EM U.S. Department of Energy
Office Of Environmental Management

Savannah River Site Federal Facility Agreement Under Section 120 of CERCLA, January 15, 1993

The United States Environmental Protection Agency Region
IV
and
The United States Department of Energy
and
The South Carolina
Department of Health and Environmental Control

IN THE MATTER OF:	)	
	)	FEDERAL FACILITY
The U. S. Department	)	AGREEMENT
of Energy's	)	UNDER SECTION 120 of CERCLA
SAVANNAH RIVER SITE	)	AND SECTIONS 3008(h) AND
	)	6001 of RCRA
	)	
	)	Administrative
	)	Docket No: 89-05-FF

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

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Introduction

This Agreement directs the comprehensive remediation of the Savannah River Site (SRS). It contains requirements for (1) site investigation, and remediation of releases and potential releases of hazardous substances, and (2) interim status corrective action for releases of hazardous wastes or hazardous constituents. This Agreement delineates the relationship between its requirements and the requirements for corrective measures being conducted under Sections 3004(u) and 3004(v) according to the conditions of the SRS's Federal Resource Conservation and Recovery Act (RCRA) permit and the State's Hazardous Waste permit. It expands the site investigation process begun at the SRS under the RCRA permit to address (1) releases at or from units not included in the RCRA permit, and (2) releases of hazardous or radioactive substances or both not regulated by the RCRA permit. This Agreement also establishes requirements for the prevention and mitigation of releases or potential releases at or SRS high-level radioactive waste tank system(s) identified in Appendix B to this Agreement.

This Agreement governs the corrective/remedial action process from site investigation through site remediation and describes procedures for the Parties to set annual work priorities (including schedules and deadlines) for that process. The Parties will coordinate the administrative and public participation processes prescribed by the various statutes (e.g., RCRA and CERCLA) governing the corrective/remedial action process at the SRS.

This Agreement also consists of Appendices A through H. In the event of any inconsistency between this Agreement and its Appendices, this Agreement shall govern unless and until modified under Section XLIII (Modification of Agreement) of this Agreement.

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I. Jurisdiction

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

1. The U. S. Environmental Protection Agency (EPA) 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 of 1980 (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) and the RCRA Facility Investigation/Corrective Measures Study (RFI/CMS) pursuant to Sections 3008(h) and 6001 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6928(h) and 6961, as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) (hereinafter jointly referred to as RCRA) and Executive Order 12580;

2. The EPA enters into those portions of this Agreement that relate to operable units and final corrective/remedial actions pursuant to Section 120(e)(2) of CERCLA, Sections 3008(h) and 6001 of RCRA and Executive Order 12580:

3. The Department of Energy (DOE) enters into those portions of this Agreement that relate to the RFI/RI and CMS/FS pursuant to Section 120(e)(1) of CERCLA, Sections 3008(h) and 6001 of RCRA, Executive Order 12580, the National Environmental Policy Act, 42 U.S.C. § 4321, and the Atomic Energy Act of 1954 (AEA), as amended, 42 U.S.C. § 2011;

4. The DOE enters into those portions of this Agreement that relate to operable units and final corrective/remedial actions pursuant to Section 120(e)(2) of CERCLA, Sections 3008(h) and 6001 of RCRA, Executive Order 12580, and the AEA;

5. The DOE will take all necessary actions in order to fully effectuate the terms of this Agreement, including undertaking response actions at the Savannah River Site in accordance with Federal and State applicable or relevant and appropriate laws, standards, limitations, criteria, and requirements to the extent consistent with CERCLA.

6. The South Carolina Department of Health and Environmental Control (SCDHEC) enters into this Agreement pursuant to Sections 120(f) and 121(f) of CERCLA, the South Carolina Hazardous Waste Management Act, S.C. Code Ann., Section 44-56-10, *et seq.*, and the Pollution Control Act, S.C. Code Ann., Section 48-1-10, *et seq.* (1985), S.C. Code Ann., Section 48-43-510, *et seq.* (1985), and regulations promulgated thereto.

B. The National Priorities List (NPL) is promulgated under Section 105 of CERCLA, 42 U.S.C. § 9605 and at 40 CFR Part 300. The Savannah River Site has been included by EPA on the Federal Agency Hazardous Waste Compliance Docket established under Section 120 of CERCLA, 42 U.S.C. § 9620, 52 Federal Register 4280, (February 12, 1988). The EPA proposed the Savannah River Site for inclusion on the NPL in Update Nine to the NPL published on July 14, 1989 at 54 Federal Register 29820. The EPA finalized the Savannah River Site on the NPL on November 21, 1989 at 54 Federal Register 48184, which became effective on December 21, 1989. The Parties intend that this Agreement shall satisfy the requirements of Section 120 of CERCLA, 42 U.S.C. § 9620, for the Savannah River Site.

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II. Definitions

Except as provided below or otherwise explicitly stated herein, the definitions provided in CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR Part 300 (hereinafter the National Contingency Plan or NCP), and RCRA shall control the meaning of the terms used in this Agreement. This Agreement references documents required by the DOE's RCRA permit. Appendix A to this Agreement identifies those documents and their CERCLA counterparts. Any references to the documents or terms identified in Appendix A shall also include the corresponding RCRA or CERCLA documents.

In addition, the following definitions are used for purposes of this Agreement. If any of the following terms are amended by revisions to the NCP after the effective date of this Agreement, the revised NCP definition shall control the meaning of that term.

A. "Additional Work" shall mean any work agreed upon by the Parties under Section XXI (Additional Work) to this Agreement.

B. "Atomic Energy Act" (AEA) shall mean the Atomic Energy Act of 1954, as amended, 42 U.S.C. §§ 2011, *et seq.*

C. "Ancillary Equipment" shall mean any device including, but not limited to, such devices as piping,

fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal on-site, or to a point of shipment for disposal off-site.

D. "Agreement" shall mean this document and shall include all Appendices to this document referred to herein. All such Appendices shall be appended to and made an enforceable part of this Agreement.

E. "Applicable State Laws" shall include, but not be limited to, all laws determined to be applicable or relevant and appropriate requirements (ARARs) as described in Section 121(d) of CERCLA, 42 U.S.C. § 9621(d). It is recognized that in some instances in which this phrase is used, there may be no applicable State laws.

F. "ARAR(s)" shall mean "legally applicable" or "relevant and appropriate" laws, standards, requirements, criteria, or limitations as those terms are used in Section 121(d) of CERCLA, 42 U.S.C. § 9621(d).

G. "Authorized Representatives" shall mean a Party's employees, agents, successors, assigns, and contractors acting in any capacity, including an advisory capacity, when so designated by that Party.

H. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. §§ 9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499.

I. "Component" shall mean either the tank or ancillary equipment of a tank system.

J. "Corrective Action" shall mean those actions necessary to correct releases to all media from all solid waste management units at RCRA facilities. Corrective action consists primarily of four steps: the RCRA Facility Assessment the RCRA Facility Investigation, the Corrective Measures Study, and Corrective Measures Implementation.

K. "Corrective Measures Implementation" (CMI) shall mean the design, construction, operation, maintenance, and monitoring of selected corrective measures.

L. "Corrective Measures Study(s)" (CMSs) shall mean the study or report identifying and recommending, as appropriate, specific corrective measures that will correct the release(s) identified during the RCRA Facility Investigation. The CMS shall include a corrective/remedial action plan(s), as appropriate.

M. "Days" shall mean calendar days, unless business days are specified. Any submittal 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 following business day.

N. "DOE" shall mean the United States Department of Energy and its authorized representatives.

O. "Revision.0 Primary Document" shall mean the first version of a report issued by the DOE for any primary document listed in Section XXII.C.1. (Review/Comment on Documents) and submitted to EPA and SCDHEC for review and comment under Section XXII (Review/Comment on Documents) of this Agreement.

P. "Revision.1 Primary Document" shall mean the revised version of a report issued by the DOE for any primary document listed in Section XXII.C.1. (Review/Comment on Documents) after receipt of comments from the EPA and SCDHEC under Section XXII (Review/Comment on Documents). A Revision.1 primary document may be subject to the dispute resolution procedures of Section XXVII (Resolution of Disputes) of this Agreement.

Q. "EPA" shall mean the United States Environmental Protection Agency and its authorized representatives.

R. "Feasibility Study(s)" (FSs) shall mean a study that fully evaluates and develops remedial action alternatives to prevent and/or mitigate the migration of the release of hazardous substances, pollutants, or contaminants at and from the site.

S. "Hazardous Constituent(s)" shall mean those substances listed in Appendix VIII to 40 CFR Part 261 and includes hazardous constituents released from solid waste and hazardous constituents that are reaction by-products.

T. "Hazardous Substances" shall have the meaning set forth by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

U. "Hazardous Waste(s)" shall have the meaning set forth by Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), 40 CFR Parts 260 and 261, S.C. Code Ann., Section 44-56-20(6), 25 S.C. Code Ann. R. 61-79, Sections 260 and 261, and R. 61-66, Section VII.

V. "Hazardous Waste Management Act" (HWMA) shall mean the South Carolina Hazardous Waste Management Act, S.C. Code Ann. §§ 44-56-10, *et seq.* (Sups. 1988).

W. "Interim Measures" shall mean those measures conducted in accordance with Part II.H. of the DOE's RCRA permit to contain, remove, or treat contamination resulting from the release of hazardous constituents from solid waste management units in order to protect human health and the environment. Such measures may be conducted concurrently with operable units under this Agreement.

X. "Leak" shall mean, for the purposes of Section IX only, the escape of a hazardous substance from primary or secondary containment as detected by leak detection methods approved by SCDHEC under this Agreement or by any other means.

Y. "National Contingency Plan" (NCP) shall mean the National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR Part 300, and any amendments thereto.

Z. "National Priorities List (NPL) Site" (site) shall mean the site as finally promulgated at 40 CFR Part 300.

AA. "On-site" shall mean the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action, 40 CFR Section 300.400(e).

BB. "Operable Unit" shall mean a discrete action that comprises an incremental step toward

comprehensively addressing site problems. This discrete portion of a remedial response manages migration, or eliminates or mitigates a release, threat of release, or pathway of exposure. The remediation of a site can be divided into a number of operable units, depending on the complexity of the problems associated with the site. Operable units may address geographic portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site. Operable units will not impede implementation of subsequent actions, including final action at the site.

CC. "Parties" shall mean all parties who are signatories to this Agreement.

DD. "Pollution Control Act" (PCA) shall mean the South Carolina Pollution Control Act, S.C. Code Ann. §§ 48-1-10, *et seq.* (Supp. 1988).

EE. "Project Manager(s)" shall mean the officials designated by EPA, DOE, and SCDHEC to coordinate, monitor, or direct corrective/remedial response actions at the site.

FF. "Proposed Plan(s)" shall mean the report(s) describing the corrective/remedial action(s) recommended for the site, Section 117(a) of CERCLA, 42 U.S.C. § 9617.

GG. "Quality Assured Data" shall mean data that have undergone quality assurance as set forth in the approved Quality Assurance Plan.

HH. "Radioactive Mixed Waste(s) or Mixed Waste(s)" shall mean wastes that contain both hazardous components subject to RCRA and radioactive components subject to the Atomic Energy Act of 1954, as amended.

II. "RCRA" shall mean 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.

JJ. "RCRA closure and post-closure care" shall mean closure and post-closure care of hazardous waste management units under 40 CFR Parts 264 and 265 or the State of South Carolina's corresponding regulations.

KK. "RCRA Facility Assessment(s)" (RFAs) shall mean the assessment(s) performed under RCRA to identify actual and potential releases from RCRA regulated units and other solid waste management units at the Savannah River Site.

LL. "RCRA Facility Investigation(s)" (RFIs) shall mean the investigation(s) performed in accordance with the RCRA permit to gather data sufficient to fully characterize the nature, extent and rate of migration of actual and potential contaminant releases identified in the RFA(s).

MM. "Record(s) of Decision" (RODs) shall mean the document(s) issued as the final corrective/remedial action plan for the site (or any operable unit) pursuant to Section 117(b) of CERCLA, 42 U.S.C. § 9617.

NN. "Release" shall mean any spilling, leaking, pumping, pouring, emitting, emptying, discarding, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes 1) any release which results in

exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such person, 2) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine, 3) release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the AEA, if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under Section 170 of the AEA, or, for the purposes of Section 104 of CERCLA or any other response action, any release of source byproduct, or special nuclear material from any processing site designated under Section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978, and 4) the normal application of fertilizer, and 5) the releases of petroleum as excluded under Section 101(14) and (33) of CERCLA, 42 U.S.C. § 9001(14) and (33).

OO. "Remedial Action(s)" (RAs) shall mean the implementation of the RA Work Plan and the RD consistent with the NCP and the Superfund Remedial Design and Remedial Action Guidance (EPA) including on-site construction, treatment processes, removals, and any other tasks necessary.

PP. "Remedial Action Work Plan(s)" shall mean the report describing the implementation of the corrective/remedial action selected for remediation of the site.

QQ. "Remedial Design(s)" (RDs) shall mean the technical analysis and procedures which follow the selection of remedy and result in a detailed set of plans and specifications for implementation of the corrective/remedial action.

RR. "Remedial Investigation(s)" (RIs) shall mean an investigation conducted to fully assess 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 corresponding feasibility study.

SS. "Removal Action" shall have the same meaning as "remove" or "removal" as defined in Section 101(23) of CERCLA, 42 U.S.C. § 9601(23).

TT. "Respond or Response" shall have the meaning set forth in Section 1()1(25) of CERCLA, 42 U.S.C. § 9601(25).

UU. "Site" shall have the same meaning as "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9). This definition is not intended to limit CERCLA, RCRA, or any other federal response authorities or South Carolina authorities.

VV. "Solid Waste(s)" shall have the meaning set forth by Section 1004(27) of RCRA, 42 U.S.C. § 6903(27), 40 CFR Part 261, and in 25 S.C. Code Ann. R. 61-79, Section 261.

WW. "Solid Waste Management Units" (SWMUs) shall mean those units subject to applicable RCRA corrective action requirements, identified by EPA and SCDHEC, either presently or in the future, as requiring further investigation. The SWMUs at SRS are identified along with Operable Units in the RCRA/CERCLA Units List of Appendix C. This Appendix may be revised by agreement of the Parties. The DOE may consolidate SWMUs or other areas or both into single groupings for purposes of conducting any work under this Agreement and with the concurrence of the EPA and SCDHEC.

XX. "SCDHEC" shall mean the South Carolina Department of Health and Environmental Control and its authorized representatives.

YY. "Tank System(s)" shall mean those tanks, including their associated ancillary equipment and containment systems, listed or otherwise identified in Appendix B to this Agreement. This Appendix may be revised by agreement of the Parties.

ZZ. "Timetables and Deadlines" shall mean schedules as well as that work and those actions that are to be completed and performed in conjunction with such schedules, including performances of actions established pursuant to Section XX (Timetables and Deadlines), Section XXI (Additional Work), and Section XXVII (Resolution of Disputes) of this Agreement.

