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

Lawrence Livermore National Laboratory Federal Facility Agreement Under CERCLA Section 120, June 29, 1992

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 9
AND
CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL
AND
CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD
AND
UNITED STATES DEPARTMENT OF ENERGY

IN THE MATTER OF:	)	Federal Facility
	)	Agreement Under
The U.S. Department	)	CERCLA Section 120
of Energy	)	
	)	Administrative
Lawrence Livermore	)	Docket Number: 92-16
National Laboratory	)	
Site 300	)	

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

Table of Contents

1. Purpose

1.1 The general purposes of this Agreement are to:

(a) Ensure that the environmental impacts associated with past and present activities at the Site are thoroughly investigated and appropriate remedial action taken as necessary to protect human health, welfare or the environment;

(b) Establish a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at the Site in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Contingency Plan (NCP), Superfund guidance and policy, the Resource Conservation and Recovery Act (RCRA), RCRA guidance and policy, and applicable State law; and,

(c) Facilitate cooperation, exchange of information and participation of the Parties in such

action.

1.2 Specifically, the purposes of this Agreement are to:

(a) Identify operable units (OUs) which are appropriate at the Site prior to the implementation of final remedial action(s) for the Site. OUs not already identified by the effective date of this Agreement shall be identified and proposed to the Parties as early as possible prior to final proposal of OUs to EPA, DTSC and the RWQCB pursuant to CERCLA and applicable State law. This process is designed to promote cooperation among the parties in identifying OUs prior to the final selection of OUs. Operable units identified at Lawrence Livermore National Laboratory Site 300 (LLNL Site 300) shall be defined in Appendix A of this Agreement;

(b) Establish requirements for the performance of a Remedial Investigation (RI) to determine fully the nature and extent of the threat to human health, welfare or the environment caused by the release and threatened release of hazardous substances, pollutants, or contaminants at the Site and to establish requirements for the performance of a Feasibility Study (FS) for the Site to identify, evaluate, and select alternatives for the appropriate remedial action(s) to prevent, mitigate, or abate the release or threatened release of hazardous substances, pollutants, or contaminants at the Site in accordance with CERCLA and applicable State law;

(c) Identify the nature, objective, and schedule of response actions to be taken at the Site. Response actions at the Site shall attain that degree of cleanup of hazardous substances, pollutants, or contaminants mandated by CERCLA and applicable State law;

(d) Implement the selected remedial action(s) in accordance with CERCLA and applicable State law;

(e) Assure compliance, through this Agreement, with RCRA and other applicable Federal and State laws and regulations for matters covered herein;

(f) Expedite the cleanup process to the extent consistent with protection of human health and the environment;

(g) Provide for DTSC and RWQCB involvement in the initiation, development, selection and enforcement of remedial actions to be undertaken at LLNL Site 300, including the review of all applicable data as it becomes available in accordance with Section 22 (Data and Document Availability) and the development of studies, reports, and action plans; and to identify and integrate State ARARs into the remedial action process; and,

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

Go to Table of Contents

2. Parties

2.1 The Parties to this Agreement are EPA, the Department of Energy, DTSC, and the RWQCB. The terms of the Agreement shall apply to and be binding upon EPA, DTSC, the RWQCB, and the Department of Energy.

2.2 This Agreement shall be enforceable against all of the Parties to this Agreement. This Section shall not be construed as an agreement to indemnify any person. The Department of Energy shall notify its agents, members, employees, response action contractors for the Site, and all subsequent owners, operators, and lessees of the Site of the existence of this Agreement.

2.3 Each Party shall be responsible for ensuring that its contractors comply with the terms and conditions of this Agreement. Failure of a Party to provide proper direction to its contractors and any resultant noncompliance with this Agreement by a contractor shall not be considered a Force Majeure event or other good cause for extensions under Section 9 (Extensions), unless the Parties so agree or unless established by the dispute resolution process contained in Section 12 (Dispute Resolution).

Go to Table of Contents

3. Jurisdiction

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

(a) 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 (CERCLA), 42 U.S.C. Section 9620(e)(1), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Public Law 99-499 (hereinafter jointly referred to as CERCLA), and the Resource Conservation and Recovery Act (RCRA) Sections 6001, 3004(u) and (v), 3008(h), 7003, and 9003(h), 42 U.S.C. Sections 6961, 6924(u) and (v), 6928(h), 6973, and 6991b(h), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) (hereinafter jointly referred to as RCRA), and Executive Order 12580;

(b) EPA enters into those portions of this Agreement that relate to remedial actions pursuant to CERCLA Section 120(e), 42 U.S.C. Section 9620(e), RCRA Sections 6001, 3008(h), 3004(u) and (v), 7003, 9003(h), 42 U.S.C. Sections 6961, 6928(h), 6924(u) & (v), and 6991b(h), and Executive Order 12580;

(c) The Department of Energy enters into those portions of this Agreement that relate to the RI/FS pursuant to CERCLA Section 120(e)(1), 42 U.S.C. Section 9620(e)(1), RCRA Sections 6001, 3008(h), 3004(u) & (v), and 9007(a), 42 U.S.C. Sections 6961, 6928(h), 6924(u) & (v), and 6991f(a), Executive Order 12580, and the National Environmental Policy Act, 42 U.S.C. Section 4321, and the Atomic Energy Act of 1954 (AEA), as amended, 42 U.S.C. 2201, et seq.;

