creek on the west, and Norfolk - Western Railroad and Banshee Road on the south.

2. In 1946, MED acquired title to the SLAPS property to store residues from the processing of uranium ore at the Destrehan Street Refinery and Metals Plant.

3. At the SLAPS, pitchblende raffinate was stored on the ground and in the open; the radium-bearing residues (K-65) were stored in drums. Other wastes stored at SLAPS included:

a. Barium Sulfate cake residues (AJ-4);

b. Colorado raffinate residues (AM-10);

c. Used dolomite liner and recycled magnesium fluoride liner generated as slag;

d. Uranium-containing sand from Japan; and,

e. Scrap materials.

4. Most residues were stored on open ground at SLAPS. At one time, these residues covered the eastern two-thirds of the site and rose to 20 feet above ground level. The estimated volume of wastes at one time at SLAPS and associated vicinity properties ranged from 283,700 to 474,000 cubic yards.

5. Waste storage activities at SLAPS was operated by MED and, subsequently AEC, until 1953 when site operation was transferred to Mallinckrodt Chemical Works.

Mallinckrodt Chemical Works operated the SLAPS property under contract to AEC from 1953 until 1967.

6. In 1957, contaminated scrap metal and miscellaneous radioactive materials were buried in the western end of the property.

7. In 1965, the AEC conducted a waste inventory and radiological survey of SLAPS. Approximately 121,000 tons of uranium refinery residues and contaminated materials were identified on open ground at SLAPS.

8. In 1966 and 1967, most stored residues were sold for mineral recovery and transported by the purchaser to the Latty Avenue Site.

9. In 1969, the St. Louis Airport Authority initiated partial decontamination of SLAPS, during which remaining barium sulfate waste was transported to the Latty Avenue Site and all structures, except for a security fence, were razed and buried on-site. These structures consisted of an office building and three plant buildings, which had radioactive contamination. One to three feet of clean fill was placed on top of the buried wastes to control runoff and erosion and reduce radiation exposure rates.

10. In 1971, following completion of the partial decontamination by the St. Louis Airport Authority, AEC performed a topographical and radiological survey of SLAPS. Surface dose rates were found to be less than one milli-rad per hour (mrad/h), although uranium-238, radium-226, and thorium-230 were identified as buried onsite.

11. In 1973, AEC conveyed the SLAPS property by Quit Claim Deed to the St. Louis Airport Authority. Because radioactive materials remained on-site, the deed specified that the property could not be leased, sold, salvaged, disposed of, or used for any airport purposes without written consent from the Federal Aviation Administration.

12. In 1976 and 1978, DOE performed a radiological survey of SLAPS and found elevated radionuclide concentrations onsite and north of the site in ditches north and south of McDonnell Boulevard.

13. The contaminated ditches were designated for remedial action consideration under DOE's FUSRAP program to control low level radioactive contamination.

14. Soil contamination at SLAPS was found to range from background to 900 pCi/g uranium-238 and 1400 pCi/g radium 226. Contamination has also been found at vicinity properties, including an adjacent ball field, areas along McDonnell Boulevard, ditches north and south of SLAPS, portions of Banshee Road, and along Coldwater Creek.

15. In 1981 DOE initiated a two-year groundwater monitoring program at the SLAPS. Results indicate that radionuclides stored onsite are leaching into the groundwater. Uranium 238 was detected at significant levels with a maximum concentration of 2230 pCi/L.

16. In 1986, Bechtel National, Inc., under contract to DOE, conducted a radiological and limited chemical characterization survey at SLAPS to identify radionuclide concentrations, determine radionuclide distribution with depth and spatially, document hydrogeological properties of the site and determine the presence of any potentially hazardous chemical substances.

17. The 1986 Bechtel survey found radioactive contamination present at SLAPS in concentrations exceeding DOE guidelines and identified radioactive contamination as deep as 18 feet beneath the ground surface. Major contaminants were determined to be uranium-238, thorium-230, and radium-226. Concentrations of uranium-238, thorium-230, and radium-226 ranged up to 1600, 2600, and 5620 pCi/g, respectively. Metal concentrations exceeding background were identified at SLAPS. No total organic halogens were found, but three samples contained in excess of 1 percent total organic carbon.

18. SLAPS is located in an area of mixed industrial, commercial, and recreational uses. Approximately 3000 persons reside within one mile of the site.

19. SLAPS is currently owned by the St. Louis Airport Authority, is not occupied, and contains no structures other than a security fence.

D. 9200 Latty Avenue Site

1. The 11-acre Latty Avenue site is located at 9200 Latty Avenue, Hazelwood, Missouri. It is surrounded by commercial, light industries and transportation facilities. Approximately 2500 to 3000 people live within a one-mile radius of the site.

2. In April 1962, Contemporary Metals Corporation, which later became Continental Mining and Milling, purchased ore residues and uranium and radium process wastes being stored at SLAPS from AEC. In 1966, Continental Mining and Milling Company transported approximately 117,000 tons of these materials from SLAPS to their property at 9200 Latty Avenue. These radioactive materials consisted of 74,000 tons of Belgium Congo pitchblende raffinate, 32,500 tons of Colorado raffinate, 8,700 tons of leached barium sulfate cake, 1,500 tons of unleached barium sulfate cake and 350 tons of miscellaneous residues.

3. In 1967, Commercial Discount Corporation seized Continental Mining and Milling assets and sold and shipped 70,000 tons of these radioactive materials to Cotter Corporation in Canon City, Colorado.

4. Additional uranium residues were sold and shipped to Cotter Corporation in November 1970. As of December 1970, the only remaining materials at 9200 Latty Avenue were an estimated 10,000 tons of Colorado raffinate and 8,700 tons of leached barium sulfate.

5. In 1973, the remaining 10,000 tons of Colorado raffinate was shipped to Cotter Corporation.

6. The remaining barium sulfate was moved without authority to the West Lake Landfill in St. Louis County.

7. In June 1977, the buildings and grounds at 9200 Latty Avenue were purchased by Mr. E. Dean Jarboe. Mr. Jarboe currently also operates Futura Coatings, Inc. on the western portion of the site.

8. Radiological surveys conducted by the Nuclear Regulatory Commission (NRC) in 1976 indicated the presence of residual uranium and thorium concentrations in soil and

exposure levels at 9200 Latty Avenue exceeded NRC/DOE guidelines for release of land areas for unrestricted use.

9. In 1977, a follow-up radiological characterization of HISS/FUTURA was made by DOE prior to occupancy by the present owners. This survey disclosed uranium, thorium and radium in and around the building, as well as in the soil to a depth of 18 inches, at concentrations in excess of DOE guidelines for residual radionuclide concentrations in soil.

10. In August 1979, under NRC guidance, the owner of the property cleaned up the buildings and a 3.5 acre tract of land surrounding the building. Approximately 13,000 cubic yards of radioactive material were generated from this cleanup and were placed on the HISS/FUTURA to form the main storage pile (Figure 2 of the Attachment A).

11. In 1981, DOE surveyed the northern and eastern boundaries of the HISS/FUTURA and identified radiation levels above background in all areas, and elevated concentrations of

Uranium-238, Thorium-230 and Radium-226 in soil.

12. In 1984 DOE identified contamination of vicinity properties extending along Latty Avenue to Hazelwood Avenue, and from Coldwater Creek to Hanley Avenue.

13. Remedial action during 1984 removed an additional 14,000 cubic yards of contaminated soil from HISS/FUTURA and along Latty Avenue. This radioactively contaminated soil was also stored on HISS/FUTURA to form the secondary pile presently on the site.

14. Data from characterization work performed to date indicates that:

a. a large portion of the ground surface and subsurface soil as deep as 15 feet beneath the surface of the HISS/FUTURA site still remains radiologically contaminated in excess of DOE guidelines;

b. a majority of the HISS/FUTURA ground surface also remains radiologically contaminated in excess of DOE guidelines. Subsurface contamination ranges from 2-6 feet deep over the site;

c. migration of radiologically contaminated material offsite from the HISS/FUTURA has occurred via surface pathways; and,

d. the volume of contaminated and waste material on the Latty Avenue site is estimated to be 119,600 to 211,000 cubic yards.