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III. Purpose of Agreement

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 that appropriate corrective/remedial action is taken as necessary to protect the public health and welfare and the environment;

2. Ensure that all releases of hazardous substances, pollutants or contaminants as defined by CERCLA and all releases of hazardous wastes or hazardous constituents as defined by RCRA are addressed so as to achieve a comprehensive remediation of the site;

3. Prevent, mitigate, or abate releases or threatened releases of hazardous substances from high-level radioactive waste tank systems prior to final corrective/remedial action at the site;

4. Establish a procedural framework and schedule for developing, implementing, and monitoring appropriate response actions at the site in accordance with CERCLA, the NCP, RCRA, and in accordance with applicable South Carolina law;

5. Facilitate cooperation, exchange of information and participation of the Parties, and provide for effective public participation;

6. Minimize the duplication of investigative and analytical work, and documentation, and ensure the quality of data management;

7. Ensure that corrective/remedial action(s) at the site will be in compliance with ARARs;

8. Expedite response actions with a minimum of delay;

9. Establish a basis for a determination that the DOE has completed the RI/FS(s), remedial design (s) and remedial action(s) at the site pursuant to CERCLA and applicable South Carolina laws;

10. Integrate response actions under CERCLA and this Agreement with RFI(s)/CMS(s) and corrective measures now being conducted under RCRA and applicable South Carolina laws; and

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

1. Identify operable units which are candidates for investigation and possible corrective/remedial action at the site;

2. Establish requirements for the performance of an RFI/RI(s) to determine fully the nature and extent of the threat to the public health or welfare or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at the site;

3. Establish requirements for the performance of an CMS/FS(s) for the site to identify, evaluate, and select alternatives for the appropriate corrective/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 and in compliance with ARARs identified pursuant to this Agreement;

4. 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 remediation of hazardous substances, pollutants or contaminants mandated by CERCLA and in compliance with ARARs identified pursuant to this Agreement;

5. Implement the selected operable unit(s) and final corrective/remedial action(s) in accordance with CERCLA and in compliance with ARARs identified pursuant to this Agreement;

6. Establish requirements for the SRS high-level radioactive waste tank system(s) identified in Appendix B to this Agreement to ensure structural integrity, containment and detection of releases, and source control pending final corrective/remedial action at the site;

7. Meet the requirements of Section 120(e)(2) of CERCLA, 42 U.S.C. § 9620(e)(2), for an interagency agreement between the Parties;

8. Provide for continued operation and maintenance following implementation of the selected corrective/remedial action(s);

9. Assure compliance with Federal and State hazardous waste laws and regulations for matters covered by this Agreement;

10. Expedite remediation of the site to the extent necessary to protect human health and welfare and the environment;

11. Provide for State involvement in the initiation, development, selection, and enforcement of corrective/remedial actions to be undertaken at the site, including the review of all applicable data as it becomes available and the development of studies, reports, and action plans; and to identify and integrate State ARARs in accordance with CERCLA.

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IV. RCRA/CERCLA Integration

A. The Parties intend to integrate the DOE's CERCLA response obligations with the corrective measures required by its current RCRA permit. The Parties intend that the response actions under this

Agreement, together with the corrective measures under the RCRA permit, achieve comprehensive remediation of releases and threatened releases of hazardous substances, hazardous wastes, hazardous constituents, pollutants or contaminants at or from the site. Thus, response actions under CERCLA will address releases of radionuclides and other hazardous substances not presently addressed in the RCRA permit. 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 the corrective action requirements of Section 3008(h) of RCRA; 42 U.S.C. § 6928(h), for interim status facilities; to satisfy the investigation and corrective action requirements of §§ 3004(u) and (v) of RCRA, 42 U.S.C. §§ 6924(u) and (v); 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. The documents common to RCRA and CERCLA and a flowchart for their submittal is provided in Appendix A to this Agreement.

B. This Agreement expands the RCRA Facility Assessments and Investigations presently under way at the SRS with investigations of (1) releases at or from units not included in the RCRA permit and (2) releases of hazardous and/or radioactive substances not regulated by the DOE's RCRA permit. The Parties intend to integrate and combine these assessments, investigations, and other response actions at the site. The Parties intend to combine the administrative records and files developed for activities under the RCRA permit and response actions under this Agreement in order to facilitate public participation in the selection of RCRA/CERCLA response actions and to ensure comprehensive remediation of the site. The Parties intend to integrate the procedures for the selection of response action(s) under this Agreement with the administrative procedures for the modification of the DOE's RCRA permit. The Parties intend to modify the DOE's RCRA permit to incorporate the remedial actions under this Agreement as corrective measures, when appropriate to satisfy Sections 3004(u) and (v) of RCRA, 42 U.S.C. §§ 6924(u) and (v) DOE shall submit necessary requests for permit modification to EPA and SCDHEC. The Parties agree that with respect to releases of hazardous waste or hazardous constituents from facilities that are or were authorized to operate under Section 3005(e) of RCRA, 42 U.S.C. § 6925(e) that are covered by this Agreement, that RCRA shall be considered one of the applicable or relevant and appropriate requirements pursuant to Section 121 of CERCLA, 42 U.S.C. § 9621.

C. Notwithstanding any provisions of this Agreement, any challenges to response actions selected or implemented under Sections 104, 106, or 120 of CERCLA, 42 U.S.C. §§ 9604, 9606, or 9620, may be brought only as provided in Section 113 of CERCLA, 42 U.S.C. § 9613.

D. Subject to Subsection F below, SCDHEC decisions for SRS units which SCDHEC has regulatory authority, and which SCDHEC has issued RCRA hazardous waste permits or which have interim status pursuant to S.C. Code R. 61-79.270, shall not be subject to Section XXVII (Resolution of Disputes) of this Agreement. As new units achieve interim status pursuant to S.C. Code R. 61-79.270 or as SCDHEC issues new hazardous waste permits, Appendix H shall be revised by SCDHEC accordingly.

E. DOE will address all releases at SRS units listed in Appendix H pursuant to the Memorandum of Agreement, dated April 8, 1985, entered into between DOE and SCDHEC. To satisfy CERCLA requirements, DOE will also submit to EPA and SCDHEC Proposed Plans and RODs according to the requirements of Section XV (Proposed Plans/Records of Decision) for units listed in Appendix H which have released hazardous substances.

F. It is the intent of EPA and SCDHEC that remedial actions approved or directed by either

regulatory agency at SRS not be incompatible with other actions approved or directed by either regulatory agency under this Agreement. Nothing in this Agreement shall restrict EPA or SCDHEC regulatory authority, EPA reserves its authorities pursuant to Section 122(e)(6) of CERCLA and DOE reserves all rights and defenses it would have absent the Agreement and as provided for in Subsection B of Section XLIV.

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V. Stipulated Facts

For purposes of this Agreement only, the following constitutes a summary of facts by the EPA and SCDHEC upon which this Agreement is based.

A. The DOE owns and operates the SRS. The SRS produces plutonium, tritium, and other special nuclear materials for national defense, for other governmental uses, and for civilian uses. The SRS is the nation's primary source of reactor-produced nuclear defense materials. Construction of the SRS began in 1951. The SRS is located near Aiken, South Carolina, and is approximately twenty-five (25) miles southeast of Augusta, Georgia. The SRS encompasses approximately three hundred (300) square miles.

B. In March 1979, the SRS discontinued operation of seven (7) chemical, metal, and pesticide disposal pits. In 1984, under the approval and supervision of the State of South Carolina, the SRS excavated these pits and removed contaminated material. Additional groundwater monitoring wells were installed.

C. On December 19, 1979, pursuant to the State of South Carolina's regulations, the SRS notified the SCDHEC of SRS's hazardous waste management activities. The SRS submitted a copy of its notification to the EPA.

D. In August 1980, pursuant to Section 3010 of RCRA, 42 U.S.C. § 6910, the SRS notified EPA of SRS's hazardous waste management activities and submitted a copy of the notification to the SCDHEC.

E. On September 29, 1980, the SRS submitted "Part A" of its hazardous waste management permit application to the SCDHEC and EPA. Since that time, the SRS has modified its "Part A" to include new units or modifications to existing units. The SRS submitted "Part B" of its permit application on February 11, 1985.

F. In February 1984, the SRS began groundwater corrective/remedial action by the use of an air stripper at the SRS M-Area.

G. On May 8, 1984, the SRS prepared an assessment of its waste disposal sites and groundwater impacts (Technical Summary Groundwater Quality Protection Program at Savannah River Plant).

H. On May 31, 1984, the DOE notified the EPA of potential CERCLA sites at DOE facilities, including the SRS.

I. On January 7, 1987, the SRS submitted to EPA a document entitled, "Waste Management Units - Savannah River Plant," which contained a listing of solid waste management units (SWMUs) on the

SRS. The SWMUs list is revised annually and provided to EPA and SCDHEC.

J. On September 30, 1987, the SCDHEC and EPA issued a RCRA permit for the SRS. The Federal RCRA permit requires the SRS to initiate RFIs for listed SWMUs under the authority of RCRA Sections 3004(u) and (v). The State Hazardous Waste permit contains similar conditions under Section 44-5610, *et seq.*, of the Hazardous Waste Management Act. The list of SWMUs was revised on May 30, 1990, to include a total of eighty-one (81) SWMUs.

K. On October 16, 1987, the SRS submitted to EPA draft Hazard Ranking System (HRS) scores and supporting information for sixty-six (66) potential sites on the SRS. On April 28, 1988, the SRS submitted to EPA its Preliminary Assessments for these sites.

L. In December 1987, the SRS published its final environmental impact statement (EIS), entitled, "Waste Management Activities for Groundwater Protection: Savannah River Plant; Aiken, South Carolina." The purpose of the EIS was to identify and select a waste management strategy for the treatment, storage, and disposal of hazardous, radioactive, and mixed wastes.

M. On May 2, 1988, the SRS submitted an RFI Program Plan to EPA and SCDHEC pursuant to its RCRA permit. On September 6, 1989, EPA conditionally approved the RFI Program Plan.

N. On July 14, 1989, EPA proposed the SRS for inclusion on the NPL at 40 CFR Part 300 (54 Federal Register 29820).

O. On November 21, 1989, EPA finalized the SRS on the NPL at 40 CFR Part 300 (54 Federal Register 48184), which became effective on December 21, 1989.

P. The SRS is engaged in the generation, treatment, storage, and disposal of hazardous wastes as defined in RCRA, 42 U.S.C. §§ 6901, *et seq.*, and as defined in the HWMA, S.C. Code Ann. §§ 44-56-10, *et seq.* (Supp 1988).

Q. The SRS releases, has released, and threatens to release hazardous substances, pollutants or contaminants into the environment, as defined in CERCLA, 42 U.S.C. §§ 9601, *et seq.*

R. Hazardous constituents, as defined by RCRA, and hazardous substances as defined by CERCLA, are present in the environment at the SRS.

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VI. Stipulated Determinations

For the purposes of this Agreement only, the following constitute the determinations by EPA and SCDHEC upon which this Agreement is based.

A. The SRS is an installation which includes facilities within the meaning of Section 101(9) of CERCLA, 42 U.S.C. § 9601(9) and 25 S.C. Code Ann. R. 61-70.260.10. The SRS is a facility authorized to operate under Sections 3005 and 3005(e) of RCRA, 42 U.S.C. §§ 6925 and 6925(e). The SRS is a facility authorized to operate under State permits and has interim status to conduct certain activities.

B. The SRS, for the purposes of this Agreement, is a Federal installation listed on the Federal Agency Hazardous Waste Compliance Docket pursuant to CERCLA Section 120. The SRS is subject to and shall comply with, CERCLA, RCRA, and applicable South Carolina laws in the same manner and to the same extent, both procedurally and substantively, as any nongovernmental entity, including liability under Section 107 of CERCLA. 42 U.S.C. § 9607.

C. In September 1987, the EPA issued a permit under Section 3005 of RCRA, 42 U.S.C. § 6925(c), to DOE to require it to determine whether there have been any releases of hazardous waste or hazardous constituents from solid waste management units on the SRS and to take appropriate corrective action for any such releases. This permit, in conjunction with the Hazardous Waste Permit issued by the State of South Carolina on September 30, 1987, constitutes the RCRA permit for the SRS. The SRS has treatment, storage, or disposal utility that remain under "interim status" pending incorporation into the existing RCRA permit. Under a June 1, 1988, Consent Decree (NRDC *et al.* vs. Herrington *et al.* CA # 1:85-2583-6, D.C.S.C. 1988), the SRS has agreed to close the Metallurgical Laboratory Basin (and associated Carolina Bay) and the 904-74G, -75G, -78G, and -80G Acid/Caustic Basins, and the Mixed Waste Management Facility under provisions of RCRA. The SRS also agreed to address the Savannah River Laboratory Seepage Basins and the new TNX Basin as outlined in the provisions of the Consent Decree.

D. Hazardous substances and pollutants or contaminants and solid wastes, hazardous wastes, and hazardous constituents within the meaning of Sections 101(14), 101(33) and 104(a)(2) of CERCLA, 42 U.S.C. §§ 9601(14), 9601(33) and 9604(a)(2), and Sections 1004(27) and 1004(5) of RCRA, 42 U.S.C. §§ 6903(27) and 6903(5) and 40 CFR Part 261, S.C. Code Ann. Section 44-5620(6), and 25 S.C. Code Ann. R. 61-79, Section 261, have been released or disposed of at the SRS.

E. There have been releases and there continue to be releases and threatened releases of hazardous substances and pollutants or contaminants and solid wastes, hazardous wastes, and hazardous constituents from the SRS into the environment within the meaning of Sections 101(22), 104, 106, and 107 of CERCLA, 42 U.S.C. §§ 9601(22), 9604, 9606, and 9607, and Sections 1004(27), 1004(5), and 3008(h) of RCRA, 42 U.S.C. § 6903(27), 6903(5), and 6928(h) and S.C. Code Ann. Section 44-56-20, and 25 S.C. Code Ann. R. 61-79, Section 261. SRS releases of source, special nuclear, and byproduct materials in compliance with legally enforceable DOE regulations or orders issued pursuant to the AEA are "federally permitted releases" as defined in Section 101(10) of CERCLA, 42 U.S.C. § 9601(10).

F. With respect to those releases and threatened releases, the DOE is a person and an owner or operator within the meaning of Sections 101(21), 101(20), and 107 of CERCLA, 42 U.S.C. §§ 9601 (21), 9601(20), and 9607 and 25 S.C. Code Ann. R.61-79.260.10. The SRS is authorized to operate under Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).

G. The actions to be taken pursuant to this Agreement are reasonable and necessary to protect public health or welfare or the environment; and

H. A reasonable time for completing the actions required by this Agreement will be provided.

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VII. Parties

The Parties to this Agreement are the EPA, the SCDHEC, and the DOE. The terms of this Agreement shall apply to and be binding upon the EPA, the DOE, and the SCDHEC, their respective agents, employees, and response action contractors for the Savannah River Site and upon all subsequent owners, operators, and lessees of the DOE for the site. The DOE shall notify the EPA and the SCDHEC, in its fiscal year quarterly written progress reports, of the identity and assigned tasks of each of its contractors performing work under this Agreement upon their selection. The DOE shall take all necessary measures to assure that its contractors performing work under this Agreement act in a manner consistent with the terms of this Agreement. This Section shall not be construed as an agreement by the Parties to indemnify each other or any third party. The DOE shall notify its agents, employees, response action contractors for the site, and all subsequent owners, operators, and lessees of the SRS of the existence of this Agreement.