(d) The Department of Energy enters into those portions of this Agreement that relate to remedial actions pursuant to CERCLA Section 120(e), 42 U.S.C. Section 9620(e), RCRA Sections 6001, 3004(u) & (v), 3008(h), and 9007(a), 42 U.S.C. Sections 6961, 6924(u) & (v), 6928(h), and 6991f(a), Executive Order 12580 and the National Environmental Policy Act, 42 U.S.C. Section 4321, and the Atomic Energy Act of 1954 (AEA), as amended, 42 U.S.C. 2201, et seq.;

(e) The California Department of Toxic Substances Control and the Central Valley Regional Water Quality Control Board enter into this Agreement pursuant to CERCLA Sections 120(f) and 121, 42 U.S.C. Sections 9620(f) and 9621, and California Health and Safety Code Sections

102 and 25355.5(a)(1)(C), Division 20, Chapters 6.5 and 6.8, and Division 7 of the California Water Code, and the Clean Water Act, 33 U.S.C. Section 1251, et seq.

Go to Table of Contents

4. Definitions

4.1 The definitions provided in CERCLA, CERCLA case law, and the NCP shall control the meaning of terms used in this Agreement. The following definitions cover terms either not defined in the NCP or terms of sufficient importance to warrant reiteration of the definition in this Agreement.

(a). "Agreement" shall refer to this document and shall include all Appendices to this document to the extent they are consistent with the original Agreement as executed or modified. All such Appendices shall be attached to and made an integral and enforceable part of this document. Copies of Appendices shall be available as part of the Administrative Record, as provided in Subsection 26.3.

(b). "ARARs" ("Applicable or Relevant and Appropriate Requirements") shall mean Federal and State applicable or relevant and appropriate requirements, standards, criteria, or limitations, identified pursuant to Section 121 of CERCLA. ARARs shall apply in the same manner and to the same extent that such are applied to any non-governmental entity, facility, unit, or site, as defined in CERCLA and the NCP. See CERCLA Section 120(a)(1), 42 U.S.C. Section 9620(a)(1).

(c). "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act, Public Law 96-510, 42 U.S.C. Section 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499, and any subsequent amendments.

(d). "Days" shall mean calendar days, unless business days are specified. Any submittal that under the terms of this Agreement would be due on Saturday, Sunday, or a Federal or State holiday shall be due on the following business day.

(e). "Department of Energy" or "DOE" shall mean the U.S. Department of Energy, its employees, members, agents, and authorized representatives, to the extent necessary to effectuate the terms of this Agreement, including, but not limited to, appropriations and congressional reporting requirements.

(f). "DTSC" shall mean the California Department of Toxic Substances Control (formerly Department of Health Services), its successors and assigns, and its duly authorized representatives.

(g). "Ecological Assessment" shall mean a qualitative and/or quantitative appraisal of the actual or potential effects of a hazardous waste site on plants and animals other than people and domesticated species, as described in EPA's Risk Assessment Guidance for Superfund -- Environmental Evaluation Manual, March 1989, EPA/540/1-899/001A (OSWER Directive 9285.7-01).

(h). "EPA" shall mean the United States Environmental Protection Agency, its employees and

authorized representatives.

(i). "Facility" shall have the same definition as in CERCLA Section 101(9), 42 U.S.C. Section 9601(9).

(j). "Feasibility Study" or "IFS" means a study conducted pursuant to CERCLA and the NCP which fully develops, screens and evaluates in detail remedial action alternatives to prevent, mitigate, or abate the migration or the release of hazardous substances, pollutants, or contaminants at and from the Site.

(k). "LLNL Site 300" shall mean the property described in Appendix E to this Agreement.

(l). "Meeting," in regard to Remedial Project Managers, shall mean an in-person discussion at a single location or a conference telephone call of all Remedial Project Managers. With the concurrence of the Remedial Project Managers, a conference call will suffice for an in-person meeting.

(m). "National Contingency Plan" or "NCP" shall refer to the regulations contained in 40 CFR Part 300 et seq., and any subsequent amendments thereof.

(n). "Natural Resources Trustee(s)" or "Federal or State Natural Resources Trustees" shall have the same meaning and authority as provided in CERCLA and the NCP.

(o). "On-Scene Coordinator" or "OSC" shall have the same meaning and authority as provided in the NCP.

(p). "Operable Unit" or "OU" shall have the same meaning as provided in the NCP, 40 CFR 300.5.

(q). "Operation and maintenance" shall mean measures required to maintain the effectiveness of response actions.

(r). "RCRA" or "RCRA/HSWA" shall mean the Resource Conservation and Recovery Act of 1976, Public Law 94-580, 42 U.S.C. Section 6901 et seq., as amended by the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, and any subsequent amendments.

(s). "Remedial Design" or "RD" shall have the same meaning as provided in the NCP, 40 CFR 300.5.

(t). "Remedial Investigation" or "RI" means that investigation conducted pursuant to CERCLA and the NCP. The RI serves as a mechanism for collecting data for site and waste characterization and conducting treatability studies as necessary to evaluate performance and cost of the treatment technologies. The data gathered during the RI will also be used to conduct a baseline risk assessment, perform a feasibility study, and support design of a selected remedy.

(u). "Remedial Project Manager" or "RPM" shall have the same meaning and authority as provided in the NCP, 40 CFR 300.5.