E. NPL Status

1. On October 4, 1989, SLAPS, the HISS/FUTURA Site and some vicinity properties were included on the National Priorities List (NPL), 40 C.F.R. Part 300, Appendix B, developed pursuant to Section 105(a)(8)(B), 42 U.S.C. § 9605(a)(8)(B).

VIII. DETERMINATIONS

Based upon the foregoing findings and conclusions, the Parties have made the following determinations.

A. The Site is a facility within the meaning of Section 101(9) of CERCLA, 42 U.S.C. § 9601(9);

B. Radionuclides present at the Site include thorium-230, uranium-238 and radium-226, which are defined as hazardous air pollutants in Section 112 of the Clean Air Act and are therefore hazardous substances as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

C. The presence of radionuclides in the waste materials at the Site, in the underlying groundwater, in sediments from the nearby Coldwater Creek, and soil samples from the nearby roadways and recreational field constitute a release and threatened release of hazardous substances into the environment as defined at Section 101(22) of CERCLA, 42 U.S.C. § 9601(22);

D. Response actions addressed by this Agreement are, subject to consultation with and approval of EPA as provided in this Agreement, under the jurisdiction of DOE.

E. The actions required to be taken pursuant to this Agreement are necessary to protect the public health and welfare and the environment and are consistent with the National Contingency Plan; and,

F. The schedules established by this Agreement satisfy the requirements of Section 120(e) of CERCLA, 42 U.S.C. § 9620(e).

IX. AGREEMENT

It is hereby agreed by the Parties that DOE shall conduct each of the following activities in accordance with the schedule set forth in Part X hereof:

A. Remedial Investigation and Feasibility Study

1. DOE shall conduct a Remedial Investigation and Feasibility Study in accordance with the guidelines set forth in the document entitled "Guidance For Conducting Remedial Investigations and Feasibility Studies Under CERCLA", Interim Final U.S. EPA Publication (October 1988), or more recent version thereof as EPA shall make available to DOE during the course of the RI/FS. Any disagreement as to the appropriateness of using any such guidance which changes during the course of work in progress shall be resolved in accordance with the dispute resolution procedures of Part XXIII of this Agreement. The Remedial Investigation shall include, inter alia the design, and implementation of a monitoring program to define the extent and nature of soil contamination and ground water contamination at the Site and the extent and nature of releases of hazardous substances from the Site.

-2. DOE shall implement the previously approved RI and FS work plans in accordance with the schedule established in Part XI of this Agreement.

3. The RI shall be coordinated with the FS such that both activities are completed in a timely and cost effective manner.

B. Operable Unit Remedial Actions

1. In accordance with Part XI of this Agreement, DOE shall propose deadlines for the completion of Operable Unit Work Plans for any Operable Unit currently anticipated. These work plans shall be reviewed in accordance with Part X of this Agreement.

2. All Operable Units undertaken pursuant to this Agreement shall comply with all NCP requirements and EPA guidelines applicable to such actions.

3. All requirements for remedial action selection and implementation pursuant to this Agreement shall apply to the selection and implementation of Operable Unit remedial actions, including the preparation of an Operable Unit Feasibility Study and Record of Decision for all Operable Unit remedial actions.

C. Remedial Action Selection

1. At such time as a Feasibility Study report, including an Operable Unit Feasibility Study report, becomes final in accordance with Part X of this Agreement, DOE shall publish a Proposed Plan for public review and comment in accordance with Part XXXI.

2. Within ninety (90) days of completion of the public comment period on the proposed plan, DOE shall submit its proposed Record of Decision (ROD), including its response to all significant comments received from the public during the public comment period (Responsiveness Summary), to EPA. The proposed ROD and Responsiveness Summary shall be written in accordance with the guidance document entitled "The Proposed Plan and the Record of Decision," OSWER Directive No. 9355.3-02 (March 1988), or more recent version thereof as EPA shall make available to DOE. Any disagreement as to the appropriateness of using any such guidance which changes during the course of work in progress shall be resolved in accordance with the dispute resolution procedures of Part XXIII of this Agreement. The Administrator of EPA shall, in consultation with DOE pursuant to Part X, make the final selection of the remedial action for the Site. The remedial action selected by the Administrator shall be final and is not subject to dispute resolution under Part XXIII.

3. Within fifteen (15) months of receipt of written notice of final remedy selection by EPA, DOE shall commence substantial continuous physical onsite remedial action at the Site.

4. DOE shall implement the remedial action in accordance with the provisions, time schedule, standards and specifications set forth in this Agreement and the approved Remedial Action Work Plan.

5. DOE shall provide for public participation in accordance with Part XXXI prior to commencement of any remedial action.

D. Removal Actions

1. Any removal actions undertaken by DOE at the site shall be conducted in a manner consistent with CERCLA, the NCP, and EPA removal guidance, including provisions for timely notice and consultation with EPA.

2. For all removal actions except emergency removals, prior to undertaking the action, DOE shall advise EPA, in writing, as to the basis for the action, the nature of the action, the expected time period during which the action will be implemented, and the impact, if any on any remedial action contemplated at the Site. For emergency removals, DOE shall provide as much advance notice as the circumstances leading to the removal action allow.

3. Prior to the initiation of any removal action, which is not an emergency removal, DOE shall provide EPA adequate opportunity for timely review and comment on any such proposed removal action. Following consideration of EPA comments, DOE shall provide to EPA a written response to those comments, as soon as practicable. DOE determination as to the necessity for taking emergency removal action shall not be subject to Parts XXIII and XXIV of this agreement.

4. Upon completion of a removal action, DOE shall provide to EPA, in writing, notification of the completion of the removal action and a description of the action taken.

5. Designation of Operable Units for the purpose of selecting and implementing an Operable Unit remedial action shall not limit DOE's authority to conduct removal actions.

6. Nothing in this Agreement shall alter DOE's authority with respect to removal actions conducted pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604.

X. CONSULTATION WITH U.S. EPA

Review and Comment Process for Draft and Final Documents

A. Applicability

1. The provisions of this Part establish the procedures that shall be used by DOE and U.S. EPA to provide the Parties with appropriate notice, review, comment, and response to comments regarding RI/FS and RD/RA documents, specified herein as either primary or secondary documents. In accordance with Section 120 of CERCLA, DOE will normally be responsible for issuing primary and secondary documents to U.S. EPA. As of the effective date of this Agreement, all draft and final documents for any deliverable document identified herein shall be prepared, distributed and subject to dispute in accordance with Paragraphs B through J, below.

2. The designation of a document as "draft" or "final" is solely for purposes of consultation with U.S. EPA in accordance with this Part. Such designation does not affect the obligation of the Parties to issue documents, which may be referred to herein as "final", to the public for review and comment as appropriate and as required by law.

B. General Process for RI/FS and RD/RA Documents

1. Primary documents include those documents that are major, discrete portions of RI/FS or RD/RA activities. Primary documents are initially issued by DOE in draft subject to review and comment by U.S. EPA. Following receipt of comments on a particular draft primary document, DOE will respond to the comments received and issue a draft final primary document subject to dispute resolution. The draft final primary document will become the final primary document either 30 days after the period established for review of a draft final document if dispute resolution is not invoked or as modified by decision of the dispute resolution process.

2. Secondary documents include those documents that are discrete portions of the primary documents and are typically input or feeder documents. Secondary documents are issued by DOE in draft subject to review and comment by U.S. EPA. Although DOE will respond to comments received, the draft secondary documents may be finalized in the context of the

corresponding primary documents. A secondary document may be disputed at the time the corresponding draft final primary document is issued.