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VIII. Site Description

The DOE's Savannah River Site (SRS) is located within the western most part of south-central South Carolina near Aiken, South Carolina. The SRS incorporates approximately three hundred (300) square miles within Aiken, Allendale, and Barnwell Counties, South Carolina. Approximately twenty (20) miles of the Savannah River forms the west boundary of the SRS. All surface water on the SRS flows into the Savannah River which forms the southern border between the States of South Carolina and Georgia. Along the banks of the Savannah River is a fifteen (15) square mile wetland known as the Savannah River Swamp. The area within and around SRS is heavily wooded and ranges from dry hilltops to swampland.

The SRS employs over twenty thousand (20,000) persons and the average population density in the area surrounding SRS ranges up to five hundred and sixty (560) people per square mile, with the largest concentration occurring approximately twenty-five (25) miles north of SRS in Augusta, Georgia which has an approximate population of two hundred and fifty thousand (250,000).

The drinking water supply serving SRS is obtained from the Savannah River and underlying groundwater. Nearby, the approximately thirty-two hundred (3200) residents of Jackson, South Carolina obtain drinking water from groundwater wells located within three (3) miles of SRS. The average annual precipitation at SRS is forty-seven (47) inches with surface run-off flowing into creeks and marsh areas which serve as tributaries to the Savannah River.

The primary mission of SRS is to produce defense materials including tritium and plutonium-239. The SRS includes nuclear reactors, a fuel and target fabrication plant, two chemical separations plants, the Defense Waste Processing Facility, the Savannah River Laboratory and other support operations.

As a result of operations, SRS generates a variety of radioactive, non-radioactive, and mixed (radioactive and hazardous) wastes. The SRS waste management practices (past and present) include the use of seepage basins for liquids, pits and piles for solids, tanks for high-level radioactive mixed wastes, and landfills for low-level radioactive wastes.

The DOE is investigating releases on the SRS under its Environmental Restoration Program and under its RCRA permit. The DOE is also closing some areas on the SRS and conducting post-closure

monitoring under its RCRA permit.

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IX. High-Level Radioactive Waste Tank Systems(s)

The provisions of this Section apply to the DOE's high-level radioactive waste tank system(s) that are listed and identified in Appendix B to this Agreement. These Appendix B tank system(s) are associated with the F- and H-Area Tank Farms. This Section establishes requirements for the prevention and mitigation of releases or potential releases at or from the high-level radioactive waste tank system(s) identified in Appendix B. The Section also establishes requirements for the remediation of tank system(s) that are removed from service. On June 30, 1987, the SRS submitted a revised RCRA Part A permit application which included the high-level radioactive waste tank system (s) identified in Appendix B. The SRS will submit applications to the SCDHEC for wastewater construction and operation permits for these tank system(s), except for tank 50 and associated ancillary equipment that is currently permitted by SCDHEC as a wastewater treatment unit. Upon issuance of wastewater construction and operation permits, the SRS will amend its RCRA Part A to delete the tank system(s).

The SCDHEC is the designated oversight agency for purposes of review and approval of all documentation relevant to the high-level radioactive waste tank system(s) identified in Appendix B to this Agreement. Unless otherwise specified within this section, procedures for review and approval of documentation for the high-level waste tank system(s) identified in Appendix B will be as follows: (a) Submittals required of the DOE will be submitted to both SCDHEC and EPA on or before the specified due date; (b) The Parties agree that the requirements in Subsections A through D herein shall be implemented via SCDHEC's wastewater construction permit program in accordance with the State's regulation 61-67 "Preparation and Submission of Engineering Reports" unless otherwise specified in this section; and the SCDHEC will receive and consider comments from the EPA on all documents submitted under the provisions of this section of the Agreement. The SCDHEC is the final decision authority on any disputes pertaining to State construction permit decisions. The EPA reserves the right to invoke dispute resolution where there is a release or substantial threat of release to the environment.

A. Structural Integrity and Secondary Containment Demonstrations for Existing High-Level Waste Tank System(s)

1. The DOE shall submit wastewater construction permit application(s) for the high-level waste tanks identify in Appendix B. The Parties agree that the permit applications must include information demonstrating: (a) the structural integrity of the existing high-level waste tank system(s) in the F- and H-Areas that do not meet the secondary containment standards of Subsection C herein; and (b) that existing high-level waste tank system(s) in the F- and H-Areas that have secondary containment systems meet the secondary containment standards of Subsection C herein.

2. The permit applications submitted under Subsection A.1 above shall include a description of past leaks and demonstrations, subject to the review and approval of SCDHEC, that each high-level waste tank system is not leaking. The permit applications submitted by DOE under A.1 shall include proposed methods and a schedule for ongoing demonstrations that these tank system(s) are not leaking. Such methods and schedule shall be complied with until such time as

the waste tank system(s) is removed from service under Subsection E herein. The demonstrations submitted under Subsection A.1 above shall be in the form of a written assessment reviewed and certified by a registered professional engineer that attests to the tank system's structural integrity or, if applicable, the waste tank system's secondary containment.

3. For high-level waste tank system(s) without secondary containment, the written assessment(s) submitted under Subsection A.1 herein, shall demonstrate that the high-level waste tank systems are adequately designed and have sufficient structural strength and compatibility with the hazardous and/or radioactive substances to be stored or treated, to ensure that the waste tank system(s) will not collapse, rupture, or fail. The written assessment(s) shall include, at a minimum, the information contained in Subsection A of Appendix B, entitled, "Standards for Integrity Assessment for Existing Tanks."

4. For high-level waste tank system(s) that have secondary containment, the written assessment(s) shall demonstrate that the high-level waste tank system(s) meet the standards contained in Subsection C of Appendix B, entitled, "Standards for Containment/Release Detection."

5. If the results of the above assessment(s) demonstrate that a waste tank system(s) is (or may be) leaking, then the DOE shall implement the provisions of Subsection D herein, for the "Disposition of Leaking Tank(s)."

B. Design/Installation of New or Replacement High-Level Waste Tank System(s)/Component(s) in the Land H Area Tank Farms

1. For each F- and H-Area high-level waste tank system(s) or component(s) installed or modified after the approval of the wastewater permit application for the F-and H-Area high-level waste tank system(s), the DOE shall prepare and submit for SCDHEC approval, a wastewater construction permit application or application for a permit modification in accordance with applicable SCDHEC regulations. Replacement of individual components with identical items meeting the secondary containment standards of Appendix B, subsection B (i.e., items that match the description in the permit and that have been previously addressed in a plan under Subsection A.1(b)) or localized repair of small sections of pipe shall not require permit modification. Replacement of components that do not meet the secondary containment standards may require permit modification.

2. (a) Except as provided in subparagraph below, for each F- and H-Area high-level waste tank system or component installed after the effective date of this Agreement, the DOE shall prepare a written assessment, certified by a registered professional engineer, that the waste tank system or component has sufficient structural integrity and is acceptable for the storing or treating of hazardous and/or radioactive substances.

   (b) For new or replacement tanks, the assessment shall be submitted by DOE and approved by SCDHEC before installation and entry into service of the tank. For new or replacement waste tank system components, the assessments shall be submitted annually. These assessments shall be submitted each year on or before March 9 of each year for all components installed during the previous year.

   (c) No assessment shall be required for installation of ancillary equipment in an existing tank system where the installation of the ancillary equipment does not modify the secondary

containment or structural integrity for that tank system. Such installations include, but are not limited to (a) a component that is unrelated to secondary containment, such as temperature monitoring equipment; or (b) a pump inside a tank where the tank itself provides secondary containment. Furthermore, an assessment is not required for installation of ancillary equipment where the equipment matches the description(s) in the approved assessment(s) for that tank system, such as for routine maintenance.

3. The assessment(s) shall demonstrate that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the waste tank system(s) have sufficient structural strength, compatibility with the hazardous/radioactive substances to be stored or treated, and corrosion protection to ensure that the waste tank system (s) or component(s) will not collapse, rupture, or fail. At a minimum, the assessment(s) shall include the information contained in Subsection B of Appendix B herein, entitled; "Design/Installation Standards for New and Replacement Tank System(s) anal Components".

C. Containment and Detection of Releases

1. In order to prevent the release of hazardous and/or radioactive substances to the environment, the DOE shall submit to the SCDHEC for review and approval, a plan to provide secondary containment for all F- and H-Area high-level waste tank system(s) or component(s) installed or replaced after the effective date of this Agreement. This plan shall be submitted as a part of the wastewater construction permit application(s) required under B.1 above.

2. The DOE shall install secondary containment system(s) that are (a) designed, installed, and operated to prevent any migration of hazardous or radioactive constituents, hazardous substances, or accumulated liquid out of the system(s) to the soil, groundwater, or surface water at any time during the use of the waste tank system(s); and (b) capable of detecting and collecting releases and accumulated liquids until the collected material is removed. The DOE's secondary containment system(s) shall meet the standards contained in Subsection C of Appendix B herein, entitled, "Standards for Containment/Release Detection".

3. The requirements of this Subsection do not apply to replacement of individual components where (a) the components are replaced with identical items (i.e., items that match the description in the permit); and (b) the design of the component being replaced has been previously addressed in a plan under this Subsection or Subsection A.l(b).

D. Disposition of Leaking Waste Tank System(s)

For a waste tank system or secondary containment system from which there is or has been a leak, the DOE shall comply with the standards contained in Subsection D of Appendix B herein, entitled, "Disposition of Leaking Tank(s)." For the purposes of this Section, a leak shall mean the escape from primary or secondary containment of any substance, including, but not limited to, sewage, industrial waste, water waste, air containment or any combination thereof in such quantity and of such characteristics and duration as may cause, or tend to cause the environment of the State of South Carolina to be contaminated, unclean, noxious, odorous, impure or degraded, or which is, or tends to be injurious to human health or welfare; or which damages property, plant, animal or marine life, or use of property. Leak detection methods may include installed leak detection equipment and procedures, photographic or visual inspections that show liquid or accumulating dried waste, or sampling and analysis.

E. Removal of Waste Tank System(s) From Service

1. The DOE shall submit to EPA and SCDHEC for review and approval, a plan(s) and schedule (s) for the removal from service of waste tank system(s)/component(s) that do not meet the secondary containment standards of Subsection C herein, or that leak or have leaked. This plan (s) and schedule(s) shall be submitted and/or amended by DOE as follows: (a) within ninety (90) days of the effective date of this Agreement for tank system(s) or secondary containment system(s) known to leak or have leaked prior to the effective date of this Agreement that will not be repaired in accordance with Subsection D herein; (b) within ninety (90) days of discovery of leaks from tank system(s) or secondary containment system(s) not known before the effective date of this Agreement that will not be repaired in accordance with Subsection D herein; and within ninety (90) days of receipt of written notification from SCDHEC of the determination that any waste tank system(s)/component(s) do not meet the secondary containment standards of Subsection C herein. After approval of the schedule by EPA and SCDHEC, DOE shall remove the tanks from service according to the approved plan(s) and schedule(s). In lieu of the requirements of E.1(c) above, DOE may submit a plan that meets the requirements of Subsection C herein to provide secondary containment for substandard tank system(s)/component(s). Subject to the applicable requirements of Appendix B, the DOE may continue to use tanks systems/components scheduled to be removed from service for receipt and storage of wastes according to the approved schedule and prior to approval of the schedule, unless SCDHEC notifies DOE in writing that specific tanks are unsuitable for continued service. Waste tanks deemed unsuitable by SCDHEC shall not receive additional waste prior to schedule approval for such receipt and only if waste receipt is approved as a part of the plan associated with such schedule.

2. The DOE's waste tank system(s) removal plan(s) shall provide for the removal or decontamination of all residues, contaminated containment system components (liners, etc.), contaminated soils and structures and equipment contaminated with hazardous and/or radioactive substances. If the DOE demonstrates that it cannot practicably remove or decontaminate soils or structures and equipment, then the DOE shall conduct all necessary response actions under Section XI through XVI of this Agreement for those waste tank system (s). The SCDHEC is the designated oversight agency for review and approval of all response action documents leading up to the Proposed Plan. The DOE must obtain written concurrence from both EPA and SCDHEC prior to publication of Proposed Plans and RODs. SCDHEC will be the designated oversight agency for review/approval of RD/CM and CA/RA documents for the high-level waste tanks identified in Appendix B to this Agreement and oversight of all associated response action field activities.

3. The DOE will submit to EPA and SCDHEC an annual report on the status of tanks being removed from service under Subsection E.1 herein. This report will include any requests, subject to review and approval, for changes to the existing plan(s) and schedule(s) approved under Subsection E.1. This annual report shall be submitted in conjunction with the assessments submitted under Subsection B.3 herein.

4. For waste tank system(s) that DOE decides to remove from service that have been issued an industrial wastewater operating permit under the PCA, the DOE shall remove such waste tank system(s) from service in accordance with the Pollution Control Act, S.C. Code Ann., Section 48-1-10, *et seq.* (1985) and all applicable regulations promulgated pursuant to the PCA. For

any waste tank system(s) for which closure or removal from service is or has been conducted under the PCA, the DOE shall conduct Site Evaluations in accordance with Section X (Site Evaluations) of this Agreement.

5. The Parties agree that the DWPF, along with associated pre-treatment in the F-and H-Area tank farms, is an appropriate treatment method for SRS high-level wastes, including wastes generated when tanks are removed from service as required in this Subsection. The Parties recognize that schedules for removal of tanks from service may be limited by the processing schedule and rates of DWPF and by tank farm processing. Furthermore, the Parties recognize that this treatment process must also be used to treat new waste from ongoing operations at SRS. If extensions to the schedule for removing tanks from service are required due to changes in the operations schedule, these extensions shall be negotiated according to the provisions of Section XXXI (Extensions) of this Agreement.

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X. Site Evaluation(s)

A. For those areas with potential or known releases of hazardous substances not identified before the effective date of this Agreement, the DOE agrees to: (a) provide notice to EPA and SCDHEC in accordance with Section 300.405 of the NCP and to provide notification within 15 business days of discovery for those areas for which a Removal Site Evaluation Report will be submitted; and (b) conduct removal site evaluations (SEs) in accordance with Section 300.410 of the NCP. The DOE shall submit to EPA and SCDHEC Removal Site Evaluation Reports based on such evaluations. If the removal SE indicates that removal action under Section 300.415 of the NCP is necessary, the DOE will satisfy the requirements of Section XIV (Removal Actions) of this Agreement. If the Removal SE Report indicates that remedial action under Section 300.430 of the NCP may be necessary for an area, DOE will amend the SRS Site Evaluation List of Appendix G.1 or the RCRA/CERCLA Units List of Appendix C to this Agreement to include such area. For those areas in the SRS Site Evaluation List of Appendix G to this Agreement, the DOE agrees to conduct remedial SEs in accordance with Section 300.420 of the NCP. The DOE shall submit to EPA and SCDHEC Remedial Site Evaluation Reports based on such evaluations, and recommend the need for further response actions. If DOE's recommendation is accepted, then EPA and SCDHEC will concur by written response. If the EPA and SCDHEC determine that further response action is necessary for an area, then the DOE agrees, subject the dispute resolution procedures in Section XXVII (Resolution of Disputes), to amend Appendix C to this Agreement to include such areas and to conduct additional work at such areas under the terms of this Agreement. If the three Parties concur on a recommendation of no further response action for a Remedial Site Evaluation Report or a Removal Site Evaluation Report, the DOE agrees to amend Appendix G.2 of this Agreement to include such area. To the extent practicable, the DOE may combine the notices and SEs required by this Section of the Agreement with the information required by Part II.B of the SRS Federal RCRA permit.