(v). "Remedy" or "Remedial Action" or "RA" shall have the same meaning as provided in

Section 101(24) of CERCLA, 42 U.S.C. Section 9601(24), and the NCP, 40 CFR 300.5, and may consist of Operable Units.

(w). "Remove" or "Removal" shall have the same meaning as provided in Section 101(23) of CERCLA, 42 U.S.C. Section 9601(23), and the NCP, 40 CFR 300.5.

(x). "RWQCB" shall mean the Regional Water Quality Control Board, Central Valley Region, its successors and assigns, and its duly authorized representatives.

(y). "Response Action" shall have the same meaning as that provided in the definition of "respond or response" in the NCP, 40 CFR 300.5.

(z) "Site" shall include LLNL Site 300 as defined above; the "Facility" as defined above; any area off LLNL Site 300 to or under which a release of hazardous substances has migrated, or threatens to migrate, from a source on or at LLNL Site 300; and any on-site area necessary for performance of remedial actions. The term "on-site" shall have the same meaning as provided in the NCP, 40 CFR 300.5.

Go to Table of Contents

5. Stipulated Determinations

For the purpose of this Agreement only, the following constitutes a summary of the determinations upon which this Agreement is based. None of the determinations related herein shall be considered admissions by any Party with respect to any unrelated claims by a Party or any claims by persons not a Party to this Agreement.

5.1 LLNL Site 300, San Joaquin and Alameda Counties, California, was placed on the National Priorities List by the Environmental Protection Agency on August 30, 1990, 55 Federal Register 35502.

5.2 LLNL Site 300 is a facility under the jurisdiction, custody, or control of the Department of Energy within the meaning of Executive Order 12580, 52 Federal Register 2923, 29 January 1987.

5.3 LLNL Site 300 is a Federal Facility under the jurisdiction of the Secretary of Energy within the meaning of CERCLA Section 120, 42 U.S.C. Section 9620, and Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 211, et seq., 10 U.S.C, Section 2701, et seq.

5.4 The Department of Energy is the authorized delegate of the President under E.O. 12580 for receipt of notification by the State of its ARARs as required by CERCLA Section 121(d)(2)(A)(ii), 42 U.S.C. Section 9621(d)(2)(A)(ii).

5.5 The authority of the Department of Energy to exercise the delegated removal authority of the President pursuant to CERCLA Section 104, 42 U.S.C. Section 9604 is not altered by this Agreement.

5.6 The actions to be taken pursuant to this Agreement are reasonable and necessary to protect human health, welfare, or the environment.

5.7 There are areas within the boundaries of the Federal Facility where hazardous substances have been deposited, stored, placed, or otherwise come to be located in accordance with 42 U.S.C. Sections 9601(9) and (14).

5.8 There have been releases of hazardous substances, pollutants or contaminants at or from the Federal Facility into the environment within the meaning of 42 U.S.C. Sections 9601(22), 9604, 9606, and 9607.

5.9 With respect to these releases, the Department of Energy is an owner, operator, and/or generator subject to the provisions of 42 U.S.C. Section 9607 and within the meaning of California Health and Safety Code Section 25323.5(a).

5.10 Included as Attachment A to this Agreement is a map showing source(s) of known or suspected contamination, based on information available at the time of the signing of this Agreement.

5.11 In accordance with Section 300.600(b)(3) of the National Contingency Plan, and Section 107(f) of CERCLA, 42 U.S.C. Section 9607(f), the Secretary of Energy is the trustee for natural resources located on, over, or under the Federal Facility, to the extent such natural resources are not specifically entrusted to the Secretary of Commerce or the Secretary of the Interior.

5.12 Appendix B to this Agreement shows those primary documents which have been reviewed or are currently under review by EPA, DTSC, and RWQCB, as of the effective date of this Agreement.

Go to Table of Contents

6. Work To Be Performed

6.1 The Parties agree to perform the tasks, obligations and responsibilities described in this Section in accordance with CERCLA and applicable CERCLA guidance and policy; the NCP; pertinent provisions of RCRA and applicable RCRA guidance and policy; Executive order 12580; applicable State laws and regulations; and all terms and conditions of this Agreement including documents prepared and incorporated in accordance with Section 7 (Consultation).

6.2 The Department of Energy agrees to undertake, seek adequate funding for, fully implement and report on the following tasks, in accordance with the requirements of this Agreement:

(a) Remedial Investigations of the Site, including ecological assessments;

(b) Feasibility Studies for the Site;

(c) All response actions, including Operable Units, for the Site;

(d) Operation and maintenance of response actions at the Site;

(e) Federal and State Natural Resources Trustee notification and coordination for the Site.

(f) Community Relations (Public Participation) activities related to the work performed under this Agreement.

6.3 The Parties agree to:

(a) Make their best efforts to expedite the initiation of response actions for the Site;

(b) Carry out all activities under this Agreement so as to protect human health, welfare, or the environment.

6.4 Upon request, EPA, DTSC, and the RWQCB agree to provide any Party with guidance or reasonable assistance in obtaining guidance relevant to the implementation of this Agreement.

6.5 All RI/FS and RD/RA documents prepared pursuant to this Agreement shall be under the direction and supervision of a Registered Professional Engineer, a Certified Engineering Geologist, or a Registered Geologist. All such persons shall have expertise in hazardous waste site cleanup and shall be licensed in the State of California. The name and address of the project engineer, engineering geologist, or geologist chosen by the Department of Energy shall be submitted to the other Parties within fifteen (15) calendar days of the effective date of this Agreement. All final draft primary documents must be signed by a California Registered Professional Engineer, Certified Engineering Geologist, or Registered Geologist, as appropriate to the nature of the document.