C. Primary Documents

1. DOE shall complete and transmit drafts of the following primary documents to U.S. EPA for review and comment in accordance with the provisions of this Part:

a. RI/FS Work Plan, including Sampling and Analysis Plan and QAPP;

b. Risk Assessment;

c. RI Report;

d. Initial Screening of Alternatives;

e. FS Report;

f. Proposed Plan;

g. Record of Decision;

h. Remedial Design;

i. Remedial Action Work Plan; and,

j. Community Relations Plan.

2. Only the draft final document for the primary documents identified above shall be subject to dispute resolution. DOE shall complete and transmit draft primary documents in accordance with the timetable and deadlines established in Part XI of this Agreement.

D. Secondary Documents

1. DOE shall complete and transmit draft documents for the following secondary documents to U.S. EPA for review and comment in accordance with the provisions of this Part:

a. Site Characterization Summary;

b. Detailed Analysis of Alternatives;

c. Post-screening Investigation Work Plan, if necessary;

e. Treatability Studies, if necessary;

f. Sampling and Data Results; and,

g. Data Quality Objectives.

2. Although U.S. EPA may comment on the draft documents for the secondary documents listed above, such documents shall not be subject to dispute resolution except as provided by Paragraph B hereof. Target dates shall be established for the completion and transmission of draft secondary documents pursuant to Part XI of this Agreement.

E. Meetings of the Project Managers on Development of Documents

The Project Managers shall meet approximately every 60 days, except as otherwise agreed by the Parties, to review and discuss the progress of work being performed at the Site on the primary and secondary documents. Prior to preparing any draft document specified in Paragraphs C and D above, the Project Managers shall meet to discuss the document results in an effort to reach a common understanding, to the maximum extent practicable, with respect to the results to be presented in the draft document.

F. Identification and Determination of Potential ARARs

1. For those primary documents or secondary documents that consist of or include ARAR determinations, prior to the issuance of a draft document, the Project Managers shall meet to identify and propose, to the best of their ability, all potential ARARs pertinent to the document being addressed. Draft ARAR determinations shall be prepared by DOE in accordance with Section 121(d)(2) of CERCLA, the NCP and pertinent guidance issued by U.S. EPA which is not inconsistent with CERCLA and the NCP.

2. In identifying potential ARARs, the Parties recognize that actual ARARs can be identified only on a site specific basis and that ARARs depend on the specific hazardous substances, pollutants and contaminants at a site, the particular actions proposed as a remedy and the characteristics of a site. The Parties recognize that ARAR identification is necessarily an iterative process and that potential ARARs must be reexamined throughout the RI/FS process until a ROD is issued.

G. Review and Comment on Draft Documents

1. DOE shall complete and transmit each draft primary document to U.S. EPA on or before the corresponding deadline established for the issuance of the document. DOE shall complete and transmit the draft secondary document in accordance with the target dates established for the issuance of such documents established pursuant to Part XI of this Agreement.

2. Unless the Parties mutually agree to another time period, all draft documents shall be subject to a 60-day period for review and comment. Review of any document by the U.S. EPA may concern all aspects of the document (including completeness) and should include, but is not limited to, technical evaluation of any aspect of the document, and consistency with CERCLA, the NCP and any pertinent guidance or policy issued by the U.S. EPA. Comments by the U.S. EPA shall be provided with adequate specificity so that DOE may respond to the comment and, if appropriate, make changes to the draft document. Comments shall refer to any pertinent sources of authority or references upon which the comments are based, and, upon request of DOE, the U.S. EPA shall provide a copy of the cited authority or reference. In cases involving complex or unusually lengthy documents, U.S. EPA may extend the 60-day comment period for an additional 20 days by written notice to DOE prior to the end of the 60-day period. On or before the close of the comment period, U.S. EPA shall transmit by next day mail their written comments to DOE.

3. Representatives of DOE shall make themselves readily available to U.S. EPA, through the Project Managers, during the comment period for purposes of informally responding to questions and comments on draft documents. Oral comments made during such discussions need not be the subject of a written response by DOE on the close of the comment period.

4. In commenting on a draft document which contains a proposed ARAR determination, U.S. EPA shall include a reasoned statement of whether they object to any portion of the proposed ARAR determination. To the extent that U.S. EPA does object, it shall explain the

basis for its objection in detail and shall identify any ARARs which it believes were not properly addressed in the proposed ARAR determination.

5. Following the close of the comment period for a draft document, DOE shall give full consideration to all written comments on the draft document submitted during the comment period. Within 60 days of the close of the comment period on a draft secondary document, DOE shall transmit to U.S. EPA its written response to comments received within the comment period. Within 60 days of the close of the comment period on a draft primary document, DOE shall transmit to U.S. EPA a draft final primary document, which shall include DOE's response to all written comments, received within the comment period. While the resulting draft final document shall be the responsibility of DOE, it shall be the product of consensus to the maximum extent possible.

6. DOE may extend the 60-day period for either responding to comments on a draft document or for issuing the draft final primary document for an additional 20 days by providing notice to U.S. EPA. In appropriate circumstances, this time period may be further extended in accordance with Part XXI hereof.

H. Availability of Dispute Resolution for Draft Final Primary Documents

1. Dispute resolution shall be available to the Parties for draft final primary documents as set forth in Part XXIII.

2. When dispute resolution is invoked on a draft primary document, work may be stopped in accordance with the procedures set forth in Part XXIII regarding dispute resolution.

I. Finalization of Documents

The draft final primary document shall serve as the final primary document if no party invokes dispute resolution regarding the document or, if invoked, at completion of the dispute resolution process should DOE's position be sustained. If DOE's determination is not sustained in the dispute resolution process, DOE shall prepare, within not more than 35 days, a revision of the draft final document which conforms to the results of dispute resolution. In appropriate

circumstances, the time period for this revision period may be extended in accordance with Part XXI hereof.

J. Subsequent Modifications of Final Documents

Following finalization of any primary document pursuant to Paragraph I, above, U.S. EPA or DOE may seek to modify the document, including seeking additional field work, pilot studies, computer modeling or other supporting technical work, only as provided in Paragraphs 1 and 2 below.

1. U.S. EPA or DOE may seek to modify a document after finalization if it determines, based on new information (i.e., information that became available, or conditions that became known, after the document was finalized) that the requested modification is necessary. U.S. EPA or DOE may seek such a modification by submitting a concise written request to the Project Manager of the other Party. The request shall specify the nature of the requested modification and how the request is based on new information.

2. In the event that a consensus is not reached by the Project Managers on the need for a modification, either U.S. EPA or DOE may invoke dispute resolution to determine if such modification shall be conducted. Modification of a document shall be required only upon a showing that:

a. the requested modification is based on significant new information, and

b. the requested modification could be of significant assistance in evaluating impacts on the public health or the environment, in evaluating the selection of remedial alternatives, or in protecting human health and the environment.

3. Nothing in this Subpart shall alter U.S. EPA's ability to request the performance of additional work pursuant to Part XII of this agreement (Additional Work) which does not constitute modification of a final document.

XI. DEADLINES

A. Within thirty (30) days of the effective date of this Agreement, DOE shall submit to EPA for review and approval a list of existing documents and prior actions taken at the Site which DOE contends satisfy, in whole or in part, the requirements of this Agreement. For each item on this list, DOE shall indicate which requirement or requirements of this Agreement it believes the item satisfies. EPA shall have sixty (60) days from receipt of this list for review and comment thereon. Any disagreement as to whether the item satisfies the requirements of this Agreement shall be resolved in accordance with the dispute resolution provisions of this Agreement.

B. Within forty-five (45) days of the effective date of this Agreement, DOE shall propose deadlines for completion of the following draft primary documents:

1. RI/FS Work Plan, including Sampling and Analysis Plan and QAPP;
2. Risk Assessment;
3. RI Report;
4. Initial Screening of Alternatives;
5. FS Report;
6. Proposed Plan;
7. Record of Decision; and
8. Community Relations Plan;.