B. The DOE shall submit a Revision.0 Appendix G by October 1 of each fiscal year. The EPA and SCDHEC shall review and comment on the Revision.0 Appendix G within one hundred and twenty (120) days of receipt. The Appendix G will be revised in response to these comments, if necessary, and DOE will submit a Revision.l Appendix G according to the requirements of Subsection G of Section XXII (Review/Comments on Documents) to this Agreement.

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XI. RCRA Facility/Remedial Investigation(s)

The DOE agrees that it shall conduct a RFI/RI(s) for the site (including any operable unit(s) at the site) which is in accordance with the timetables and deadlines set forth in Appendix D to this Agreement. For those areas in the SRS RCRA/CERCLA Units List of Appendix C to this Agreement, the RFI/RI(s) shall meet the purposes set forth in Section III (Purpose of Agreement) of this Agreement. For SWMUs for which the DOE is required to conduct a RFI pursuant to its RCRA permit, the Parties agree that the RFI and RI shall be combined into a single investigation designed to meet the requirements of both the RCRA permit and the purposes of this Agreement. For the operable unit(s) which DOE is required to conduct a RI, the Parties agree that the EPA-approved DOE RFI Program Plan meets the investigation requirements of both CERCLA and the purposes of the Agreement.

In accordance with the requirements of Section XV (Proposed Plan(s)/Record(s) of Decision) to this Agreement, DOE will, at a minimum, submit Revision.0 Proposed Plans to EPA and SCDHEC for those units listed in Appendix C to this Agreement under or requiring closure plans or post-closure permits in accordance with RCRA. If the EPA and SCDHEC determine that further response action is necessary for a unit, then the DOE agrees, subject to the dispute resolution procedures in Section XXVII (Resolution of Disputes), to conduct additional work at such unit, under the terms of this Agreement.

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XII. Corrective Measures/Feasibility Study(s)

The DOE agrees it shall conduct a CMS/FS(s) for the site and submit report(s) on the CMS/FS(s) for operable units in accordance with the timetables and deadlines set forth in Appendix D of this Agreement. The CMS/FS(s) shall be based on the RFI/RI(s) and shall meet the purposes set forth in Section III of this Agreement. For SWMUs for which the DOE is required to conduct a CMS pursuant to its RCRA permit, the Parties agree that the CMS and FS shall be combined into a single study designed to meet the requirements of both the RA permit and the purposes of this Agreement.

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XIII. Operable Unit(s)

Pursuant to the published schedules and timetables, the DOE agrees to develop operable unit(s). After consultation with EPA and SCDHEC, the DOE shall submit its proposed operable unit(s) to EPA and SCDHEC. The Parties shall make a final selection of the operable units for the site. If the Parties are unable to agree upon the selection of operable units, the final selection of operable unit(s) shall be subject to dispute resolution according to the requirements of Section XXVII (Resolution of Disputes) of this Agreement. The designation of operable unit(s) shall be reviewed and revised annually in conjunction with the preparation and submittal of Appendix C (RCRA/CERCLA Units) of this Agreement. All submittals and elements of work undertaken pursuant to this Section shall be performed in accordance with the requirements and time schedules set forth in Section XX (Timetables and Deadlines) of this Agreement. Operable unit(s) shall meet the purposes set forth in Section III (Purposes of Agreement) of this Agreement.

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XIV. Removal Actions

A. The DOE shall designate an SRS On-Scene Coordinator (OSC) as required by Section 300.120 of the NCP. The SRS OSC shall be the point of contact between DOE, EPA, and SCDHEC for all removal actions for hazardous substances.

B. Removal actions conducted by the DOE on the SRS shall be consistent with CERCLA and the NCP. The DOE shall notify the EPA and SCDHEC in writing of any such proposed removal actions, including proposed technical specifications. The EPA and SCDHEC shall respond with any comments and/or objections within thirty (30) days of receipt of such notification. The EPA and SCDHEC may request additional time not to exceed twenty (20) days in which to respond to the notification. The DOE agrees to submit to EPA and SCDHEC an annual Removal Action Report which describes the removal actions performed during the previous fiscal year. The report shall be due on or before January 1, of each fiscal year.

C. In cases in which a release at the SRS could cause imminent and substantial endangerment to the public health or welfare or the environment, the DOE shall proceed as soon as possible with a removal action and notify EPA and SCDHEC in accordance with Section 300.125 of the NCP. A description of the emergency and the technical specifications for the removal action, including any further action needed to complete the removal action, shall be submitted in writing to EPA and SCDHEC within five (5) business days of the release.

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

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XV. Proposed Plan(s)/Record(s) of Decision

Following completion and a review in accordance with Section XXII (Review/Comment on Documents) by EPA and SCDHEC of a RFI/RI Report(s) (including a RFI/RI Report for any operable unit) and the corresponding CMS/FS Report(s) (including a CMS/FS Report for any operable unit) for all or part of the site, the DOE shall submit a Proposed Plan(s) for corrective/remedial action(s), including proposed timetables and deadlines for the submittal of the Corrective Measures/Remedial Design Work Plan(s) and Corrective/Remedial Action Work Plan(s), to EPA and SCDHEC for review in accordance with Appendix D and Section XXII (Review/Comment on Documents) of this Agreement. The Proposed Plan(s) shall meet the purposes set forth in Section III (Purposes of Agreement) of this Agreement. Following approval by the EPA and SCDHEC pursuant to Section XXII (Review/Comment on Documents) of this Agreement, the DOE shall publish its Proposed Plan(s) for public review and comment in accordance with Section 117(a) of CERCLA, 42 U.S.C. § 9617(a), and applicable State law. The Parties agree that public notice of the Proposed Plan(s) may be issued jointly with public notices of any proposed modifications of the DOE's RCRA permit. Upon completion of the public comment period, all Parties shall consult with each other about the need for modification of the Proposed Plan(s) and additional public comment based on the public response. When public comment has been properly considered, the DOE shall submit its Revision.0 Record(s) of Decision in accordance with applicable

guidance. The Revision.0 Record(s) of Decision shall enact the purposes set forth in Section III (Purposes of Agreement) of this Agreement. A review in accordance with Section XXII (Review/Comment on Documents) shall be conducted on the Revision.0 Record(s) of Decision. If the Parties agree on the Record(s) of Decision, the Record(s) of Decision shall be signed by EPA, SCDHEC and the DOE, and then the DOE shall issue the final Record(s) of Decision. If the Parties are unable to reach agreement on the Record(s) of Decision, the selection of the corrective/remedial action(s) shall be signed by the Administrator of EPA, or his delegates, and EPA shall then prepare the final Record(s) of Decision. The selection of the corrective/remedial action(s) by the Administrator of EPA shall be final and shall not be subject to dispute under Section XXVII (Resolution of Disputes). Notice of the final Record(s) of Decision shall be published by the DOE with EPA's and SCDHEC's concurrence and shall be made available to the public prior to the commencement of the corrective/remedial action(s), in accordance with Sections 117(b), (c), and (d) of CERCLA. 42 U.S.C. §§ 9617(b), (c), and (d). EPA and/or SCDHEC shall propose any modifications necessary to the corrective action provisions of the DOEs RCRA permit in conjunction with the notice of the Proposed Plan(s) and final Record(s) of Decision.

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XVI. Corrective Measures/Remedial Design(s) and Corrective/Remedial Action(s)

Following final selection of the corrective/remedial action(s), the DOE shall submit a Corrective Measures/Remedial Design Work Plan(s) and Corrective/Remedial Action Work Plan(s) for the selected corrective/remedial action(s), to EPA and SCDHEC for review in accordance with Appendix D and Section XXII (Review/Comment on Documents) of this Agreement. The Corrective Measures/Remedial Design Work Plan(s) and Corrective/Remedial Action Work Plan(s) shall meet the purposes set forth in Section III (Purposes of Agreement) of this Agreement. Upon approval of the Corrective Measures/Remedial Design Work Plan(s) by EPA and SCDHEC, the DOE shall implement the corrective/remedial action(s) in accordance with the then approved requirements and timetables and deadlines.

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XVII. Deliverables

The DOE agrees to submit to EPA and SCDHEC certain deliverables to fulfill the obligations and meet the purposes of this Agreement. A schedule for the submittal of these deliverables is shown in Appendix D to this Agreement. Deliverables which include engineering plans for construction, modification, or operation of environmental restoration facilities, or which describe corrective/remedial action(s), shall be certified by a registered professional in accordance with applicable law.

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XVIII. Guidance

The EPA and SCDHEC agree to provide DOE with guidance and to give a timely response to requests for guidance to assist DOE in the performance of the requirements under this Agreement.

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XIX. Scoping Work Priorities

A. The DOE plans its future work in five year increments as reflected in the Environmental Restoration and Waste Management Five-Year Plan (Five-Year Plan). The process of developing the Five-Year Plan focuses on the activities funded two years beyond the current fiscal year so as to tie into the Federal Budget cycle. It also includes the current fiscal year and five years beyond. The DOE, SCDHEC, and EPA agree that it is our intent to establish environmental restoration work priorities under the terms of this Section of the Agreement prior to the submittal of these activities for inclusion in the annual revisions to the Five-Year Plan or in the Federal Budget request.

B. The DOE agrees to use, as appropriate, the procedures set forth in Appendix F (Prioritization of Environmental Restoration Tasks). These procedures shall be used to prioritize the sites listed in Appendix C (RCRA/CERCLA Units List) for RFI/RI Phase I and Phase II activities implementation. The DOE shall submit to the EPA and SCDHEC a Revision.0 Appendix C which list sites according to the priority established through the procedures set forth in Appendix F by October 1 of each fiscal year, beginning with fiscal year 1994, which will prioritize FY+2 and beyond RFI/RI activities. The EPA and SCDHEC shall review and comment on such priority listing within one hundred and twenty (120) days of receipt. The Appendix C listing will be revised in response to these comments, if necessary, and DOE will submit a Revision.1 Appendix C according to the requirements of Subsection G of Section XXII (Review/Comment on Documents). The Parties agree to finalize Appendix C in accordance with the provisions of Subsection I of Section XXII (Review/Comment on Documents) to the Agreement.

C. DOE has commitments contained in DOE RCRA permits, administrative orders and consent agreements entered into by DOE and SCDHEC. The establishment of priorities under this Agreement shall be coordinated with the schedule and milestones for corrective action contained in such documents.

D. The DOE shall submit to EPA and SCDHEC a Revision.0 Appendix E (Long-Term Projections), which will list the projected deliverable submittal dates that correspond to work activities for FY+1 and FY+2, and ROD issuance dates for FY+3 and beyond for all sites listed in Appendix C, no later than November 15 of each fiscal year. The SCDHEC and EPA shall review and comment on the Revision.0 Appendix E within thirty (30) days of receipt. The DOE shall revise Appendix E if necessary, and submit a Revision.1 Appendix E by December 31 of each fiscal year. The Parties agree to finalize Appendix E in accordance with the provisions of Subsection I of Section XXII (Review/Comment on Documents) to the Agreement. The SCDHEC and EPA agree that the long-term projections for FY+3 and beyond in Appendix E will be used by all Parties for planning purposes only and to develop an understanding of the resource needs that the implementation and oversight of the environmental restoration activities will require. Long-term projections in Appendix E for activities planned for FY+1 and FY+2 shall be enforceable commitments under this Agreement, subject to the provisions of this Subsection and of Section XX (Timetables and Deadlines) of this Agreement.

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XX. Timetables and Deadlines

A. Commitments for FY+1 and FY+2 are contained in Appendix E to this Agreement. Enforceable

timetables and deadlines for current FY commitments are contained in Appendix D to this Agreement. Appendix shall contain timetables and deadlines from the previous FY+1 Appendix E commitments. To the extent that DOE has diligently sought but did not receive appropriation from Congress for the previous FY+1 Appendix E commitments, the current FY timetables and deadlines in Appendix D are subject to modification in accordance with Section XLIII (Modification of Agreement) and will be amended each year according to Subsection B herein.

B. Within five (5) business days of receipt of its annual budget allotment from DOE-HQ, DOE-SR shall provide written notification to EPA and SCDHEC of such receipt. Also, within thirty (30) business days after DOE-SR receives its annual budget allotment, the DOE-SR shall submit a Revision.0 Appendix D which reflects the work activities established through the provisions of Section XIX.D (Scoping Work Priorities) which have received appropriations. EPA and SCDHEC shall review and comment on the Revision.0 Appendix D within fifteen (15) business days of receipt. Within fifteen (15) days of receipt of EPA and SCDHEC comments, DOE will revise, if necessary, the Revision.0 Appendix D and submit a Revision.1 Appendix D. The Parties agree to finalize Appendix D in accordance with the provisions of Subsection I of Section XXII (Review/Comment on Documents) to this Agreement.

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XXI. Additional Work

A. Except as provided in Section XII (Review/Comment on Documents) of this Agreement, either EPA or SCDHEC may at any time request additional work, including field modifications, remedial investigatory work, or engineering evaluations, which they determine necessary to accomplish the purposes of this Agreement. Such requests shall be in writing to the DOE, with copies to the other Parties. The DOE agrees to give full consideration to all such requests. The DOE may either accept or reject any such requests and shall do so in writing, together with a statement of reasons, within forty-five (45) days of receipt of any such requests. If there is no agreement concerning whether or not the requested additional work or modification to work should be conducted, then dispute resolution may be invoked only at the time of review of the subsequent corresponding primary document, in accordance with the procedures set forth in Section XXII (Review/Comment on Documents) of this Agreement.

B. Should additional work be required pursuant to this Section, the appropriate work plan shall he amended and proposed by the DOE for review and approval by the EPA and SCDHEC. Appendix D to this Agreement shall be modified if necessary in accordance with Section XLIII (Modification of Agreement) of this Agreement.

C. The discovery of previously unknown sites, releases of hazardous substances, contamination, or other significant new site conditions may be addressed as additional work under this Section.

D. Any additional work or modifications to work proposed by DOE shall be proposed in writing to the other Parties and shall be subject to review in a primary document (or modification to an existing primary document) in accordance with Section XXII (Review/Comment on Documents) of this Agreement. The DOE shall not initiate such work prior to review and approval by EPA and SCDHEC, except for emergency removal actions taken under Subsection XIV.B.