6.6 Beginning with the month following the effective date of this Agreement, and monthly thereafter, the Department of Energy shall submit monthly progress reports (letter reports) on activities conducted pursuant to this Agreement. The reports shall be submitted within fifteen (15) calendar days of the end of the month, and shall describe: (1) specific actions taken by or on behalf of the Department of Energy during the previous calendar month; (2) actions expected to be undertaken during the current calendar month; (3) any requirements under this Agreement that were not completed and any problems or anticipated problems in complying with this Agreement.

6.7 DOE shall submit a draft final Community Relations Plan in accordance with Section 7 (Consultation).

6.8 Unless all Parties have agreed to specific deviations, all risk assessments prepared pursuant to this Agreement shall follow all applicable EPA and State regulations, policies, and guidance, including but not limited to the following: Risk Assessment Guidance for Superfund: Human Health Evaluation Manual, Part A, September 1989, U.S. EPA 9285.701A; Risk Assessment Guidance for Superfund: Human Health Risk Assessment: U.S. EPA Region IX Recommendations (December 15, 1989, Interim Final).

6.9 DOE shall evaluate the environmental impacts of site contamination and proposed remedial actions. Unless all Parties have agreed to specific deviations, such evaluation(s) shall be conducted in accordance with applicable portions of the Risk Assessment Guidance for Superfund -- Environmental Evaluation Manual (Interim Final), EPA OSWER Directive 9285.7-01 (EPA 540/189-001A), and the Draft Risk Assessment Guidance for Superfund: Ecological Assessments/Region IX. Within 90 days of the effective date of this Agreement, DOE shall inform the other Parties of the document(s) in which the ecological assessments shall be addressed.

6.10. DOE shall notify all State and Federal natural resource trustees of potentially affected resources and ensure that coordination is carried out pursuant to the requirements of 40 CFR 300.615.

Go to Table of Contents

7. Consultation: Review and Comment Process for Draft and Final Documents

7.1 Applicability: The provisions of this Section establish the procedures that shall be used by the Parties to provide each other with appropriate technical support, notice, review, comment, and response to comments regarding RI/FS and RD/RA documents, specified herein as either primary or secondary documents. In accordance with CERCLA Section 120, 42 U.S.C. Section 9620, and 10 U.S.C. Section 2705, the Department of Energy will be responsible for issuing primary and secondary documents to EPA, DTSC and the RWQCB. As of the effective date of this Agreement, all draft, draft final and final documents for any deliverable document identified herein shall be prepared, distributed and subject to dispute in accordance with Subsections 7.2 through 7.10 below. The designation of a document as "draft" or "final" is solely for purposes of consultation with EPA, DTSC and the RWQCB in accordance with this Section. Such designation does not affect the obligation of the Parties to issue documents, which may be referred to herein as "final", to the public for review and comment as appropriate and as required by law.

7.2 General Process for RI/FS and RD/RA documents:

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

(b) Secondary documents include those documents that are discrete portions of the primary documents and are typically input or feeder documents. Secondary documents are issued by the Department of Energy in draft subject to review and comment by the EPA, DTSC and the RWQCB. Although the Department of Energy will respond to comments received, the draft secondary documents may be finalized in the context of the corresponding primary documents. A secondary document may be disputed at the time the corresponding draft final primary document is issued.

7.3 Primary Documents:

(a) The following documents, if required to be produced, shall be primary documents for purposes of review and comment in accordance with the provisions of this Section and Section 21 (Notification). The Department of Energy shall complete and transmit to EPA, DTSC, and the RWQCB all required primary documents in accordance with the deadlines established pursuant to Section 8 (Deadlines).

(1) RI/FS Work Plans (including Standard Operating Procedures and Quality Assurance Project Plan), revised in accordance with this Agreement

(2) Community Relations Plan

(3) Operable Unit Work Plans not covered in other documents listed here

(4) RI Reports

(5) Risk Assessment Reports (if produced separately from RI and/or FS Reports)

(6) FS Reports

(7) Proposed Plans

(8) Records of Decision (RODS)

(9) Remedial Design Work Plans

(10) Preliminary Remedial Designs

(11) Final Remedial Designs

(12) Remedial Action Work Plans (including plans for monitoring and evaluating the effectiveness of the remedial action, and schedules for start and completion of construction and start of operation)

(13) Construction Quality Assurance Plans

(14) Construction Quality Control Plans

(15) Contingency Plans

(16) Project Close-out Reports

(17) Operation and Maintenance Plans

(b) Only draft final primary documents shall be subject to dispute resolution. The Department of Energy shall complete and transmit draft primary documents in accordance with the timetable and deadlines established according to the procedures set forth in Section 8 (Deadlines) of this Agreement.

(c) Primary documents may include target dates for subtasks as provided for in Subsection 7.4 (b) and 18.3. The purpose of target dates is to assist the Department of Energy in meeting deadlines, but target dates do not become enforceable by their inclusion in the primary documents and are not subject to Section 8 (Deadlines), Section 9 (Extensions), or Section 13 (Enforceability).