Within thirty (30) days of receipt, EPA shall review and provide comments to DOE regarding the proposed deadlines. Within thirty (30) days following receipt of the comments DOE shall, as appropriate, make revisions and reissue the proposal. The Parties shall meet as necessary to discuss and finalize the proposed deadlines. If the Parties agree on proposed deadlines, the finalized deadlines shall be incorporated into the appropriate Work Plans. If the Parties fail to agree within thirty (30) days on the proposed deadlines, the matter shall immediately be submitted for dispute resolution pursuant to Part XXIII of this Agreement. The final deadlines established pursuant to this Paragraph shall be published by EPA.

C. Within thirty (30) days of issuance of the Record of Decision, DOE shall propose deadlines for completion of the following draft primary documents to EPA:

1. Remedial Design; and,

2. Remedial Action Work Plan

These deadlines shall be proposed, finalized and published utilizing the same procedures set forth in Paragraph B. above.

D. The deadlines set forth in this Part, or to be established as set forth in this Part, may be extended pursuant to Part XXI of this Agreement. The Parties recognize that one possible basis for extension of the deadlines for completion of the Remedial Investigation and Feasibility Study Reports is the identification of significant new Site conditions during the performance of the Remedial Investigation.

XII. ADDITIONAL WORK OR MODIFICATION TO WORK

A. In the event that the U.S. EPA determines that additional work or modification to work, including remedial investigatory work, is necessary to accomplish the objectives of this Agreement, notification shall be provided to DOE. DOE agrees, subject to the dispute resolution procedures set forth in Part XXIII, hereof, to implement all such work.

B. Except for minor field modifications, which are addressed in Paragraph XVIII.D., any additional work or modification to work determined to be necessary by DOE shall be proposed by DOE and will be reviewed and approved in accordance with Part X of this Agreement prior to initiating any work or modification to work.

C. Any additional work or modification to work approved pursuant to Subpart A or B shall be completed in accordance with the standards, specifications, and schedule determined or approved by U.S. EPA. If any additional work or modification to work will adversely affect work scheduled or will require significant revisions to an approved Work Plan, the U.S. EPA shall be notified immediately of the situation followed by a written explanation within ten (10) business days of the initial notification.

XIII. CREATION OF DANGER

In the event the U.S. EPA determines that activities conducted pursuant to this Agreement, or any other circumstances or activities, may present an imminent and substantial endangerment to the public health or welfare or the environment, the U.S. EPA may order DOE to stop further implementation of work under this Agreement for such period of time as necessary to abate the danger. Any disagreement as to the appropriateness of an order to stop work under this provision shall be subject to the dispute resolution provisions of Part XXIII of this Agreement. However, even if DOE invokes dispute resolution, DOE shall immediately comply with the stop work order and continue in compliance with the order either until it is lifted or the matter is resolved by dispute resolution. The U.S. EPA may direct DOE to stop further implementation of this Agreement for such period of time as needed to abate the danger.

XIV. REPORTING

A. Throughout the course of these activities, DOE shall submit to U.S. EPA quarterly progress reports, which shall include, at a minimum, the following:

1. A description of the actions completed during the quarter towards compliance with this Agreement;

2. A description of all actions scheduled for completion during the quarter which were not completed along with a statement indicating why such actions were not completed and an anticipated completion date;

3. Copies of all data and sampling and test results, including sample number, sample location, sample description, and either a map depicting sample location or, if such a map has previously been provided, a reference to the appropriate map and location on the map, which have passed the quality assurance and quality control standards, agreed to by the Parties to this Agreement, received by DOE during the quarter; and,

4. A description of the actions which are scheduled for the following quarter.

B. These quarterly reports shall be due on or before the thirtieth (30) day of the month following the quarter for which the report is submitted. During periods of extended field

activities (e.g., two (2) quarters or more), DOE shall provide monthly progress reports which will include the data identified above. These monthly reports shall be submitted by the tenth (10) day of each month following initial mobilization and revert to quarterly reporting the month following demobilization.

C. EPA reserves the right to make reasonable requests for raw data and all other laboratory deliverables at any time during the project.

XV. MONITORING AND QUALITY ASSURANCE

A. DOE shall use Quality Assurance, Quality Control (QA/QC) and chain-of-custody procedures during all field investigation, monitoring, sample collection, and laboratory analysis activities in accordance with U.S. EPA guidance.

B. DOE shall use the quality assurance, quality control, and chain of custody procedures specified in the Quality Assurance Project Plan as approved by U.S. EPA for all sample collection and analysis performed pursuant to this Agreement.

C. All laboratories analyzing samples pursuant to this Agreement shall perform, at DOE's expense, analyses of samples provided by U.S. EPA to demonstrate the quality of each such laboratory's analytical data.

D. DOE shall ensure that U.S. EPA representatives are allowed access, for auditing purposes, to all laboratories and personnel utilized by DOE for sample collection and analysis and other field work.

XVI. SAMPLING AND DATA/DOCUMENT AVAILABILITY

A. DOE shall make available to U.S. EPA quality-assured results of sampling, tests and other data collection obtained by it, or on its behalf, with respect to the implementation of this Agreement in accordance with the requirements of Part XIV (Reporting), hereof. Copies of all other documents pertaining to sampling, test results, and other data collection, including, inter alia, quality assurance documentation, shall be provided to EPA in a timely manner upon request by EPA.

B. At the request of U.S. EPA, DOE shall allow the Party making the request to collect split or duplicate samples of all samples collected pursuant to this Agreement. To the maximum extent practicable, DOE shall notify U.S. EPA at least twenty (20) business days prior to any sample collection. If it is not possible to provide twenty (20) business days advance notice, DOE shall provide as much notice as possible that samples will be collected. U.S. EPA shall make all quality-assured results available to DOE within thirty (30) days of receipt of such results.

XVII. CONFIDENTIAL BUSINESS INFORMATION

A. DOE may assert a business confidentiality claim covering all or part of the information submitted pursuant to this Agreement. Analytical data shall not be claimed as confidential by DOE. The information covered by such a claim will be disclosed by U.S. EPA only to the extent and by the procedures specified in 40 C.F.R. Part 2, Subpart B. Such a claim may be made by placing on or attaching to the information, at the time it is submitted to U.S. EPA, a cover sheet, stamped or typed legend or other suitable form of notice employing language such as "trade secret," "proprietary," or "company confidential." Allegedly confidential portions of otherwise nonconfidential documents should be clearly identified and may be submitted separately to facilitate identification and handling by U.S. EPA. If confidential treatment is sought only until a certain date or occurrence of a certain event, the notice should so state. If no such claim accompanies the information when it is received by U.S. EPA, it may be made available to the public without further notice to DOE. Information determined to be confidential by U.S. EPA pursuant to 40 C.F.R. Part 2 shall be afforded the protection specified therein.

B. Information, records, or other documents produced by DOE as classified within the meaning of and in conformance with the Atomic Energy Act of 1954, as amended, shall not be available to the public. In addition, these data, documents, records, or files which could otherwise be withheld pursuant to the Freedom of Information Act (FOIA), 5 U.S.C., Subsection 552(a), unless expressly authorized for release by the originating party, shall be handled in accordance with those regulations. Other affected persons (e.g., remedial action contractors, PRPs, etc.) may assert a confidentiality claim covering all or part of any information requested

under this Agreement. Such claims will be afforded the same protection pursuant to 40 C.F.R. Part 2 as provided by DOE.

XVIII. PROJECT MANAGERS

A. The following individuals are designated as the Project Manager for the respective party:

1. For U.S. EPA:

Gene Gunn
Waste Management Division
U.S. Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City, Kansas 66101
Telephone number FTS 276-7776 [(913) 551-7776]

2. For DOE:

Bob Atkin
Site Manager
Technical Services Division
U. S. Department of Energy
Oak Ridge Operations
P.O. Box 2001
Oak Ridge, Tennessee 37831-8723
Telephone number: FTS 626-1826 [(615) 576-1826]

B. All verbal notices and written documents, including, but not limited to written notices, reports, plans, and schedules, including schedules for inspections conducted by or on behalf of EPA, requested or required to be submitted pursuant to this Agreement shall be directed to the designated Project Managers. To the maximum extent possible, all communications between the Parties concerning the terms and conditions of this Agreement shall be directed through the Project Managers.