E. Any additional work or modification to work agreed to required under this Section, shall be

completed in accordance with the standards specifications, and schedules determined or approved by EPA and SCDHEC and shall be governed by the provisions of this Agreement.

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XXII. Review/Comment on Documents

A. Applicability:

The provisions of this Section establish the procedures that shall be used by the DOE, EPA, and SCDHEC to provide the Parties with appropriate notice, review, comment, and response to comments regarding RFI/RI and CMS/FS and CM/RD and CA/RA documents, specified herein as either primary or secondary documents. In accordance with Section 120 of CERCLA, 42 U.S.C. § 9620, and 10 U.S.C. § 2705, the DOE shall be responsible for issuing primary and secondary documents to EPA and SCDHEC. As of the effective date of this Agreement, all documents for any deliverable document identified herein shall be prepared and distributed in accordance with Subsections B through J below.

The designation of a document as "Revision.0" or "Revision.1" is solely for purposes of consultation with EPA and SCDHEC in accordance with this Section. Such designation does not affect the obligation of the Parties to issue documents, which may be either primary or secondary documents. In accordance with Section 120 of CERCLA, 42 U.S.C. § 9020, and 10 U.S.C. § 2705, the DOE shall be responsible for issuing primary and secondary documents to EPA and SCDHEC. Such designation does not affect the obligation of the Parties to issue documents to the public for review and comment as appropriate and as required by law.

B. General Process for RFI/RI and CMS/FS. and CM/RD and CA/RA Documents:

1. Primary documents include those documents identified in Subsection C.1 herein, for each operable unit at the site. Primary documents are initially issued by the DOE as Revision.0 subject to review and comment by EPA anal SCDHEC. Following receipt of comments on a particular primary document, the DOE will respond to comments received and issue a Revision.1 primary document subject to dispute resolution. The Revision.1 primary document will become the final primary document either after the period established for review of a Revision.1 document if dispute resolution is not invoked or as modified by decision of the dispute resolution process.

2. Secondary documents typically include those documents that are discrete portions of the primary documents and are typically feeder documents. Secondary documents are issued by the DOE as Revision.0 subject to review and comment by EPA and SCDHEC. Although the DOE will respond to comments received, the secondary documents may be finalized in the context of the corresponding primary documents. A secondary document may be disputed at the time the corresponding primary document is submitted.

3. The Parties agree that plans and reports prepared by the DOE for SWMUs subject to the corrective action requirements of its RCRA permit, as well as the reviews of such plans and reports by EPA and SCDHEC, shall be combined into a single document designed to meet the requirements of both the RCRA permit and this Agreement.

C. Primary Documents:

1. The DOE shall complete and submit documents for the following primary documents to EPA and SCDHEC for review and comment in accordance with the provisions of this Section:

    a. Community Relations Plan (CRP);
    b. RFI/RI Work Plan(s);
    c. RFI/RI Report(s);
    d. Baseline Risk Assessment Report(s);
    e. CMS/FS Report(s),
    f. Proposed Plan(s);
    g. Record(s) of Decision;
    h. Corrective Measures/Remedial Design Work Plan(s);
    i. Corrective Measures/Remedial Design Report(s);
    j. Corrective/Remedial Action Work Plan(s);
    k. Post-Construction Report(s); and
    l. Final Remediation Report(s).

2. The Corrective Measures/Remedial Design Report(s) may be submitted in phased packages when necessary to expedite construction work under this Agreement. In such cases, the Record (s) of Decision shall describe the phased submittals and identify the Corrective Measures/Remedial Design submittals which shall be considered primary documents for purposes of Section XLVII (Stipulated Penalties) under this Agreement.

3. Only the Revision.1 documents for the primary documents identified above shall be subject to dispute resolution. The DOE shall complete and submit primary documents in accordance with Section XX (Timetables and Deadline) of this Agreement.

D. Secondary Documents:

1. The DOE shall complete and submit secondary documents to EPA and SCDHEC for review and comment in accordance with the provisions of this Section. The following list contains examples of secondary documents:

    a. Fiscal Year Progress Report;
    b. Annual Waste Tank Removal Plan;
    c. Tank Assessment Report(s);
    d. Site Evaluation Report(s);
    e. Preliminary Characterization Summary Report(s);
    f. Preliminary Risk Assessment Report(s);
    g. Treatability Study Report(s);
    h. Sampling and Analysis Plan;
    i. Field Sampling Plan;
    j. Quality Assurance Project Plan;
    k. Health and Safety Plan;
    l. Sampling and Analysis Results;
    m. Chain of Custody Forms;
    n. Request for Analysis Forms;

o. Computer Models and Technical Databases;
p. Minutes of Public Meetings;
q. Public Meeting Transcripts;
r. Administrative Record Index;
s. Results of CRP Community Interview;
t. News Releases; and
u. Responsiveness Summary(s).

2. Although EPA and SCDHEC may comment on the secondary documents, such documents shall not be subject to dispute resolution except as provided by Subsection B hereof. Secondary documents shall be identified and target dates for the completion and submission of secondary documents shall be established within primary documents pursuant to Section XX (Timetables and Deadlines) of this Agreement.

E. Meetings of Project Managers:

The Project Managers shall meet approximately every forty-five (45) days, except as otherwise agreed by the Parties, to review and discuss the progress of work being performed at SRS on the primary and secondary documents. Prior to preparing any document specified in Subsections C and D above, the Parties shall confer to discuss the document results in an effort to reach a common understanding.

F. Identification and Determination of Potential ARARs:

1. For those primary documents or secondary documents that consist of or include ARAR determinations, prior to DOE's issuance of a document, the Parties shall confer to identify and propose, to the best of their ability, all potential ARARs pertinent to the document being addressed. ARARs determinations shall be prepared by the DOE in accordance with Section 121(d)(2) of CERCLA 42 U.S.C. § 9621(d)(2), the NCP, and pertinent guidance issued by EPA not inconsistent with CERCLA.

2. In identifying the potential ARARs listed in Appendix A, the Parties recognize that actual ARARs can be identified only on an operable unit specific basis and that ARARs depend upon the specific hazardous substances, pollutants or contaminants at a site, the particular actions proposed as a remedy and the characteristics of a operable unit. The Parties recognize that ARARs identification is necessarily an iterative process and that potential ARARs must be re-examined throughout the RFI/RI and CMS/FS processes until the CA/RA(s) is implemented.

G. Review and Comment on Documents:

1. The DOE shall complete and submit each primary document to EPA and SCDHEC on or before the corresponding deadline established for the submittal of the documents established pursuant to Section XX (Timetables and Deadlines) of this Agreement. The DOE shall complete and submit the secondary documents in accordance with the target dates established for the issuance of such documents according to the approved schedules within the appropriate Work Plan(s).

2. Unless the Parties mutually agree to another time period, all Revision.0 documents shall be subject to the document specific period for review and comment as provided in Appendix I of

this Agreement. All secondary documents shall be subject to a one hundred and twenty day (120) period for review and comment. Review of any document by the EPA and SCDHEC may concern all aspects of the document (including its 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 promulgated by the EPA or SCDHEC. Comments by the EPA and SCDHEC shall be provided with adequate specificity so that the DOE may respond to the comment and, if appropriate, make changes to the document. Comments shall refer to any pertinent sources of authority or references upon which the comments are based, and, upon request of the DOE, the EPA, and SCDHEC shall provide a copy of the cited authority or reference. In cases involving complex or unusually lengthy documents, EPA and SCDHEC may extend the comment period for an additional thirty (30) days by written notice to the DOE prior to the end of the comment period. On or before the close of the comment period, the EPA and SCDHEC shall submit its written comments to the DOE.

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

4. In commenting upon a document which contains a proposed ARAR determination, EPA or SCDHEC shall include a reasoned statement of whether it objects to any portion of the proposed ARAR determination. To the extent that the EPA and/or SCDHEC objects, 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 review/comment period for a document, the DOE shall give full consideration to all EPA and SCDHEC written comments on the document submitted during the comment period. Within ninety (90) days of the receipt of comments on a secondary document, the DOE shall submit to EPA and SCDHEC its written response to comments received within the comment period. The period for revision of a Revision.0 primary document will begin on the last date that comments are received from either EPA or SCDHEC. The DOE shall submit to EPA and SCDHEC the Revision.1 primary document and a response to comments within the period established under Appendix I of the Agreement.

6. The DOE may extend the review period established under Appendix I for either responding to comments on a document or for submitting the Revision.1 primary document, for an additional thirty (30) days by providing written notice to EPA and SCDHEC. In extenuating circumstances, this time period may be further extended in accordance with Section XXXI (Extensions) of this Agreement.

H. Availability of Dispute Resolution for Revision.1 Primary Documents:

1. Dispute resolution shall be available to the Parties for Revision.1 primary documents as set forth in Section XXVII (Resolution of Disputes).

2. When dispute resolution is invoked on a primary document, work may be stopped in accordance with the procedures set forth in Section XXVII (Resolution of Disputes).

I. Finalization of Documents:

The Revision.1 primary document shall become the final primary document upon EPA and SCDHEC written concurrence or, if dispute resolution is invoked, at completion of the dispute resolution process should the DOE's position be sustained. If the DOE's determination is not sustained in the dispute resolution process, the DOE shall prepare, within sixty (60) days, a revision of the 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 Section XXXI (Extensions) of this Agreement.

J. Subsequent Modifications of Final Documents:

Following finalization of any primary document pursuant to Subsection I above, the EPA, SCDHEC, or the 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 Subsections J.1 and 2 below.

1. The EPA, SCDHEC, or the 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. Any Party seeking modification may such a modification by submitting a concise written request to the Project Manager of the other Parties. 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, any of the Parties may invoke dispute resolution to determine if such modification shall be conducted. Modification of a document shall be required only upon a showing that: (1) the requested modification is based on new information, and (2) 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 Subsection shall alter either EPA's or SCDHEC's ability to request the performance of additional work pursuant to Section XXI (Additional Work) of this Agreement which does not constitute modification of a final document.

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XXIII. Permits

A. The Parties recognize that the requirement to obtain permits for response actions undertaken pursuant to this Agreement shall be as provided for in Section 121(e)(1) of CERCLA and the NCP. The Parties further recognize that the SRS may be subject to or be required to obtain additional permits under Federal and State laws. This Agreement does not relieve the DOE of its obligations to obtain such permits. This Agreement does not supersede, modify, or otherwise change either State or Federal enforcement actions.

B. 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 or by no fault of DOE, is not issued in time for DOE to comply with the terms of this Agreement, the DOE agrees it shall notify the Commissioner of the SCDHEC and the Regional Administrator of EPA of its intention to propose modifications to this Agreement (or modifications to primary or secondary documents required by this Agreement) to obtain conformance with the permit (or lack thereof). Notifications by the DOE of its intention to propose modifications shall be submitted within seven (7) business days of receipt by the DOE 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. DOE may also propose modifications within seven (7) days after the date that a permit is needed by DOE when that permit has not been issued. Within thirty (30) days from the date it submits its notice of intention to propose modifications, the DOE shall submit to the Commissioner of the SCDHEC and the Regional Administrator of EPA its proposed modifications to this Agreement with an explanation of its reasons in support thereof.

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

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XXIV. Creation of Danger

A. In the event that the Commissioner of the SCDHEC or the Regional Administrator of EPA determines that activities conducted pursuant to this Agreement may present an imminent and substantial endangerment to the health or welfare of the people on the site or in the surrounding areas or to the environment, the Commissioner of the SCDHEC or the Regional Administrator of EPA may order the DOE to stop any work being implemented under this Agreement for such period of time as needed to abate the danger or may require the DOE to take necessary action to abate the danger or both. In the event that the DOE determines that any on-site activities or work being implemented under this Agreement may create an immediate threat to human health or the environment from the release or threat of release of a hazardous substance, pollutant or contaminant, it may stop any work or on-site activities for such period of time as needed to abate the danger. In the event the DOE makes a determination to stop work under this Section, it shall immediately notify the EPA and SCDHEC. The DOE shall submit a written summary of events to EPA and SCDHEC within five (5) clays of making a determination under this Section.

B. The EPA and SCDHEC agree to develop for DOE's approval a site health and safety plan for EPA and SCDHEC activities on the SRS. This plan shall address DOE and SRS health and safety orders and shall include procedures for stopping work or taking actions necessary to meet DOE and SRS health and safety retirements.

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XXV. Reporting

The DOE agrees that it shall submit to the Commissioner of the SCDHEC and the Regional Administrator of EPA, fiscal year written progress reports which describe the actions which the DOE has taken during the previous fiscal year to implement the requirements of this Agreement. Progress

reports shall be due on or before December 1 of each fiscal year. The progress reports shall include a statement of the manner and extent to which the requirements and time schedule set out in the Appendices D and E to this Agreement are being met. In addition, the progress reports shall identify any anticipated delays in meeting time schedules the reason(s) for the delay and actions taken to prevent or mitigate the delay.

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XXVI. Notification

A. Unless otherwise specified, report or submittal provided pursuant to a schedule or deadline identified in or developed under this Agreement shall be sent by certified mail, return receipt requested, or similar method (including electronic transmission) which provides a written record of the sending and receiving dates, and addressed or hand delivered to the following persons:

U. S. Environmental Protection Agency, Region IV
Waste Management Division
Remedial Project Manager: Savannah River Site
345 Courtland Street, N. E.
Atlanta, Georgia 30365

South Carolina Department of Health and Environmental Control
Bureau of Solid and Hazardous Waste Management
Manager, Savannah River Site - Federal Facility Agreement Section
2600 Bull Street
Columbia, South Carolina 29201

U. S. Department of Energy
Savannah River Operations Office
Savannah River Site
Environmental Restoration Division
Post Office Box A
Aiken, South Carolina 29802

Copies of all correspondence shall be provided by the originator to all Parties. Unless otherwise specified or requested, all routine correspondence may be sent via regular mail or electronically transmitted to the above persons.

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XXVII. Resolution of Disputes

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

A. Within thirty (30) days after: (1) the period established for Review of a primary document

pursuant to Section XXII (Review/Comment on Documents) of this Agreement, or (2) any action which leads to or generates a dispute including a failure of the informal dispute resolution process), 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.

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

C. If agreement cannot be reached on any issue during the informal dispute resolution process, 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.

D. 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 (Senior Executive Service or equivalent). The EPA designated member on the DRC is the Waste Management Division (WMD) Director of EPA's Region IV. The DOE's designated member is the Assistant Manager for Environment, Safety and Security, Savannah River Operations Office. The SCDHEC designated member is the Chief of the Bureau of Solid and Hazardous Waste Management.

E. Following elevation of a dispute to the DRC, the DRC shall have twenty-eight (28) days to unanimously resolve the dispute and issue a written decision. If the DRC is unable to unanimously resolve the dispute within this twenty-eight (28) day period the written statement of dispute shall be forwarded to the Senior Executive Committee (SEC) for resolution.