7.4 Secondary Documents:

(a) The following documents, if required to be produced, shall be secondary documents for purposes of review and comment in accordance with the provisions of this Section and Section 21 (Notification). The Department of Energy shall complete and transmit to EPA, DTSC, and

the RWQCB all required secondary documents in accordance with the target dates established by the RPMs.

(1) Site Characterization Summaries (part of RI)

(2) Sampling and Data Results (including summary reports)

(3) Treatability Studies (only if generated)

(4) Initial Screenings of Alternatives

(5) Well closure methods and procedures

(6) Detailed Analyses of Alternatives

(b) Although EPA, DTSC and the RWQCB will comment, in accordance with Subsection 7.7 (b) on the drafts of the secondary documents listed above, such documents shall not be subject to dispute resolution except as provided by Subsection 7.2 hereof. Target dates for the completion and transmission of draft secondary documents may be established by the Remedial Project Managers. The Remedial Project Managers also may agree upon additional secondary documents that are within the scope of the listed primary documents.

7.5. Meetings of the Remedial Project Managers. (See also Subsection 18.3.) The Remedial Project Managers shall meet in person approximately every ninety (90) days, except as otherwise agreed by the Parties, to review and discuss the progress of work being performed at the site, including progress on the primary and secondary documents. However, progress meetings shall be held more frequently, but not less than thirty (30) days apart, upon request by any Remedial Project Manager. Prior to preparing any draft document specified in Subsections 7.3 and 7.4 above, the Remedial Project Managers shall meet in an effort to reach a common understanding with respect to the contents of the draft document.

7.6 Identification and Determination of Potential ARARS.

(a) For those primary or secondary documents for which ARAR determinations are appropriate, prior to the issuance of a draft document, the Remedial Project Managers shall meet to identify and propose all potential ARARs pertinent to the document being addressed. At that time, DTSC, with the assistance of the RWQCB, shall identify potential State ARARs as required by CERCLA Section 121(d)(2)(A)(ii), 42 U.S.C. Section 9621(d)(2)(A)(ii), which are pertinent to those activities for which they are responsible and to the document being addressed. Draft ARAR determinations shall be prepared by the Department of Energy in accordance with CERCLA Section 121(d)(2), 42 U.S.C. 9621(d)(2), the NCP and pertinent guidance issued by EPA.

(b) DTSC, with the assistance of the RWQCB, will contact those State and local governmental agencies which are a potential source of ARARS. The proposed ARARs obtained from the identified agencies will be submitted to the Department of Energy, along with a list of those agencies who failed to respond to DTSC's solicitation of proposed ARARS. The Department of Energy will contact those agencies who failed to respond and again solicit these inputs.

(c) In identifying potential ARARS, the Parties recognize that actual ARARs can be identified only on a site-specific basis and that ARARs depend on the specific hazardous substances, pollutants and contaminants at a site, the particular actions associated with a proposed remedy and the characteristics of a site. The Parties recognize that ARAR identification is necessarily an iterative process and that potential ARARs must be identified and discussed among the Parties as early as possible, and must be re-examined throughout the RI/FS process until a ROD is issued.

7.7 Review and Comment on Draft Documents.

(a) The Department of Energy shall complete and transmit each draft primary document to EPA, DTSC and the RWQCB on or before the corresponding deadline established for the transmittal of the document. The Department of Energy shall complete and transmit the draft secondary documents in accordance with the target dates established for the issuance of such documents.

(b) Unless the Parties mutually agree to another time period, all draft documents shall be subject to a sixty (60) day period for review and comment. Review of any document by the EPA, DTSC and the RWQCB may concern all aspects of the document (including completeness) and should include, but is not limited to, technical evaluation of any aspect of the document, and consistency with CERCLA, the NCP, applicable California law, and any pertinent guidance or policy issued by the EPA or the State. At the request of any Remedial Project Manager, and to expedite the review process, the Department of Energy shall make an oral presentation on the document to the Parties within fourteen (14) days following the request. Comments by the EPA, DTSC and the RWQCB shall be provided with adequate specificity so that the Department of Energy may respond to the comment and, if appropriate, make changes to the draft document. Comments shall refer to any pertinent sources of authority or references upon which the comments are based and, upon request of the Department of Energy, the EPA, DTSC, or the RWQCB shall provide a copy of the cited authority or reference. EPA, DTSC or the RWQCB may extend the sixty (60) day comment period for an additional fifteen (15) days by written notice to the Department of Energy prior to the end of the sixty (60) day period. On or before the close of the comment period, EPA, DTSC and the RWQCB shall transmit their written comments to the Department of Energy. In appropriate circumstances, this time period may be further extended in accordance with Section 9 (Extensions).

(c) Representatives of the Department of Energy shall make themselves readily available to EPA, DTSC and the RWQCB during the comment period for purposes of informally responding to questions and comments on draft documents. Oral comments made during such discussions need not be the subject of a written response by the Department of Energy on the close of the comment period.

(d) In commenting on a draft document which contains a proposed ARAR determination, the EPA, DTSC or the RWQCB shall include a reasoned statement of whether it objects to any portion of the proposed ARAR determination. To the extent that EPA, DTSC or the RWQCB does object, it shall explain the basis for its objection in detail and shall identify any ARARs which it believes were not properly addressed in the proposed ARAR determination.