C. The U.S. EPA Project Manager and designee shall have the authority to:

1. take samples, request split samples of DOE samples and ensure that work is performed properly and pursuant to U.S. EPA protocols as well as pursuant to the Attachments and plans incorporated into this Agreement;

2. observe all activities performed pursuant to this agreement, take photographs and make such other reports on the progress of the work as the Project Manager deems appropriate;

3. review records, files and documents relevant to this agreement; and,

4. recommend and request minor field modifications to the work to be performed pursuant to this Agreement, or in techniques, procedures or design utilized in carrying out this Agreement, which are necessary to the completion of the project.

D. DOE Project Manager may recommend and request minor field modifications to the work to be performed pursuant to this Agreement, or in techniques, procedures or design utilized in carrying out this Agreement, which are necessary to the completion of the project. Any field modifications proposed under this Part by any Party must be approved orally by both Project Managers to be effective. If agreement cannot be reached on the proposed additional work or modification to work, dispute resolution as set forth in Part XXIII may be used in addition to this Part. Within ten (10) business days following a modification made pursuant to this Part, the Project Manager who requested the modification shall prepare a memorandum detailing the modification and the reasons therefore and shall provide or mail a copy of the memorandum to the other Project Manager.

E. The Project Manager for DOE or his authorized designated representative shall be physically present on the Site or reasonably available to supervise work performed at the Site during implementation of the work performed pursuant to this Agreement and shall make himself available to U.S. EPA for the pendency of this Agreement. The U.S. EPA Project Manager need not be present at the Site and his absence from the Site shall not be cause for work stoppage.

F. Either Party may change its designated project manager by providing written notice to the other Party of the change.

XIX. ACCESS

A. DOE shall provide access to U.S. EPA to all property upon which any activities are being conducted or have been conducted pursuant to this Agreement such that U.S. EPA and its Authorized Representatives are able to enter and move freely about such property at all reasonable times for the purposes related to activities conducted pursuant to this Agreement, including, inter alia, the following:

1. Inspecting and copying records, files, photographs, operating logs, contracts and other documents relating to this response action;

2. Reviewing the status of activities being conducted pursuant to this Agreement;

3. Collecting such samples or conducting such tests as U.S. EPA determines are necessary or desirable to monitor compliance with the terms of this Agreement or to protect the public health, welfare, or the environment;

4. Using sound, optical or other types of recording equipment to record activities which have been or are being conducted pursuant to this Agreement; and,

5. Verifying data and other information submitted by DOE pursuant to this Agreement.

B. DOE shall advise EPA as to any areas on the Site which it has designated as restricted access, based upon worker health and safety considerations. For those portions of the Site which have been so designated as of the effective date of this Agreement, DOE shall notify EPA, in writing, within thirty (30) days of the effective date of this Agreement. For any portions of the Site which are so designated after the effective date of the Agreement, DOE shall notify EPA verbally at the time of an inspection as to any designations since the prior inspection and, in writing, within ten days of the designation.

C. DOE may provide an escort to accompany EPA during any inspections conducted by EPA pursuant to this Agreement. DOE agrees to provide and EPA agrees to have its inspectors attend a safety briefing for EPA inspectors prior to the EPA inspectors' conducting an inspection within any portions of the Site designated as limited access pursuant to Paragraph XIX.B., above,

without a DOE escort. This safety briefing shall only be required once for each inspector and shall be of approximately 2 hours duration.

D. Within thirty (30) days of the effective date of this Agreement DOE shall provide U.S. EPA a listing of all properties, including a description of the property and the name and address of the owner and any lessees of the property, to which access is required to perform any activities under this agreement but which is not owned or leased by DOE. DOE shall use all available authorities, including authorities under Section 104(e) of CERCLA, to obtain access necessary to conduct activities under this Agreement. Access shall be obtained to these properties in time so as not to have lack of access delay completion of any activity performed under this Agreement.

E. With respect to property not owned or leased by DOE, upon which monitoring wells, pumping wells, treatment facilities or other response actions are to be located, the access agreements shall also provide that no conveyance of title, easement, or other interest in the property shall be consummated without provisions for the continued operation of such wells, treatment facilities, or other response actions on the property. The access agreements shall also provide that the owners of any site or of any property where monitoring wells, pumping wells, treatment facilities or other response actions are located shall notify DOE and the U.S. EPA by certified mail, at least thirty (30) days prior to any conveyance, of the property owner's intent to convey any interest in the property and of the provisions made for the continued operation of the monitoring wells, treatment facilities, or other response actions installed pursuant to this Agreement.

F. In the event DOE is unable to obtain voluntary access in a timely manner, it shall notify U.S. EPA as to the steps being taken to secure such access.

XX. RECORD PRESERVATION

DOE shall, without regard to any document retention policy to the contrary, preserve during the pendency of this Agreement and for a minimum of ten (10) years after its termination, all records and documents in its possession, custody or control which relate in any

way to hazardous substances generated, stored, treated or disposed of on the site, the release or threatened release of hazardous substances from the site or work performed pursuant to this Agreement. After this ten-year period has lapsed, DOE shall notify U.S. EPA at least sixty (60) calendar days prior to the destruction of any such document. DOE shall, as directed by U.S. EPA, either provide to U.S. EPA the documents or copies of such documents or retain them for an additional time period specified by U.S. EPA.

XXI. EXTENSIONS

A. Either a timetable and deadline or a schedule shall be extended upon receipt of a timely request for extension and when good cause exists for the requested extension. Any request for extension by either Party shall be submitted in writing and shall specify:

1. The timetable and deadline or the schedule that is sought to be extended;

2. The length of the extension sought;

3. The good cause(s) for the extension; and,

4. Any related timetable and deadline or schedule that would be affected if the extension were granted.

B. Good cause exists for an extension when sought in regard to:

1. An event of Force Majeure;

2. A delay caused by another party's failure to meet any requirement of this agreement;

3. A delay caused by the good faith invocation of dispute resolution or the initiation of judicial action;

4. A delay caused, or which is likely to be caused, by the grant of an extension in regard to another timetable and deadline or schedule; and,

5. Any other event or series of events mutually agreed to by the Parties as constituting good cause.

C. Absent agreement of the Parties with respect to the existence of good cause, DOE may seek and obtain a determination through the dispute resolution process that good cause exists.

D. Within seven days of receipt of a request for an extension of a timetable and deadline or a schedule, U.S. EPA shall advise DOE in writing of its respective position on the request. Any failure by U.S. EPA to respond within the seven-day period shall be deemed to constitute concurrence in the request for extension. If U.S. EPA does not concur in the requested extension, it shall include in its statement of nonconcurrence an explanation of the basis for its position.

E. If there is consensus among the Parties that the requested extension is warranted, the affected timetable and deadline or schedule shall be extended accordingly. If there is no consensus among the Parties as to whether all or part of the requested extension is warranted, the timetable and deadline or schedule shall not be extended except in accordance with determination resulting from the dispute resolution process.

F. Within seven days of receipt of a statement of nonconcurrence with the requested extension, DOE may invoke dispute resolution.

G. A timely and good faith request for an extension shall toll any assessment of stipulated penalties or application for judicial enforcement of the affected timetable and deadline or schedule until a decision is reached on whether the requested extension will be approved. If dispute resolution is invoked and the requested extension is denied, stipulated penalties may be assessed and may accrue from the date of the original timetable, deadline or schedule. Following the grant of an extension, an assessment of stipulated penalties or an application for judicial enforcement may be sought only to compel compliance with the timetable and deadline or schedule as most recently extended.