F. The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. The EPA representative on the SEC is the Regional Administrator of EPA's Region IV. The DOE representative on the SEC is the Manager, Savannah River Operations Office. The SCDHEC representative on the SEC is the Deputy Commissioner for Environmental Quality Control. 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-eight (28) days, EPA's Regional Administrator shall issue a written position on the dispute. The DOE or SCDHEC may, within twenty-eight (28) days of the Regional Administrator's issuance of EPA's position, issue a written notice elevating the dispute to the Administrator of EPA for resolution in accordance with all applicable laws and procedures. In the event that neither the DOE nor the SCDHEC elect to elevate the dispute to the EPA Administrator within the designated twenty-eight (28) day elevation period, the DOE and the SCDHEC shall be deemed to have agreed with the Regional Administrator's written position with respect to the dispute.

G. Upon elevation of a dispute to the EPA Administrator pursuant to Subsection F, the Administrator will review and resolve the dispute within twenty-eight (28) days. Upon request, and prior to resolving the dispute, the Administrator shall meet and confer with any of the following Parties: the Secretary of the DOE, the Commissioner of the SCDHEC to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide all Parties with a written final decision setting forth resolution of the dispute. The duties of the Administrator set forth in this Subsection shall not be

delegated.

H. The pendency of any dispute under this Section shall not affect the 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.

I. When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Waste Management Division Director for EPA's Region IV requests, in writing, that work related to the dispute be stopped because, in 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, 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, then the DOE may meet with the WMD to discuss the work stoppage. The final written decision of the WMD will be submitted to DOE within fifteen (15) days and may be subjected to formal dispute resolution immediately. Such dispute may be brought directly to either the DRC or the SEC, at the discretion of the DOE or the SCDHEC.

J. Within thirty-five (35) days of resolution of a dispute pursuant to the procedures specified in this Section, the 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.

K. Resolution of a dispute pursuant to this Section of this Agreement constitutes a final resolution of said dispute. All Parties shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Section of this Agreement. Any final resolution of a dispute pursuant to this Agreement shall be incorporated into this Agreement and shall become a term and condition of this Agreement.

L. Resolution of disputes may include a determination of the length of any time extensions which are necessary.

M. Pursuant to this Section, all or a portion of a dispute may be elevated.

N. Authorities set forth to members of the DRC or SEC may be delegated only to those persons acting for the designated member during a designated member's absence.

O. Resolution of disputes under this Section may be accelerated as provided in Section XLIV (Covenant Not to Sue/Reservation of Rights) of this Agreement.

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XXVIII. Designated Project Managers

A. The EPA, DOE, and the SCDHEC will each designate Project Managers to coordinate the

implementation of this Agreement and shall notify each other in writing of the designation. Each Party may change its designated Project Manager by notifying the other Parties in writing.

B. To the maximum extent possible, communications between the EPA, DOE, and the SCDHEC and all documents, including reports, agreements, and other correspondence, concerning the activities performed pursuant to the terms and conditions of this Agreement, shall be directed through the Project Managers. Each Project Manager shall be responsible for assuring the internal dissemination and processing of all communications and documents received from the other Project Managers.

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XXIX. Quality Assurance/Sampling Availability/Data Management

A. The Parties shall make available to each other, upon request, results of sampling, tests, or other data generated by this Agreement. All quality-assured data from all samples reported on shall be available no later than ninety (90) days after the end of the quarter in which the analyses have been received and validated.

B. At the request of the EPA or the SCDHEC Project Manager, the DOE shall allow split or duplicate samples to be taken by EPA or SCDHEC during sample collection conducted pursuant to this Agreement. Upon request by DOE, EPA and SCDHEC shall submit to DOE copies of records, and other documents, including sampling and monitoring data, that are relevant to oversight activities. All requirements of the AEA, 42 U.S.C. § 2011, *et seq.*, and all Executive Orders concerning the handling of unclassified controlled nuclear information, restricted data, and national security information, including "need to know" requirements, shall be applicable to any grant of access to classified information, including sample collection, under the provisions of this Agreement.

C. The Parties intend to integrate all data and release characterization studies generated pursuant to this Agreement with all that generated pursuant to the RFA/RFI being conducted pursuant to the corrective action requirements contained in DOE's RCRA permit for the SRS. All data and studies produced under this Agreement shall be managed and presented in accordance with the requirements contained in a Data Management Plan to be developed by the Parties and appended to this Agreement after the effective date of this Agreement. The DOE shall maintain data base(s) for the site which includes all data and studies generated pursuant to this Agreement. Such data base(s) will be operational within six (6) months after the effective date of this Agreement. These data base(s) may be maintained in electronic form provided however, that hard copies of all data/studies and related documents are made available upon request.

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XXX. Access/Data/Document Availability

A. The EPA and SCDHEC will be permitted to enter the site at times previously arranged and coordinated for the purpose of inspecting records, logs, and other documents relevant to implementation of this Agreement; reviewing the progress of the DOE, its contractors, and lessees in carrying out the activities under this Agreement; conducting, with prior notice to the DOE, tests which EPA or SCDHEC deem necessary; and verifying data submitted to EPA and SCDHEC by DOE. The DOE shall honor all reasonable requests for access to the site made by EPA or SCDHEC. When on-site, the EPA and SCDHEC shall comply with OSHA Hazardous Waste Operations and

Emergency Response rules where applicable and DOE site health and safety requirements. The EPA and SCDHEC access shall be subject to the applicable requirements of the AEA, 42 U.S.C. § 2011, *et seq.*, and Executive Orders concerning the handling of unclassified controlled nuclear information, restricted data, and national security information. Upon request by EPA or SCDHEC, the DOE shall submit to EPA and SCDHEC copies of records, and other documents, including sampling and monitoring data, that are relevant to oversight activities.

B. To the extent that activities pursuant to this Agreement must be carried out on property other than SRS property, the DOE agrees to use its best efforts, including exercising its authority, if necessary, to obtain access pursuant to Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), from the present owners and/or lessees. The DOE shall use it best efforts to obtain access agreements which shall provide reasonable access for DOE, EPA, and SCDHEC and their representatives, and other appropriate state regulatory agencies.

C. The DOE shall use its best efforts to obtain written access agreements with respect to non-DOE property upon which pumping wells, treatment facilities, or other facilities may be located to carry out response actions under this Agreement. In the event DOE is unable to obtain access within sixty (60) days after the access is sought, the DOE shall promptly notify EPA and the SCDHEC regarding both the lack of access and the efforts undertaken to obtain such access. If appropriate, the DOE shall submit proposed modification(s) to this Agreement to EPA and SCDHEC in response to such inability to obtain access.

D. Information, records, or other documents produced under the terms of this Agreement by EPA, DOE, and SCDHEC shall be available to the public except (a) those identified to EPA or SCDHEC by DOE as classified, or unclassified but controlled, within the meaning of and in conformance with the AEA or (b) those that could otherwise be withheld pursuant to the Freedom of Information Act or the Privacy Act, unless expressly authorized for release by the originating agency. Documents or information so identified shall be handled in accordance with those regulations. If the document is final and no confidentiality claim accompanies information which is submitted to any Party, then the information may be made available to the public without further notice to the originating Party.

E. Notwithstanding any provisions of this Agreement, all requirements of the AEA, as amended, and all Executive Orders concerning the handling of unclassified controlled nuclear information, restricted data and national security information, including "need to know" requirements, shall be applicable to any access to information or facilities covered under the provisions of this Agreement. The EPA and SCDHEC reserve their right to seek to otherwise obtain access to such information or facilities in accordance with applicable law.

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XXXI. Extensions

A. Either a timetable and deadline or a schedule, including schedules within a work plan shall be extended upon receipt of a timely request for extension and when good cause exists for the requested extension. If an extension due to good cause affects any enforceable deadline in Appendix D, the Agreement shall be modified according to Section XLIII (Modifications of Agreement). Any request for an extension shall be made prior to the deadline or scheduled or deliverable date to EPA, SCDHEC, or DOE, as appropriate, either in writing or orally with a written follow-up request within ten (10) business days. Any oral or written request shall be provided to the other Parties pursuant to

Section XXVI (Notification). The written request 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:
5. A delay caused by additional work agreed to by the Parties: and
6. Any other event or series of events, including but not limited to new technical information or technological barriers mutually agreed to by the Parties as constituting good cause.

C. Absent agreement of the Parties with respect to the existence of good cause, the Parties may seek and obtain a determination through the dispute resolution process whether or not good cause exists.

D. For extension requests by DOE, the EPA, and SCDHEC will follow the following procedures:

1. Within fourteen (14) business days of receipt of a written request for an extension of a timetable and deadline or a schedule, the EPA and SCDHEC shall advise all Parties in writing of their respective positions on the request. Any failure by EPA or SCDHEC to respond within the 14-day period shall be deemed to constitute concurrence with the requested extension. If either EPA or SCDHEC does not concur with the requested extension, it shall include in its statement of nonconcurrence an explanation of the basis for its position.

2. If there is consensus among all Parties that the requested extension is warranted, then DOE shall extend the affected timetable and deadline or schedule 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 a determination resulting from the dispute resolution process.

3. Within fourteen (14) business days of receipt of a statement of nonconcurrence with the requested extension, the DOE may invoke dispute resolution. If DOE does not invoke dispute resolution within fourteen (14) business days of receipt of a statement of nonconcurrence, then DOE accents EPA's or SCDHEC's nonconcurrence and the existing schedule.

4. 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 because it was not brought in good faith, stipulated penalties may he 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, as defined in Section XLVII (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.

E. For extension requests by EPA and the SCDHEC, if no Party invokes dispute resolution within fourteen (14) business days after written notice of the requested extension, the extension shall be deemed approved.

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XXXII. Five-Year Review

Consistent with Section 121 of CERCLA, 42 U.S.C. § 9621(c), and in accordance with this Agreement, the DOE agrees that if the remedial action(s) selected results in hazardous substances, pollutants or contaminants remaining at the site, the EPA and SCDHEC will review the remedial action(s) no less often that once every five (5) years after the initiation of the final remedial action(s) to assure that human health and the environment are being protected by the remedial action(s) being implemented. If, upon such review, it is the judgment of EPA or SCDHEC that additional action or modification of a remedial action is appropriate in accordance with Sections 104, 106 or 120 of CERCLA, 42 U.S.C. §§ 9604, 9606 or 9620 then EPA or SCDHEC shall require DOE to submit a proposal to implement such additional or modified action(s), which shall be subject to review and approval by EPA and SCDHEC.

Any dispute under this Section shall be resolved under Section XXVII (Resolution of Disputes) of this Agreement.

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XXXIII. Retention of Records

The DOE shall preserve, during the duration of this Agreement and for a minimum of ten (10) years after the termination and satisfaction of this Agreement the complete Administrative Record, post-Record of Decision primary and secondary documents and reports. After this ten (10) year period, the DOE shall notify EPA and SCDHEC at least ninety (90) days prior to the destruction of any such records or documents. Upon request by EPA or SCDHEC, the DOE shall make available any such records or copies of such records.

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XXXIV. Administrative Record

A. The DOE shall establish and maintain an Administrative Record for the site. A complete copy of the Administrative Record shall be available to the public at the DOE reading room in Aiken, South Carolina. In addition, copies of the current index to the Administrative Record and selected documents from the Administrative Record shall be available at other locations.

B. The selection of each response action shall be based on the Administrative Record, in accordance with Section 113(k) of CERCLA, 42 U.S.C. § 9613(k), any regulations promulgated pursuant to that Section and any applicable guidance. A copy of each Administrative Record or a complete index of

each Administrative Record shall be maintained at EPA's Region IV office currently at 345 Courtland Street N. E., Atlanta Georgia 30365.

C. Upon request by EPA or SCDHEC the DOE shall provide copies of documents generated or possessed by DOE that are included in the Administrative Record to the requesting Party. The EPA and SCDHEC shall provide DOE with copies of documents generated by each agency which should be included within the Administrative Record.

D. Upon establishment of an Administrative Record the DOE shall provide EPA and SCDHEC with an index of the Administrative Record. The index shall identify the documents which will comprise the Administrative Record for each decision document for each particular response action.

E. The DOE shall provide to EPA and SCDHEC in its fiscal year written progress reports a periodic update of the indices of the Administrative Records and/or Administrative Record Files that includes any changes or additions to the Record. The Project Managers shall review the Administrative Record Indices and the Administrative Record File Indices to ensure that the Administrative Records and Administrative Record Files are current and complete.

F. The EPA shall provide the DOE with guidance on establishing and maintaining the Administrative Record as the guidance is developed.

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XXXV. Public Participation

A. The Parties agree that work conducted under this Agreement and any subsequently proposed remedial action alternative(s) and subsequent plan(s) for remedial action at the site arising out of this Agreement shall comply with the public participation requirements of CERCLA including Section 117 of CERCLA, 42 U.S.C. § 9617, the NCP RCRA (as applicable) all applicable guidance developed by EPA, and all applicable State laws. This shall be achieved through implementation of the approved Community Relations Plan prepared and implemented by DOE. When appropriate the Parties intend to coordinate public participation activities under this Agreement with those required under other State and Federal environmental laws (including RCRA) regulating activities at the SRS that are not covered by this Agreement.

B. Excluding imminent hazard situations any Party issuing an official news release to any publication with reference to any of the work required by this Agreement shall advise the other Parties of such news release and the contents thereof at least two (2) business days before the issuance of such news release.

C. Nothing in this Agreement shall be construed to preclude any Party from responding to public inquiries at any time.

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XXXVI. Recovery of Expenses

A. EPA Resources

EPA shall take all necessary steps and make efforts to obtain timely funding to meet its obligations under this Agreement. Notwithstanding any other provision of this Agreement, in the event that EPA determines that sufficient funds have not been appropriated to meet any post fiscal year 1991 commitments established by this Agreement, EPA may terminate this Agreement by written notice to DOE and SCDHEC.

B. Reimbursement of SCDHEC Expenses

1. The DOE agrees to reimburse the State for all costs incurred by the State specifically related to the implementation of this Agreement at the SRS and not inconsistent with the NCP.

2. A separate funding agreement between the DOE and the State will be executed within ninety (90) days after the Parties execute this Agreement. The separate funding agreement shall be the specific mechanism for the transfer of funds between the DOE and the State and shall provide a mechanism for the resolution of any disputed costs between the DOE and the State.

3. For purposes of budget planning only, the State shall annually provide the DOE before the beginning of the fiscal year a written estimate of the State's projected costs to be incurred in implementing the SRS Agreement in the upcoming fiscal year.

4. The State reserves all rights it has to recover any other past and future costs incurred by the State in connection with CERCLA activities conducted at the SRS.

5. In the event of a substantial increase in the State's costs incurred specifically related to the implementation of this Agreement, and a significant change in the scope of the project, the State and DOE agree to renegotiate the amounts contained in the separate funding agreement to reflect such increase proportionate to the circumstances. The amount and schedule of payment of these costs will be negotiated with consideration for the DOE's multi-year funding cycle.

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XXXVII. Claims and Publication

A. The DOE agrees to assume full responsibility for the remediation of the site in accordance with CERCLA and the NCP. However, nothing in this Agreement shall constitute or be construed as a release by SCDHEC, DOE, or EPA of any claims, causes of action, or demand in law or equity against any person, firm, partnership, or corporation not a signatory to this Agreement for any liability which it may have arising out of or related 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. This Agreement does not constitute any decision or preauthorization by EPA of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2) for any person, agent, contractor, or consultant acting for DOE.