(e) Following the close of the comment period for a draft document, the Department of Energy shall give full consideration to all written comments. Upon the request of any Party, the Parties shall hold a meeting to discuss all comments received within fifteen (15) days of the request. On a draft secondary document the Department of Energy shall, within sixty (60) days of the close of the comment period, transmit to the EPA, DTSC and the RWQCB its written response to the comments received. on a draft primary document the Department of Energy shall, within seventy-five (75) days of the close of the comment period, transmit to EPA, DTSC and the RWQCB a draft final primary document, which shall include the Department of Energy's response to all written comments received within the comment period. While the resulting draft final document shall be the responsibility of the Department of Energy, it shall be the product of consensus to the maximum extent possible.

(f) The Department of Energy may extend the seventy-five (75) day period for either responding to comments on a draft document or for issuing the draft final primary document for an additional fifteen (15) days by providing written notice to the EPA, DTSC and the RWQCB. In appropriate circumstances, this time period may be further extended in accordance with Section 9 (Extensions).

7.8 Availability of Dispute Resolution for Draft Final Primary Documents.

(a) Dispute resolution shall be available to the Parties for draft final primary documents as set forth in Section 12 (Dispute Resolution).

(b) When dispute resolution is invoked on a draft final primary document, work may be stopped in accordance with the procedures set forth in Subsection 12.9 regarding dispute resolution.

7.9 Finalization of Documents. The draft final primary document shall serve as the final primary document if no Party invokes dispute resolution regarding the document in accordance with paragraph 7.2(a) and Section 12 (Dispute Resolution), or, if invoked, at completion of the dispute resolution process should the Department of Energy's position be sustained. If the Department of Energy's determination is not sustained in the dispute resolution process, the Department of Energy shall prepare, within not more than sixty (60) days, a revision of the draft final document which conforms to the results of dispute resolution. In appropriate circumstances, the time period for this revision period may be extended in accordance with Section 9 (Extensions).

7.10 Subsequent Modification of Final Documents. Following finalization of any primary document (other than the Community Relations Plan) pursuant to Subsection 7.9 above, any Party may seek to modify the document including seeking additional field work, pilot studies, computer modeling or other supporting technical work, only as provided in subparagraphs (a) and (b) below.

(a) Any Party may seek to modify a document after finalization if it determines, based on new information (i.e., information that becomes available, or condition's that become known, after the document was finalized) that the requested modification is necessary. Any party may seek such a modification by submitting a concise written request to the Remedial Project Managers of the other Parties. The request shall specify the nature of the requested modification and how the request is based on new information.

(b) In the event that a consensus is not reached by the Remedial Project Managers on the need for a modification, any Party 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 significant new information; and

(2) The requested modification could be of significant assistance in evaluating impacts on human health, welfare, or the environment, in evaluating the selection of remedial alternatives, or in protecting human health, welfare, or the environment.

(c) Nothing in this Section shall alter EPA's, DTSC or the RWQCB's ability to request the performance of additional work which was not contemplated by this Agreement. The Department of Energy's obligation to perform such work must be established by either a modification of a document or by amendments to this Agreement.

Go to Table of Contents

8. Deadlines

8.1. All deadlines agreed upon before the effective date of this Agreement shall be incorporated into Appendix A to this Agreement. To the extent that deadlines have already been mutually agreed upon by the Parties prior to the execution of this Agreement, they will satisfy the requirements of this Section and remain in effect, shall be published in accordance with Subsection 8.2, and shall be incorporated into the appropriate work plans.

8.2 Within twenty-one (21) days of the effective date of this Agreement, the Department of Energy shall propose deadlines for completion of the following draft primary documents for those operable units identified as of the effective date of this Agreement (Appendix A) and for the overall site remedy:

(a) Sampling Plans (or Standard Operating Procedures) and Quality Assurance Project Plans (one document may cover all OUs)

(b) Remedial Investigation Reports (one document may cover all OUs)

(c) Feasibility Study Reports

(d) Proposed Plans

(e) Records of Decision

Within fifteen (15) days of receipt, EPA, DTSC and the RWQCB shall review and provide comments to the Department of Energy regarding the proposed deadlines. Within fifteen (15) days following receipt of the comments the Department of Energy shall, as appropriate, make revisions and reissue the proposal. The Parties shall meet as necessary to discuss and finalize the proposed deadlines. If the Parties fail to agree within thirty (30) days on the proposed deadlines, the matter shall immediately be submitted for dispute resolution pursuant to Section 12 (Dispute Resolution). The final deadlines established pursuant to this Subsection shall be published by EPA, in conjunction with DTSC and the

RWQCB, and shall be incorporated into Appendix A to this Agreement.

8.3 Within 15 days of the signing of the Record of Decision (ROD), the Department of Energy shall propose deadlines for completion of the following draft primary documents:

(a) Remedial Design Work Plans

(b) Preliminary Remedial Designs

(c) Final Remedial Designs

(d) Remedial Action Work Plans (including schedules for start and completion of construction and start of operation)

(e) Construction Quality Assurance Plans

(f) Construction Quality Control Plans

(g) Contingency Plans

(h) Project Close-out Reports

(i) Operation and Maintenance Plans

Within fifteen (15) days of receipt, EPA, DTSC and the RWQCB shall review and provide comments to the Department of Energy regarding the proposed deadlines. Within fifteen (15) days following receipt of the comments the Department of Energy shall, as appropriate, make revisions and reissue the proposal. The Parties shall meet as necessary to discuss and finalize the proposed deadlines. All agreed-upon deadlines shall be incorporated into the appropriate work plans. If the Parties fail to agree within thirty (30) days on the proposed deadlines, the matter shall immediately be submitted for dispute resolution pursuant to Section 12 (Dispute Resolution). The final deadlines established pursuant to this Subsection shall be published by EPA, in conjunction with DTSC and the RWQCB, and shall be included as an Appendix to this Agreement.