XXII. FORCE MAJEURE

A Force Majeure shall mean any event arising from causes beyond the control of a Party that causes a delay in or prevents the performance of any obligation under this Agreement, including, but not limited to, acts of God; fire; war; insurrection; civil disturbance; explosion; unanticipated breakage or accident to machinery, equipment or lines of pipe despite reasonably diligent maintenance; adverse weather conditions that could not be reasonably anticipated; unusual delay in transportation; restraint by court order or order of public authority;

inability to obtain, at reasonable cost and after exercise of reasonable diligence, any necessary authorizations, approvals, permits or licenses due to action or inaction of any governmental agency or authority other than DOE; delays caused by compliance with applicable statutes or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence; and, insufficient availability of appropriated funds, if DOE shall have made timely request for such funds as part of the budgetary process as set forth in Part XXXIV (Funding) of this Agreement. A Force Majeure shall also include any strike or other labor dispute, whether or not within the control of the Parties affected thereby. Force Majeure shall not include increased costs or expenses of Response Actions, whether or not anticipated at the time such Response Actions were initiated.

XXIII. RESOLUTION OF DISPUTES

A. Except as specifically set forth elsewhere in this Agreement, if a dispute arises under this Agreement, the procedures of this Part shall apply. All Parties to this Agreement shall make reasonable efforts to informally resolve disputes at the Project Manager or immediate supervisor level. If resolution cannot be achieved informally, the procedures of this Part shall be implemented to resolve a dispute.

B. Within thirty (30) days after: (1) the period established for review of a draft final primary document pursuant to Part X of this Agreement, or (2) any action which leads to or generates a dispute, the disputing Party shall submit to the other Parties a written statement of dispute setting forth the nature of the dispute, the work affected by the dispute, the disputing Party's position with respect to the dispute and the information the disputing Party is relying upon to support its position.

C. Prior to any Party's issuance of a written statement of dispute, the disputing Party shall engage the other Party in informal dispute resolution among the Project Managers and/or their immediate supervisors. During this informal dispute resolution period the Parties shall meet as many times as are necessary to discuss and attempt resolution of the dispute.

D. If an agreement cannot be reached on any issue within the informal dispute resolution period, the Disputing Party shall forward the written statement of dispute to the Dispute Resolution Committee (DRC), thereby elevating the dispute to the DRC for resolution.

E. The DRC will serve as a forum for resolution of disputes for which agreement has not been reached through informal dispute resolution. The Parties shall each designate one individual and an alternate to serve on the DRC. The individuals designated to serve on the DRC shall be employed at the policy level (SES or equivalent) or be delegated the authority to participate on the DRC for the purposes of dispute resolution under this Agreement. The U.S. EPA representative on the DRC is the Waste Management Division Director of U.S. EPA's Region VII. DOE's designated member is the DOE Oak Ridge Operations Technical Services Division Director. Written notice of any delegation of authority from a Party's designated representative on the DRC shall be provided to the other Party pursuant to the procedures of Part XVIII (Project Managers).

F. Following elevation of a dispute to the DRC, the DRC shall have twenty-one (21) days to unanimously resolve the dispute and issue a written decision. If the DRC is unable to unanimously resolve the dispute within this twenty-one (21) day period the written statement of dispute shall be forwarded to the Senior Executive Committee (SEC) for resolution.

G. The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. The U.S. EPA representative on the SEC is the Regional Administrator of U.S. EPA's Region VII. DOE's representative on the SEC is the DOE Oak Ridge Operations Manager. The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a written decision. If unanimous resolution of the dispute is not reached within twenty-one (21) days, U.S. EPA's Regional Administrator shall issue a written position on the dispute. DOE may, within twenty-one (21) days of the Regional Administrator's issuance of U.S. EPA's position, issue a written notice elevating the dispute to the Administrator of U.S. EPA for resolution in accordance with all applicable laws and procedures. In the event that DOE elects not to elevate the dispute to the Administrator within

the designated twenty-one (21) day escalation period, DOE shall be deemed to have agreed with the Regional Administrator's written position with respect to the dispute.

H. Upon escalation of a dispute to the Administrator of U.S. EPA pursuant to Subpart G, the Administrator will review and resolve the dispute within twenty-one (21) days. Upon request, and prior to resolving the dispute, the U.S. EPA Administrator shall meet and confer with the Secretary of DOE to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide DOE with a written final decision setting forth resolution of the dispute.

I. The pendency of any dispute under this Part shall not affect DOE's responsibility for timely performance of the work required by this Agreement, except that the time period for completion of work affected by such dispute shall be extended for a period of time usually not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein. All elements of the work required by this Agreement which are not affected by the dispute shall continue and be completed in accordance with the applicable schedule.

J. When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Superfund Branch Chief for U.S. EPA's Region VII requests, in writing that work related to the dispute be stopped because, in the U.S. EPA's opinion, such work is inadequate or defective, and such inadequacy or defect is likely to yield an adverse effect on human health or the environment, or is likely to have a substantial adverse effect on the remedy selection or implementation process. To the extent possible, U.S. EPA shall give DOE prior notification that a work stoppage request is forthcoming. After stoppage of work, if DOE believes that the work stoppage is inappropriate or may have potential significant adverse impacts, DOE may meet with the Branch Chief to discuss the work stoppage. Following this meeting, and further consideration of the issues, the Branch Chief will issue, in writing, a final decision with respect to the work stoppage. The final written decision of the Branch Chief may immediately be subjected to formal dispute resolution. Such dispute may be brought directly to either the DRC or the SEC, at the discretion of DOE.

K. Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in this Part, DOE shall incorporate the resolution and final determination into the appropriate plan, schedule or procedures and proceed to implement this Agreement according to the amended plan, schedule or procedures.

L. Resolution of a dispute pursuant to this Part of the Agreement constitutes a final resolution of any dispute arising under this Agreement. DOE shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Part of this Agreement.

XXIV. STIPULATED PENALTIES

A. In the event that DOE fails to submit a primary document to U.S. EPA pursuant to the appropriate timetable or deadline in accordance with the requirements of this Agreement, or fails to comply with a term or condition of this Agreement which relates to an interim or final remedial action, U.S. EPA may assess a stipulated penalty against DOE. A stipulated penalty may be assessed in an amount not to exceed $5,000 for the first week (or part thereof), and $10,000 for each additional week (or part thereof) for which a failure set forth in this Paragraph occurs.

B. Upon determining that DOE has failed in a manner set forth in Paragraph A, U.S. EPA shall so notify DOE in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, DOE shall have fifteen (15) days after receipt of the notice to invoke dispute resolution on the question of whether the failure did in fact occur. DOE shall not be liable for the stipulated penalty assessed by U.S. EPA if the failure is determined, through the dispute resolution process, not to have occurred. No assessment of a stipulated penalty shall be final until the conclusion of dispute resolution procedures related to the assessment of the stipulated penalty.

C. The annual reports required by Section 120(e)(5) of CERCLA shall include, with respect to each final assessment of a stipulated penalty against DOE under this Agreement, each of the following:

1. The facility responsible for the failure;

2. A statement of the facts and circumstances giving rise to the failure;

3. A statement of any administrative or other corrective action taken at the relevant facility, or a statement of why such measures were determined to be inappropriate;

4. A statement of any additional action taken by or at the facility to prevent recurrence of the same type of failure; and,

5. The total dollar amount of the stipulated penalty assessed for the particular failure.

D. Stipulated penalties assessed pursuant to this Part shall be payable to the Hazardous Substances Response Trust Fund from funds authorized and appropriated for that specific purpose.

E. In no event shall this Part give rise to a stipulated penalty in excess of the amount set forth in Section 109 of CERCLA.

F. This Part shall not affect DOE's ability to obtain an extension of a timetable, deadline or schedule pursuant to Part XXI of this Agreement.