C. The EPA and SCDHEC shall not be held as a party to any contract entered into by DOE to implement the requirements of this Agreement.

D. This Agreement shall not restrict EPA or SCDHEC from any legal, equitable, administrative, or response action for any matter not part of the work covered by this Agreement.

E. The DOE and EPA shall provide a copy of this Agreement to appropriate contractors, subcontractors, laboratories, and consultants retained to conduct any portion of the work performed pursuant to this Agreement prior to beginning work to be conducted under this Agreement.

F. Nothing in this Agreement shall be considered an admission by any Party with respect to any unrelated claims by any Party or any claims by persons not a Party to this Agreement.

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XXXVIII. Order of Preference

In the event of any inconsistency between the Sections of this Agreement and the Appendices to this Agreement, the Sections of this Agreement shall govern unless specifically stated otherwise in this Agreement.

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XXXIX. Funding

A. It is the expectation of the Parties that all obligations of DOE arising under this Agreement will be fully funded through Congressional appropriations consistent with Congressional limitations on future funding, DOE shall take all necessary steps and use its best efforts to obtain timely funding to meet its obligations under this Agreement, including, but not limited to, the submission of timely budget requests.

B. In accordance with Section 120(e)(5)(B) of CERCLA, 42 U.S.C. § 9620(a)(5)(B), DOE shall include in its annual report to Congress the specific cost estimates and budgetary proposals associated with the implementation of this Agreement.

C. No provision herein shall be interpreted to required obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341.

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

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XL. Five-Year Plan

The DOE has issued an Environmental Restoration and Waste Management Five-Year Plan (Five-Year Plan), updated annually, which identifies, integrates, and prioritizes compliance and environmental restoration activities at all DOE nuclear facilities and sites. The Five-Year Plan is intended to assist DOE in addressing environmental requirements and in developing and supporting its budget requests. DOE is also developing a national prioritization system to support

implementation of the Five-Year Plan. It is the intent of DOE that the terms of the Five-Year Plan shall be consistent with the provisions of the Agreement, including all requirements and schedules contained herein. It is also the intent of DOE that the that the Five-Year Plan be updated in a manner that ensures that the provisions of this Agreement are incorporated into the DOE planning and budget process. DOE agrees that the Five-Year Plan will not be construed or interpreted to change or affect the provisions of this Agreement.

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XLI. Compliance with Laws

All actions undertaken pursuant to this Agreement by DOE or its representative(s) shall be done in accordance with all applicable Federal laws, regulations and Executive Orders, and all applicable State and local laws and regulations.

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XLII. Force Majeure

A. 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 obligations under this Agreement, including, but not limited to:

1. Acts of God; fire; war; insurrection; civil disturbance; or explosion;

2. Unanticipated breakage or accident to machinery, equipment or lines of pipe despite reasonably diligent maintenance;

3. Adverse weather conditions that could not be reasonably anticipated; unusual delay in transportation;

4. Restraint by court order or order of public authority;

5. Inability to obtain, at reasonable cost and after exercise of reasonable diligence, all necessary authorizations, approvals, permits, or licenses due to action or inaction of any governmental agency or authority other than DOE;

6. Delays caused by compliance with applicable statutes or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence; and

7. For EPA and DOE only, insufficient availability of appropriated funds which have been diligently sought. In order for Force Majeure based on insufficient funding to apply to DOE, the DOE shall have made timely efforts to obtain such funds as part of the budgetary process set forth in Section XXXIX (Funding) of this Agreement.

B. 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 of expenses of Response Actions, whether or not anticipated at the time such Response Actions were initiated.

C. The DOE and SCDHEC agree that Subsection A.2 (entirely), Subsection A.3 ("delay in transportation"), Subsection A.4 ("order of public authority"), Subsection A.5 ("at reasonable cost"), and Subsection A.6 (entirely) above, do not create any presumptions that such events arise from causes beyond the control of a Party. The SCDHEC specifically reserves the right to withhold its concurrence to any extensions which are based on such events which are not entirely beyond the control of DOE pursuant to the terms of Section XXXI (Extensions), or to contend that such events do not constitute Force Majeure in any action to enforce this Agreement.

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XLIII. Modification of Agreement

A. This Agreement may be modified by agreement of all the Parties. All modifications shall be in writing and shall be effective when signed by all Parties. EPA shall be the last signatory on any major modifications to this Agreement.

B. Except as provided in Subsection C, no informal advice, guidance, suggestions or comments by EPA or SCDHEC shall be construed to relieve DOE of any obligation under this Agreement.

C. Modifications shall be considered major modifications under Subsection A, if designated "major" by any Party. A major modification is subject to Public participation, to the extent required by the DOE's Community Relations Plan, under Section XXXV (Public Participation) of this Agreement. All other modifications (including field modifications) shall not be considered major and can be made informally upon consent of the Project Managers. Informal modifications shall be confirmed in writing within ten (10) days following the consent of the Project Managers.

D. Any modification to this Agreement, its appendices, or any primary of secondary document which incorporates new innovative technology shall be considered a major modification to this Agreement. The Parties agree that such modifications will he made in the future where appropriate to incorporate those new technologies which achieve compliance with this Agreement, either at a reduced cost, or in a shorter period of time.

E. The Parties expressly acknowledge that this Agreement shall be modified, as appropriate, to incorporate the conditions of and otherwise address the authorities and the requirements of the Federal Facilities Compliance Act of 1992. Such modification may be initiated by any Party.

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XLIV. Covenant Not to Sue/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, the EPA and SCDHEC agree that compliance with this Agreement shall stand in lieu of any administrative, legal and equitable remedies against the DOE available to them regarding the currently known releases or threatened releases of hazardous substances including hazardous wastes, pollutants or contaminants at the site which are the subject of the RI/FS(s) and which will be addressed by the remedial action(s) provided for under this Agreement; except that nothing in this Agreement shall preclude either the EPA or SCDHEC from exercising any administrative, legal and equitable remedies available to them to require additional

response actions by the DOE in the event that: (1)(a) conditions previously unknown or undetected by either the EPA or SCDHEC arise or are discovered at the site, or (b) either the EPA or SCDHEC receive additional information not previously available concerning the premises which they employed in reaching this Agreement; and (2) the implementation of the requirements of this Agreement is no longer protective of public health and the environment.

B. By entering into this Agreement, the DOE does not waive any claim of sovereign immunity that it may have under Federal or State law or not expressly waived by statute; nor does it waive any immunity from payment of fines or penalties nor does it waive any claim of jurisdiction over matters reserved to it under the AEA. As stated in Section 1006 of RCRA, 42 U.S.C. § 6905, nothing in this Agreement shall be construed to require the DOE to take any action pursuant to RCRA which is inconsistent with the requirements of the AEA, as amended. In the event the DOE asserts that it cannot comply with any provisions of this Agreement under RCRA based on an alleged inconsistency between the requirements of RCRA and the AEA, as amended, it shall provide the basis for the inconsistency assertion in writing. In the event of any enforcement action, other than actions to enforce the terms of this Agreement, DOE reserves all rights available under law absent this Agreement.

C. By entering into this Agreement, the SCDHEC does not waive the right to seek civil penalties under State law in the event that sovereign immunity is waived by Act of Congress after the effective date of this Agreement provided, however, that SCDHEC shall not be entitled to collect civil or other penalties for any activities at SRS covered under the provisions of Subsection A of this Section.

D. By entering into this Agreement, the SCDHEC does not waive the any right or authority it may have under law. The SCDHEC expressly reserves all rights and authorities it may have under law except that it expressly agrees to exhaust any applicable remedies provided in Section XXII (Review/Comment on Documents) and Section XXVII (Resolution of Disputes) as provided in Section XLVIII (Enforceability) of this Agreement prior to exercising any such rights. Specifically, the SCDHEC reserves any right and authority it may have to require corrective action in accordance with the South Carolina Hazardous Waste Management Act and its right to challenge the selection of Remedial Action(s) under Section 121(f)(3)(a) of CERCLA, 42 U.S.C. § 9621(f)(3)(a). Unless expressly waived by law, the State of South Carolina does not waive its sovereign immunity by entering into this Agreement.

E. If dispute resolution concerning any matter requires a decision by the Regional Administrator or the Administrator, the Parties may mutually agree to accelerate that matter through the dispute resolution procedures of Section XXVII (Resolution of Disputes) under this Agreement to the Administrator. Notwithstanding the provisions of Section XXVII.K. (Resolution of Disputes) or any Section of this Agreement, in the event that the SCDHEC is dissatisfied with any final decision issued by the Administrator pursuant to Section XXVII (Resolution of Disputes), the SCDHEC may take any action concerning the disputed matter which would be available in the absence of this Agreement.

F. Notwithstanding this Section, or any other Section of this Agreement, the SCDHEC shall retain the right to obtain judicial review of any final decision of EPA on selection of a remedial action pursuant to any authority the SCDHEC may have under Sections 113, 121(e)(2), 121(f), and 310 of CERCLA, 42 U.S.C. §§ 9613, 9621(e)(2), 9621(f), and 9659.

G. This Covenant Not to Sue/Reservation of Rights does not affect any claims for natural resource

damage assessments or for damages to natural resources.

H. This Covenant Not to Sue/Reservation of Rights shall not be deemed to affect any rights which non-signatory persons may have.

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XLV. Natural Resource Damages

The DOE and other State and Federal trustees shall act on behalf of the public as the trustees for the natural resources present on SRS. In this capacity, the DOE shall be responsible for notifying other State and Federal trustees and for assessing damages (injury, destruction or loss of natural resources) resulting from releases of hazardous substances on SRS, and for implementation of measures designed to mitigate such damages. Those authorities are vested in the DOE (as specified in Executive Order 12580) pursuant to Section 107(f) of CERCLA and Section 311(f) of the Federal Water Pollution Control Act. As one of the trustees for natural resources on SRS, DOE shall:

1. Assess damages to public natural resources following the procedures provided by 43 CFR Part 11 and subsequent rulemaking; and

2. Devise and implement a plan to restore, replace or acquire the equivalent of such resource pursuant to CERCLA. Such a plan shall be consistent, to the degree possible, with applicable Record(s) of Decision under this Agreement.

The DOE shall notify the appropriate Federal anal State natural resource trustees as required by Section 104(b)(2) of CERCLA, 42 U.S.C. § 9604(b)(2), and Section 2(e)(2) of Executive Order 12580. Except as provided herein, DOE is not released from any liability which it may have pursuant to any provisions of State and Federal law, including any claim for damages for liability to the destruction of, or loss of natural resources.

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XLVI. Property Transfer

In the event that DOE determines to enter into any contract for the sale or transfer of any of the SRS, the DOE shall comply with the requirements of Section 120(h) of CERCLA, 42 U.S.C. § 9620(h), in effectuating that sale or transfer, including all notice requirements. In addition, the DOE shall include notice of this Agreement in any document transferring ownership or operation of the SRS to any subsequent owner and/or operator of any portion of the SRS and shall notify EPA and SCDHEC of any such sale or transfer at lease ninety (90) days prior to such sale or transfer. No change in ownership of the SRS or any portion thereof or notice pursuant to Section 120(h)(3)(b) of CERCLA, 42 U.S.C. § 9620(h)(3)(b), shall relieve the DOE of its obligation to perform pursuant to this Agreement. No change of ownership of the SRS or any portion thereof shall be consummated by the DOE without provision for continued maintenance of any containment system, treatment system, or other response action(s) installed or implemented pursuant to this Agreement. This provision does not relieve the DOE of its obligations under 40 CFR Part 270 or 25 S.C. Code Ann. R. 61-79, Section 270.

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XLVII. Stipulated Penalties

A. In the event that DOE fails to submit a primary document, as identified in Section XXII (Review/Comment on Documents), to 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, EPA and SCDHEC may determine jointly that a stipulated civil penalty may be assessed. The EPA will implement the joint decision under this Subsection. 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 Subsection occurs.

B. Upon determining that the DOE has failed in a manner set forth in Subsection A, above, 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, then 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. The DOE shall not be liable for the stipulated penalty assessed by 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 DOE annual report to Congress required by Section 120(e)(5) of CERCLA, 42 U.S.C. § 9620 (e)(5), 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 Section shall be payable to the Hazardous Substances Response Trust Fuel from funds authorized and appropriated for that specific purpose.

E. In no event shall this Section give rise to a stipulated penalty in excess of the amount set forth in Section 199 of CERCLA, 42 U.S.C. § 9609.

F. This Section shall not affect DOE's ability to obtain an extension of a timetable, deadline, or schedule pursuant to Section XXXI (Extensions) of this Agreement.

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

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XLVIII. 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 uncle CERCLA and is incorporated into this Agreement is enforceable by any person pursuant to Section 310 of CERCLA, 42 U.S.C. § 9659, 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, 42 U.S.C. §§ 9659(c) and 96099; and

2. All Appendix D timetables or deadlines associated with the development, implementation and completion of the RFI/RI and CMS/FS shall be enforceable by any person pursuant to Section 310(c) of CERCLA, U.S.C. § 9659, and any violation of such timetables or deadlines will be subject to civil penalties under Sections 310 and 109 of CERCLA, 42 U.S.C. §§ 9659(c) and 9609;

3. All terms and conditions of this Agreement which relate to operable units or final remedial actions, including corresponding timetables, deadlines, or schedules, and all work associated with the operable units or final remedial actions, shall be enforceable by any person pursuant to Section 310(c) of CERCLA, 42 U.S.C. § 9659(c), and any violation of such terms or conditions will be subject to civil penalties under Sections 310(c) and 109 of CERCLA, 42 U.S.C. §§ 9659(c) and 9609; and

4. Any final resolution of a dispute pursuant to Section XXVII (Resolution of Disputes) 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, 42 U.S.C. § 9659(c), 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, 42 U.S.C. §§ 9659(c) and 9609.

B. Consistent with Section XLIV (Covenant Not to Sue/Reservation of Rights) of this Agreement, the SCDHEC agrees to exhaust fully the remedies provided in Section XXII (Review/Comment on Documents) and Section XXVII (Resolution of Disputes) of this Agreement prior to exercising any other authority it may have relative to the Savannah River Site.

C. 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 provisions of CERCLA, including Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

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

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XLIX. Termination and Satisfaction

A. To the extent that remedial response actions are conducted in operable units under the provisions of this Agreement, following completion of all response actions at an operable unit and upon written request by DOE, the EPA, with the concurrence of the SCDHEC, will send to DOE a written notice that the operable unit has been completed in accordance with the requirements for that operable unit. This notice shall not serve as written notice of termination and satisfaction of the entire Agreement described under Subsection B of this Section.

B. To the extent that remedial response actions are conducted pursuant to the provisions of this

Agreement, following the completion of all remedial response actions and upon written request by DOE, the EPA, with the concurrence of the SCDHEC will send to DOE a written notice of satisfaction of the terms of this Agreement within ninety (90) days of the request. The notice shall state that in the opinion of EPA and SCDHEC, the DOE has satisfied all the terms of this Agreement in accordance with the requirements of CERCLA, the NCP, Section 3008(h) of RCRA, 42 U.S.C. § 6928(h), and related guidance, and applicable State laws and that the work performed by DOE was consistent with the agreed-to remedial actions.