8.4 For any operable units not identified pursuant to Section 8.2 above, the Department of Energy shall propose deadlines for all documents listed in Subsection 7.3 (&)(1) through (7) (with the exception of the Community Relations Plan) within twenty-one (21) days of agreement on the proposed operable unit by all Parties. These deadlines shall be proposed, finalized and published using the same procedures set forth in Subsection 8.2, above.

8.5 The deadlines set forth in this Section, or to be established as set forth in this Section, may be extended pursuant to Section 9 (Extensions). The Parties recognize that one possible basis for extension of the deadlines for completion of the Remedial Investigation and Feasibility Study Reports is the identification of significant new Site conditions during the performance of the remedial investigation.

Go to Table of Contents

9. Extensions

9.1 Timetables, deadlines and schedules shall be extended upon receipt of a timely request for extension and when good cause exists fur the requested extension. Any request for extension by a Party shall be submitted to the other Parties in writing and shall specify:

(a) The timetable, deadline or schedule that is sought to be extended;

(b) The length of the extension sought;

(c) The good cause(s) for the extension; and

(d) The extent to which any related timetable and deadline or schedule would be affected if the extension were granted.

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

(a) An event of Force Majeure;

(b) A delay caused by another Party's failure to meet any requirement of this Agreement;

(c) A delay caused by the good faith invocation of dispute resolution or the initiation of judicial action;

(d) 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;

(e) A delay caused by public comment periods or hearings required under State law in connection with the performance of this Agreement by DTSC or the RWQCB or by receipt of unusually extensive public comments under CERCLA;

(f) Any work stoppage within the scope of Section 11 (Emergencies and Removals); or

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

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

9.4 Within seven days of receipt of a request for an extension of a timetable, deadline or schedule, each receiving Party shall advise the requesting Party in writing of the receiving Party's position on the request. Any failure by a receiving Party to respond within the 7-day period shall be deemed to constitute concurrence with the request for extension. If a receiving Party does not concur in the requested extension, it shall include in its statement of non-concurrence an explanation of the basis for its position.

9.5 If there is consensus among the Parties that the requested extension is warranted, the Department of Energy 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.

9.6 The requesting Party may invoke dispute resolution only within seven days of receipt of a statement of non-concurrence with the requested extension.

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

Go to Table of Contents

10. Force Majeure

10.1 A Force Majeure shall mean any event arising from causes beyond the control of a Party that causes a delay in or prevents the performance of any obligation under this Agreement, including, but not limited to, acts of God; fire; war; insurrection; civil disturbance; explosion; unanticipated breakage or accident to machinery, equipment or lines of pipe despite reasonably diligent maintenance; adverse weather conditions that could not be reasonably anticipated; unusual delay in transportation; restraint by court order or order of public authority; inability to obtain, at reasonable cost and after exercise of reasonable diligence, any necessary authorizations, approvals, permits, or licenses due to action or inaction of any governmental agency or authority other than the Department of Energy; delays caused by compliance with applicable statutes or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence; and insufficient availability of appropriated funds which have been diligently sought. In order for Force Majeure based on insufficient funding to apply to the Department of Energy, the Department of Energy shall have made timely request for such funds as part of the budgetary process as set forth in Section 15 (Funding). A Force Majeure shall also include any strike or other labor dispute, whether or not within the control of the Parties affected thereby. Force Majeure shall not include increased costs or expenses of Response Actions, whether or not anticipated at the time such Response Actions were initiated.

Go to Table of Contents

11. Emergencies and Removals

11.1 Discovery and Notification. If any Party discovers or becomes aware of an emergency or other situation that may present an endangerment to human health, welfare or the environment at or near the Site, which is related to or may affect the work performed under this Agreement, that Party shall immediately orally notify all other Parties. If the emergency arises from activities conducted pursuant to this Agreement, the Department of Energy shall then take immediate action to notify the appropriate Federal, State, and local agencies and affected members of the public.

11.2 Work Stoppage. If any Party determines that activities conducted pursuant to this Agreement will cause or otherwise be threatened by a situation described in Subsection 11.1, the Party may

propose the termination of such activities. If the Parties mutually agree, the activities shall be stopped for such period of time as required to abate the danger. In the absence of mutual agreement, the activities shall be stopped in accordance with the proposal, and the matter shall be immediately referred to the EPA Hazardous Waste Management Division Director for a work stoppage determination in accordance with Subsection 12.9.

11.3 Removal Actions

(a) The provisions of this Section shall apply to all removal actions as defined in CERCLA Section 101(23), 42 U.S.C. Section 9601(23) and Health and Safety Code Section 25323, including all modifications to, or extensions of, the ongoing removal actions, and all new removal actions proposed or commenced following the effective date of this Agreement.

(b) Any removal actions conducted at the Site shall be conducted in a manner consistent with this Agreement, CERCLA, the NCP and Executive Order 12580.

(c) Nothing in this Agreement shall alter the Department of Energy's authority with respect to removal actions conducted pursuant to Section 104 of CERCLA, 42 U.S.C. S 9604.