G. Nothing in this Agreement shall be construed to render any officer or employee of DOE personally liable for the payment of any stipulated penalty assessed pursuant to this Part.

XXV. OTHER APPLICABLE LAWS

A. Except as otherwise provided in Part XXVIII, below, with regard to permits, all actions required to be taken pursuant to this Agreement shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations, including, but not limited to, any permitting or licensing requirements.

B. All reports, plans, specifications, and schedules submitted pursuant to this Agreement are, upon approval by EPA, incorporated into this Agreement. Any noncompliance with the such approved reports, plans, specifications, or schedules shall be considered a failure to achieve compliance with the requirements of this Agreement.

XXVI. RESERVATION OF RIGHTS

A. In consideration for DOE's compliance with this Agreement, and based on the information known to the Parties on the effective date of this Agreement, EPA and DOE agree that, except as provided below, compliance with this Agreement shall stand in lieu of any administrative, legal and equitable remedies against DOE available to EPA regarding currently known releases or threatened releases of hazardous substances, including hazardous wastes, pollutants or contaminants, at the Site which are within the scope of this Agreement, which are the subject of the RI/FS(s) to be conducted pursuant to this Agreement and which will be adequately addressed by the remedial action(s) provided for under this Agreement. However, nothing in this Agreement shall preclude EPA from exercising any administrative, legal, or equitable remedies available to it in the event that:

1. Either conditions previously unknown or undetected by EPA arise or are discovered at the Site or EPA receives information not previously available concerning the premises it employed in reaching this Agreement; and

2. The implementation of the requirements of this Agreement are no longer protective of public health and the environment.

B. Notwithstanding compliance with the terms of this Agreement, DOE is not released from liability, if any, for any actions beyond the terms of this Agreement with respect to the Site. With respect to actions beyond the terms of this Agreement, EPA reserves the right to take any enforcement action pursuant to RCRA, CERCLA and/or any other available legal authority for relief including, but not limited to, injunctive relief, monetary penalties, and punitive damages for any violation of law.

C. EPA reserves the right to undertake response action(s) to address the release or threat of release of hazardous substances from the Site at any time and to seek reimbursement from DOE thereafter for such costs incurred.

XXVII. OTHER CLAIMS

A. Nothing in this Agreement shall constitute or be construed as a bar or release from any claim, cause of action or demand in law or equity by or against any person, firm, partnership or corporation not a signatory to this Agreement for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the Site.

B. The U.S. EPA shall not be held as a party to any contract entered into by DOE to implement the requirements of this Agreement.

C. This Agreement shall not restrict U.S. EPA from taking any legal or response action for any matter not specifically part of the work covered by this Agreement.

D. Nothing in this Agreement shall be considered an admission by any Party with respect to any claim(s) by a person not a party to this Agreement, other than in a proceeding specified in Part XXXIII (Enforceability) of this Agreement, or with respect to any unrelated claim(s) by a Party.

XXVIII. PERMITS

A. As provided in Section 121(e)(1) of CERCLA, 42 U.S.C. § 9621(e)(1), no Federal, State, or local permit shall be required for those portions of the response actions undertaken pursuant to this Agreement which are conducted entirely onsite. Such onsite response actions must satisfy all applicable or relevant and appropriate Federal and state standards, requirements, criteria, or limitations which would have been included in any such permit. For each response action proposed by DOE which in the absence of 121(e)(1) of CERCLA would require a permit, DOE shall include the following information in the Feasibility Study Report, for remedial actions, or the Engineering Evaluation, for removal actions:

1. The identity of each permit which would otherwise be required;

2. The standards, requirements, criteria, or limitations which would have had to have been met to obtain each such permit; and,

3. A description of how the proposed response action will meet the standards, requirements, criteria or limitations which would be included in each such permit.

B. DOE shall make timely and complete application or request for all permits, licenses or other authorizations necessary to implement those portions of any response actions required by this Agreement which are not conducted entirely onsite. Each work plan shall identify each such permit, license or authorization addressed therein by providing the following information:

1. The agency or instrumentality from whom the permit, license or authorization must be sought and the agency or instrumentality which would grant or issue the permit, license or authorization if not the same as the one from which it must be sought;

2. The activity which would be the subject of the permit, license or authorization; and,

3. A description of the procedure to be followed in securing such permit, license or authorization, including the date by which an application must be filed and the anticipated duration of the permit, license or authorization.

C. If a permit which is necessary for implementation of this Agreement is not issued, or is issued or renewed in a manner which is materially inconsistent with the requirements of this Agreement, DOE shall notify EPA in writing of its intention to propose modifications to this Agreement to obtain conformance with the permit (or lack thereof). Notification by DOE of its intention to propose modifications shall be submitted within fifteen (15) calendar days of receipt by it of notification that: (1) a permit will not be issued; (2) a permit has been issued or reissued; or, (3) a final determination with respect to any appeal related to the issuance of a permit has been entered. Within sixty (60) days from the date it submits its notice of intention to propose modifications, DOE shall submit to the EPA its proposed modifications to this Agreement with an explanation of its reasons in support thereof. Such proposed modifications to this Agreement will be reviewed in accordance with Part XXXV of this Agreement.

D. If DOE submits proposed modifications prior to a final determination of any appeal taken on a permit needed to implement this Agreement, EPA may elect to delay review of the proposed modifications until after such final determination is entered.

E. During any appeal of any permit required to implement this Agreement or during review of any of DOE's proposed modifications as provided in Subpart D, above, DOE shall continue to implement those portions of this Agreement which can be reasonably implemented pending final resolution of the permit issue(s).

F. Except as otherwise provided in this Agreement DOE shall comply with applicable State and Federal hazardous waste management requirements at the site.

XXIX. FIVE YEAR REVIEW

If a remedy is selected for the Site which results in any hazardous substances, pollutants or contaminants remaining at the Site, EPA shall, consistent with Section 121(c) of CERCLA, review the remedial action no less often than each five years after the initiation of the remedial action to assure that human health and the environment are being protected by the remedial action being implemented. If upon such review it is the judgment of EPA that additional action or modification of the remedial action is appropriate in accordance with Section 104 or 106 of CERCLA, EPA shall seek modification of the work pursuant to Paragraph X.J. or Part XII, or both, as appropriate.

XXX. PUBLIC PARTICIPATION

A. DOE shall develop and implement a Community Relations Plan (CRP) which responds to the need for an interactive relationship with all interested community elements, regarding activities and elements of work undertaken by DOE. DOE agrees to develop and implement the CRP in a manner consistent with Section 117 of CERCLA, the NCP, U.S. EPA guidelines set forth in U.S. EPA's Community Relations Handbook, and any modifications thereto.

B. In accordance with Section 117 of CERCLA, 42 U.S.C. § 9617, before adoption of any plan for remedial action pursuant to this Agreement, DOE shall:

1. Publish in a local newspaper or newspapers of general circulation a notice and brief analysis of the proposed plan, including an explanation of the proposed plan and alternatives considered;

2. Make such plan available to the public; and,

3. Provide a reasonable opportunity for submission of written and oral comments and an opportunity for a public meeting at or near the facility regarding the proposed plan and any proposed findings under Section 121(d)(4) of CERCLA, 42 U.S.C. § 9621(d)(4).

C. Before commencement of any remedial action, DOE shall publish a notice of the final remedial action plan adopted and shall make available to the public the plan, a discussion of any significant changes and the reasons for the changes in the proposed plan, and a response to each significant comment, criticism, and new data submitted during the public comment on the proposed plan.

D. If the remedial action taken differs in any significant respects from the final plan which was adopted, DOE shall publish an explanation of the significant differences and the reasons such changes were made.

E. To the maximum extent practicable, prior to issuing a formal press release to the media regarding any of the work required by this Agreement, a Party shall advise the other Party of the press release and its contents.