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L. Effective Date

This Agreement shall become effective after it is executed by all the Parties and upon the date set by EPA in written notification to all Parties that the Agreement has been executed and is effective.

IT IS SO AGREED

The undersigned representatives of each Party certify that they are fully authorized to enter into this Agreement and to legally bind such Party to this Agreement.

FOR THE UNITED STATES DEPARTMENT OF ENERGY:

Peter M. Hekman
Manager
Savannah River Field Office

Date: 15 January 1993

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Greer C. Tidwell
Regional Administrator
Region IV

Date: 4 December 1992

FOR THE STATE OF SOUTH CAROLINA:

R. Lewis Shaw
Deputy Commissioner
Environmental Quality Control
Department of Health
and Environmental Control

Date: 2 December 1992

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Appendix A: RCRA/CERCLA Terminology and ARARs

RCRA/CERCLA Terminology		
RCRA CORRECTIVE ACTION 3004(u), (v), 3008(h)	**CERCLA REMEDIAL ACTION 40 C.F.R. Part 300**	**COMBINATION RCRA/CERCLA**
ACRONYMS:		
RFI: RCRA Facility Investigation	RI: Remedial Investigation	RFI/RI
CMS: Corrective Measures Study	FS: Feasibility Study	CMS/FS
CMP: Corrective Measures Plan	Proposed Plan	
Not Applicable	Record of Decision	
CMD: Corrective Measures Design	RD: Remedial Design	CMD/RD
CMI: Corrective Measures Implementation	RA: Remedial Action	CMI/RA

General Terminology:

Corrective Action: RCRA term for all activities conducted under either §§ 3004(u) and (v) or § 3008(h) or both. Regulations governing RCRA corrective action are expected to be proposed and published at Subpart S of 40 C.F.R. Part 264.

Closure: RCRA term for requirements of Subpart G of 40 C.F.R. Parts 264 and 265 for RCRA-regulated TSD units only.

NFA: No Further Action

Site: CERCLA term as defined in NCP and FFA.

Solid Waste Management Unit (SWMU): RCRA term as defined in RCRA permit.

Operable Unit: CERCLA term for a discrete action as part of a remedial response that, according to a Record of Decision, manages contaminant migration, or eliminates or mitigates a release, threat of a release or pathway of human or environmental exposure.

Potential

Applicable, or Relevant and Appropriate Requirement; (ARARs)

Statues (Including implementing regulations)

Administrative Procedure Act, 5 U.S.C. § 551 *et seq.*

Archaeological and Historical Preservation Act
Atomic Energy Act 42, U.S.C. § 2011 *et seq.*
Clean Air Act, 42 U.S.C. § 7401 *et seq.*
Clean Water Act (Federal Water Pollution Control Act) 33 U.S.C. § 1251 *et seq.*
Coastal Zone Management Act
Emergency Planning and Community Right-To-Know Act, 42 U.S.C. § 11001 *et seq.*
Endangered Species Act, 16 U.S.C. § 1531 *et seq.*
Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. § 136 *et seq.*
Fish and Wildlife Coordination Act
Hazardous Materials Transportation Act
Historical Sites, Buildings and Antiquities Act
National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.*
National Historic Preservation Act, 16 U.S.C. § 470 *et seq.*
Occupational Safety and Health Act, 29 U.S.C. 651 *et seq.*
Rivers and Harbors Act of 1989
Safe Drinking Water Act (Public Health Service Act), 42 U.S.C. § 300(f) *et seq.*
Scenic River Act
Solid Waste Disposal Act (as amended by the Resource Conservation and Recovery Act), 42 U.S.C. § 6901 *et seq.*
South Carolina Administrative Procedures Act, 1-23-10
South Carolina Atomic Energy and Radiation Control Act, 13-7-10
South Carolina Hazardous Waste Management Act, S.C. Code Ann. § 44-56-10 *et seq.* (Supp 1988)
South Carolina Oil and Gas Exploration, Drilling and Transportation Act, 48-43-10
South Carolina Pollution Control Act, S. C. Code Ann. § 48-1-10 *et seq.* (Supp 1988)
South Carolina Safe Water Drinking Act, 44-55-10 (1976)
South Carolina Solid Waste Management Act, 44-96-10, *et seq.* (1991)
Toxic Substances Control Act, 15 U.S.C. § 2601 *et seq.*
Uranium Mill Tailings Radiation Control Act, 42 U.S.C. § 7910 *et seq.*
Wild and Scenic Rivers Act
Wilderness Act

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Appendix B: High Level Radioactive Waste Tank System(s)

The following high-level radioactive waste tank system(s) are subject to this Agreement:

F- and H-Area Waste Tanks:

High-Level Radioactive Waste Tanks Nos. 1 through 51;

242-F Evaporator Pot
- Mercury Collection Tank
- Cesium Removal Column Pump Tank
- Overheads Tank, North
- Overheads Tank, South
- Overheads Diverting Tank

242-16F Evaporator Pot
- Mercury Collection Tank
- Cesium Removal Column Pump Tank
- Overheads Tank, North
- Overheads Tank, South

242-H Evaporator Pot
- Mercury Collection Tank
- Cesium Removal Column Pump Tank
- Overheads Tank, 4
- Overheads Tank, 5

242-16H Evaporator Pot
- Mercury Collection Tank
- Cesium Removal Column Pump Tank
- Overheads Tank, 1
- Overheads Tank, 2

F-Area Concentrate Transfer System Pump Tank

F Pump Tank #1

F Pump Tank #2

F Pump Tank #3

H-Area Concentrate Transfer System Pump Tank

H Pump Tank #1

H Pump Tank #2

H Pump Tank #3

H Pump Tank #4

H Pump Tank #5

H Pump Tank #6

H Pump Tank #7

H Pump Tank #8

H Pump Tank #9

H Pump Tank #10

In-Tank Precipitation Filtrate Hold Tank #1

In-Tank Precipitation Filtrate Hold Tank #2

A. Standards for Integrity Assessment for Existing Tank(s)

At a minimum, the structural integrity assessment for each tank system(s) shall include an evaluation of the following:

1. Design standards, if available, according to which the tank and ancillary equipment such as sumps, cut-off valves, and piping to cut-off valves were constructed;

2. Hazardous characteristics of the hazardous or radioactive substance(s) that have been and will be handled;

3. Existing corrosion protection measures;

4. Documented age (if unavailable, an estimated age) of the tank system(s); and

5. Results of an integrity examination, either (a) a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects, or (b) other integrity examination that addresses cracks, leaks, corrosion, and erosion, and that documents the limits of the technique(s) used to examine tank integrity and is certified by a registered professional engineer.

B. Design/Installation Standards for New or Replacement Tank System(s) and Components

1. The design/installation assessment for each tank system(s)/component(s) design shall include, at a minimum, the following information:

(a) Design standard(s) according to which tank(s) and/or the ancillary equipment are constructed;

(b) Hazardous characteristics of the hazardous and/or radioactive substance(s) to be handled;

(c) For new tank system(s)/component(s) in which the external shell of a metal tank or any external metal component(s) of the tank system(s) will be in contact with the soil or water, a determination by a corrosion expert of:

(i) Factors affecting the potential for corrosion, including but not limited to:

(A) Soil moisture content;
(B) Soil pH;
(C) Soil sulfides level;
(D) Soil resistivity;
(E) Structure to soil potential;
(F) Influence of nearby underground metal structures (e.g., piping);
(G) Existence of stray electric currents;
(H) Existing corrosion-protection measures (e.g., coating, cathodic protection), and

(ii) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system(s) during the use of the system(s) or component(s), consisting of one or more of the following:

(A) Corrosion-resistant materials of construction such as special alloys, fiberglass reinforced plastic, etc.;
(B) Corrosion-resistant coating (such as epoxy, fiberglass, etc.) with cathodic protection (e.g., impressed current or sacrificial anodes); and
(C) Electrical isolation devices such as insulating joints, flanges, etc.

(d) For underground tank system components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and

(e) Design considerations to ensure that:

(i) Tank foundations will maintain the load of a full tank;

(ii) Tank systems will be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone which has had displacement during the Holocene period; and

(iii) Tank systems will withstand the effects of frost heave.

2. The DOE shall ensure that proper handling procedures are adhered to in order to prevent damage to tank system(s) or component(s) during installation. Prior to covering, enclosing, or placing a new tank system or component in use, a registered professional engineer who is trained and experienced in the proper installation of tank systems or components, shall inspect the system for the presence of any of the following items:

   (a) Weld breaks;
   (b) Punctures;
   (c) Scrapes of protective coatings;
   (d) Cracks;
   (e) Corrosion;
   (f) Other structural damage or inadequate construction or installation.

   All such discrepancies shall be remedied before the tank system is covered, enclosed, or placed in use.

3. New tank system(s)/component(s) that are placed underground and that are backfilled shall be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

4. All new tanks and ancillary equipment shall be tested for tightness prior to being covered, enclosed, or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed prior to the tank system being covered, enclosed, or placed into use.

5. Ancillary equipment shall be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

6. The DOE shall provide the type and degree of corrosion protection recommended by a professional engineer or corrosion specialist, a person who is trained by experience or education to do the work, based on the information provided under Subsection 1(c), above; or other corrosion protection if the SCDHEC determines other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated shall be supervised by a registered professional engineer to ensure proper installation.

7. The DOE shall obtain and keep on film at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of paragraphs 1 through 6 of this Subsection, that attest that the tank system was properly designed and installed and that repairs, pursuant to paragraphs 2 through 4 of this Subsection, were performed.

C. Standards for Containment/Release Detection

1. At a minimum, secondary containment system(s) shall be:

   (a) Constructed of or lined with materials that are compatible with the hazardous or

radioactive substance(s) to be placed in the tank system and shall have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste(s) or substances to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);

(b) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(c) Provided with a leak-detection system that is designed and operated so that it shall detect the failure of either the primary or secondary containment structure or the presence of any leak of hazardous or radioactive constituents, hazardous substances, or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the DOE can demonstrate that existing detection technologies or site conditions will not allow detection of a leak within 24 hours; and

(d) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks or precipitation. Leaked substances and accumulated precipitation shall be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the DOE can demonstrate that removal of the leaked substances or accumulated precipitation cannot be accomplished within 24 hours.

(e) Secondary containment for tanks shall include one or more of the following devices:

(i) a liner (external to the tank);
(ii) a vault;
(iii) a double-walled tank;
(iv) an equivalent device approved by SCDHEC.

(f) In addition to the above requirement, secondary containment systems shall satisfy the following requirements:

(i) External liner systems shall be:

(A) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

(B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

(C) Free of cracks or gaps; and

(D) Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the substances if the

substances is released from the tank(s) (i. e., capable of preventing lateral as well as vertical migration of the substance(s)).

(ii) Vault systems shall be:

(A) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

(B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a 25-year, 24-hour rainfall event:

(1) Constructed with chemical-resistant water stops in place at all joints (if any);

(2) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;

(C) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the substances being stored or treated:

(1) Meets the definition of ignitable waste under 40 CFR Section 262.21; or

(2) Meets the definition of reactive waste under 40 CFR Section 262.21, and may form an ignitable or explosive vapors.

(D) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(iii) Double-walled tanks shall be:

(A) Designed as an integral structure (i. e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell.

(B) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(C) Provided with a built-in continuous leak detection system capable of detecting a leak within 24 hours, or at the earliest practicable time, if the DOE can demonstrate that the existing detection technology or site conditions would not allow detection of a leak within 24 hours.

(iv) Ancillary equipment shall be provided with secondary containment (e.g.,

trench, jacketing, double-walled piping) that meet the requirements of this Agreement except for:

(A) Above ground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

(B) Welded flanges, welded joints, and welded connections, that are visually inspected for leaks on a dally basis;

(C) Sealless or magnetic coupling pumps, that are visually inspected for leaks on a daily basis; and

(D) Pressurized above ground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

D. Disposition of Leaking Tank(s)

1. For each tank system(s)/component(s) that is determined to be leaking, the DOE shall comply with the following requirements.

   (a) The DOE shall immediately stop the flow of hazardous or radioactive substances into the tank system(s) or secondary containment system(s) and inspect the system(s) to determine the cause of the leak.

   (b) If the leak was from the tank system to the environment, the DOE shall, within 24 hours after detection of the leak, or if the DOE demonstrates that it is not possible, at the earliest practicable time, remove as much of the hazardous/radioactive substance as is necessary to prevent further release of hazardous or radioactive substances to the environment and to allow inspection and repair of the tank system(s) to be performed.

   (c) If the leak was to a secondary containment system(s), all accumulated materials shall be removed from the secondary containment system(s) within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

2. The DOE shall as soon as possible conduct a visual inspection of the leak and, based upon that inspection:

   (a) Prevent further migration of the leak to soils or surface water; and

   (b) Remediate any visible contamination of the soil or surface water.

3. Any release to the environment shall be reported to EPA and SCDHEC within 24 hours of its detection. If the release has been reported pursuant to 40 CFR Part 302, such report will satisfy this requirement.

4. Within thirty (30) days of detection of a release to the environment, a report containing the following information shall be submitted to EPA and SCDHEC:

   (a) Likely route of migration of the release;

   (b) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

   (c) Results of any monitoring or sampling conducted in connection with the release (if available). If data are unavailable within 30 days, these data must be submitted as soon as they become available.

   (d) Proximity to downgradient drinking water, surface water, and populated areas; and

   (e) Description of response actions taken or planned.

5. Unless the DOE satisfies the requirements of paragraphs (5)(a) through (c) of this Subsection, the tank system shall be removed from service in accordance with Subsection E, Section IX of the Agreement.

   (a) If the cause of the release was a leak that has not damaged the integrity of the system, the DOE may return the system to service as soon as the released constituent/substance is removed and repairs, if necessary, are made.

   (b) If the leak was from the primary tank system into the secondary containment system, the system shall be repaired prior to returning the tank system to service, or the DOE must demonstrate, subject to the approval of SCDHEC, that returning the system to service without repair would not threaten human health or the environment.

   (c) If the source of a release was a leak to the environment from a component of a tank system without secondary containment, the DOE shall provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Subsection C of this Appendix before it can be returned to service, unless the source of the leak is an above ground portion of a tank system that can be inspected visually. If the source of the leak is an above ground portion of a tank system that can be inspected visually, the component shall be repaired and may be returned to service without secondary containment as long as the requirements of paragraph (d) of this Subsection are satisfied. If a component is replaced to comply with the requirements of this subsection, that component shall satisfy the requirements for new tank systems/components in Subsections B and C of Section IX of this Agreement. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component shall be provided with secondary containment in accordance with these requirements prior to being returned to use.

(d) If the DOE has repaired a tank system in accordance with paragraph (5) of this Subsection, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system shall not be returned to service unless: (1) the DOE has obtained a certification by a registered professional engineer that the repaired system is capable of handling hazardous/radioactive substances without release for the intended life of the system, and (2) this certification is approved by SCDHEC.

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