F. DOE agrees it shall establish and maintain an administrative record at or near the Site in accordance with Section 113(k) of CERCLA. The administrative record shall be established and maintained in accordance with current and future U.S. EPA policy and guidelines. A copy of each document placed in the administrative record will be provided to the U.S. EPA. The administrative record developed by DOE shall be routinely updated and copies of documents included within the Administrative Record shall be supplied to U.S. EPA on at least a quarterly basis. DOE shall maintain a current index of the documents in the administrative record and shall provide U.S. EPA copies of the current index along with each update of the administrative record.

G. DOE shall follow the public participation requirements of CERCLA Section 113(k) and comply with any guidance and/or regulations promulgated by U.S. EPA with respect to such Section.

XXXI. PUBLIC COMMENT

A. Within fifteen (15) days of the date of the acceptance of this Agreement, U.S. EPA shall announce the availability of this Agreement to the public for review and comment. U.S. EPA shall accept comments from the public for a period of thirty (30) days after such announcement. At the end of the comment period, U.S. EPA shall review all such comments and shall either:

1. Determine that the Agreement should be made effective in its present form, in which case DOE shall be so notified in writing, and the Agreement shall become effective on the date said notice is issued; or,

2. Determine that modification of the Agreement is necessary, in which case DOE will be forwarded a revised Agreement which includes all required changes to the Agreement.

B. In the event of significant revision or public comment, notice procedures of Sections 117 and 211 of SARA shall be followed and a responsiveness summary shall be published by the U.S. EPA.

C. In the event that modification of the Agreement is determined by U.S. EPA to be necessary pursuant to Paragraph A(2) above, within twenty (20) days of receipt of the revised Agreement, DOE reserves the right to withdraw from the Agreement. If DOE does not provide U.S. EPA with written notice of withdrawal from the Agreement within such twenty (20) day period, the Agreement, as modified, shall automatically become effective on the twenty-first (21) day, and U.S. EPA shall issue a notice to DOE to that effect.

XXXII. ENFORCEABILITY

A. The Parties agree that:

1. Upon the effective date of this Agreement, any standard, regulation, condition, requirement or order which has become effective under CERCLA and is incorporated into this

Agreement is enforceable by any person pursuant to Section 310 of CERCLA, and any violation of such standard, regulation, condition, requirement or order will be subject to civil penalties under Sections 310(c) and 109 of CERCLA; and,

2. all timetables or deadlines associated with the RI/FS shall be enforceable by any person pursuant to Section 310 of CERCLA, and any violation of such timetables or deadlines will be subject to civil penalties under Sections 310(c) and 109 of CERCLA;

3. all terms and conditions of this Agreement which relate to interim or final remedial actions, including corresponding timetables, deadlines or schedules, and all work associated with the interim or final remedial actions, shall be enforceable by any person pursuant to Section 310(c) of CERCLA, and any violation of such terms or conditions will be subject to civil penalties under Sections 310(c) and 109 of CERCLA; and,

4. Any final resolution of a dispute pursuant to Part XXIII of this Agreement which establishes a term, condition, timetable, deadline or schedule shall be enforceable by any person pursuant to Section 310(c) of CERCLA, and any violation of such term, condition, timetable, deadline or schedule will be subject to civil penalties under Sections 310(c) and 109 of CERCLA.

B. Nothing in this Agreement shall be construed as authorizing any person to seek judicial review of any action or work where review is barred by any provision of CERCLA, including Section 113(h) of CERCLA.

C. The Parties agree that all Parties shall have the right to enforce the terms of this Agreement.

XXXIII. FUNDING

A. It is the expectation of the Parties to this Agreement that all obligations of DOE arising under this Agreement will be fully funded. DOE shall take all necessary steps and use its best efforts to obtain timely funding to meet its obligations under this Agreement.

B. DOE is preparing an Environmental Restoration and Waste Management Plan (5-Year Plan) which will identify, integrate and prioritize compliance and cleanup activities at all DOE

facilities and sites, and provide a consistent basis for DOE to address environmental requirements and develop and support its budget requests. The 5-Year Plan will be updated annually to incorporate any changes that occur in the program, including changes due to the following factors: the availability of Congressional funding; the completion or modification of Federal Facility Agreements; application of a national prioritization system to environmental restoration and waste management activities conducted under the 5-Year Plan; conditions determined as the result of assessment and characterization activities at DOE facilities and sites; and new or amended regulatory requirements.

C. The activities and related milestones in the Five Year Plan shall be consistent with the provisions, including requirements and schedules, of this Agreement; it is the intent of DOE that the Five-Year Plan be drafted to insure that the provisions of this Agreement are incorporated into the DOE planning and budget process. Nothing in the 5-Year Plan shall be construed to affect the provisions of this Agreement. However, in the event that application of the 5-Year Plan's national prioritization system results in a proposed implementation schedule for environmental restoration and waste management activities that is different than schedules developed pursuant to this Agreement, DOE may request, in writing, amendment to this Agreement or the extension of deadlines established by this Agreement. Where necessary, DOE may invoke the appropriate dispute resolution provisions of this Agreement. Pending resolution of any dispute, the schedules developed pursuant to this Agreement shall remain enforceable in accordance with the terms hereof. Any amendments to this Agreement will be incorporated, as necessary, in the annual updates of the Five-Year Plan.

D. Any requirement for the payment or obligation of funds, including stipulated penalties, by DOE established by the terms of this Agreement shall be subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established requiring the payment or obligation of such funds shall be appropriately adjusted.

If appropriated funds are not available to fulfill DOE's obligations under this Agreement, U.S. EPA reserves the right to initiate any other action which would be appropriate absent this Agreement.

E. The Parties recognize that U.S. EPA must possess adequate resources to meet its commitments established by this Agreement. So that activities to be performed pursuant to this Agreement may proceed, U.S. EPA agrees to reprogram existing FY90 resources to fulfill its FY90 commitments established by this Agreement. The Parties agree that during FY90, the Parties will explore any possible alternatives which may be available to ensure that adequate resources are available to U.S. EPA to fulfill its commitments established by this Agreement.

F. Notwithstanding any other provision of this Agreement, in the event that U.S. EPA determines that adequate resources are not available to meet any post-FY90 commitments established by this Agreement, U.S. EPA may terminate this Agreement by written notice to DOE.

G. U.S. EPA reserves any rights it may have to seek or obtain reimbursement of any funds expended by U.S. EPA at the Site to the extent authorized by CERCLA; nothing herein shall prejudice U.S. EPA's ability to exercise any right to reimbursement provided by CERCLA.

XXXIV. AMENDMENT OF THE AGREEMENT

This Agreement may be amended by a written agreement of both Parties. No such amendment shall be final until signed by both Parties.

XXXV. TERMINATION

At such time as DOE believes it has completed all work required by this Agreement, except for the continuing obligations under Part XX (Record Preservation), DOE shall notify EPA, in writing, and request EPA's concurrence that the Agreement be terminated. If EPA agrees that all work required by this Agreement, except for the continuing obligations of Part XX, have been completed, it will so notify DOE, in writing. If EPA does not agree, it will advise DOE, in writing, as to the work which remains to be completed. The provisions of this Agreement shall be deemed satisfied and terminated upon receipt by DOE of written notice from U.S. EPA that

DOE has demonstrated, to the satisfaction of the U.S. EPA, that all the terms of this Agreement, except for the continuing obligations of Part XX, have been completed.

XXXVI. EFFECTIVE DATE

This Agreement is effective upon issuance of a notice to DOE by U.S. EPA following implementation of Section XXXII, above, of this Agreement.

IN WITNESS WHEREOF, the Parties have affixed their signatures below:

For the United States Department of Energy:

Joe LaGrone
Manager, Oak Ridge Operations
U.S. Department of Energy
Oak Ridge, Tennessee

June 21, 1990
Date

For the United States Environmental Protection Agency, Region VII:

Morris Kay
Regional Administrator
United States Environmental
Protection Agency
Region VII
Kansas City, Kansas

6-26-90
Date