(d) Nothing in this Agreement shall alter any authority DTSC, the RWQCB, or EPA may have with respect to removal actions conducted at the Site.

(e) All reviews conducted by EPA, DTSC and the RWQCB pursuant to 10 U.S.C. S 2705(b)(2) will be expedited so as not to unduly jeopardize fiscal resources of the Department of Energy for funding the removal actions.

(f) If a Party determines that there may be an endangerment to human health, welfare or the environment because of an actual or threatened release of a hazardous substance, pollutant or contaminant at or from the Site, including but not limited to discovery of contamination of a drinking water well at concentrations that exceed any State or Federal drinking water action level or standards, the Party may request that the Department of Energy take such response actions as may be necessary to abate such danger or threat and to protect human health, welfare or the environment. Such actions might include provision of alternative drinking water supplies or other response actions listed in CERCLA Section 101(23) or (24), or such other relief as the public interest may require.

11.4 Notice and Opportunity to Comment.

(a) The Department of Energy shall provide the other Parties with timely notice and opportunity to review and comment upon any proposed removal action for the Site. The Department of Energy agrees to provide the information described below pursuant to such obligation.

(b) For emergency response actions, the Department of Energy shall provide the EPA, DTSC and the RWQCB with notice in accordance with Subsection 11.1. Except in the case of extreme emergencies, such oral notification shall include adequate information concerning the site background, threat to human health, welfare or the environment (including the need for response), proposed actions and costs (including a comparison of possible alternatives, means of transportation of any hazardous substances off-site, and proposed manner of disposal),

expected change in the situation should no action be taken or should action be delayed (including associated environmental impacts), any important policy issues, and the DOE On-Scene Coordinator recommendations. Within forty-five (45) days of completion of the emergency action, the DOE will furnish EPA, DTSC and the RWQCB with an Action Memorandum addressing the information provided in the oral notification, and any other information required pursuant to CERCLA and the NCP, and in accordance with pertinent EPA guidance, for such actions.

(c) For other removal, actions, the Department of Energy will provide EPA, DTSC and the RWQCB with any information required by CERCLA, the NCP, and in accordance with pertinent EPA guidance, such as the Action Memorandum, the Engineering Evaluation/Cost Analysis (in the case of non-time-critical removals) and, to the extent it is not otherwise included, all information required to be provided in accordance with paragraph (b) of this Subsection. Such information shall be furnished at least forty-five (45) days before the response action is to begin.

(d) All activities related to ongoing removal actions shall be reported by the Department of Energy in the progress reports as described in Section 18 (Remedial Project Managers).

11.5 Any dispute among the Parties as to whether a proposed response action is properly considered a removal action, as defined by 42 U.S.C. § 9601(23), or as to the consistency of a removal action with the NCP or the final remedial action, or whether the Department of Energy will take a removal action requested by any Party under Subsection 11.3(f), including any additional response action requested as part of a planned removal action, shall be resolved pursuant to Section 12 (Dispute Resolution). Such dispute may be brought directly to the Dispute Resolution Committee (DRC) or the Senior Executive Committee (SEC) at any Party's request.

11.6 DOE shall implement the removal actions identified in Appendix C in accordance with the schedules presented in that Appendix.

Go to Table of Contents

12. Dispute Resolution

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

12.2 Within thirty (30) days after: (a) the issuance of a draft final primary document pursuant to Section 7 (Consultation), or (b) any action which leads to or generates a dispute, the disputing Party shall submit to the DRC 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 technical, legal or factual information the disputing Party is relying upon to support its position.

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

times as are necessary to discuss and attempt resolution of the dispute.

12.4 The DRC will serve as a forum for resolution of dispute 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 (SES) or equivalent or be delegated the authority to participate on the DRC for the purposes of dispute resolution under this Agreement. The EPA representative on DRC is the Deputy Director for Superfund of EPA's Region 9. The Department of Energy's designated member is the Assistant Manager for Environmental and Safety Support. The DTSC representative is the Chief of the Site Mitigation Branch, Region 2. The RWQCB representative is the Supervising Engineer in charge of the project. Written notice of any delegation of authority from a Party's designated representative on the DRC shall be provided to all other Parties pursuant to the procedures of Section 21 (Notification).

12.5 Following elevation of a dispute to the DRC, the DRC shall have twenty-one (21) days to unanimously resolve the dispute and issue a written decision. If the DRC is unable to unanimously resolve the dispute within this twenty-one (21) day period, the written statement of dispute shall be forwarded to the SEC for resolution within seven (7) days after the close of the twenty-one (21) day resolution period.

12.6 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 Region 9. The Department of Energy's representative on the SEC is the Manager, San Francisco Field Office, DOE. The DTSC representative on the SEC is the Regional Administrator for DTSC Region 2. The RWQCB representative on the SEC is the Executive Officer for the Central Valley Region. The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a written decision. If unanimous resolution of the dispute is not reached within twenty-one (21) days, EPA's Regional Administrator shall issue a written position on the dispute. The Department of Energy, DTSC or the RWQCB may, within fourteen (14) days of the Regional Administrators' 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 the Department of Energy, DTSC or the RWQCB elects not to elevate the dispute to the Administrator within the designated fourteen (14) day escalation period, the Department of Energy, DTSC and the RWQCB shall be deemed to have agreed with the Regional Administrator's written position with respect to the dispute.

12.7 Upon elevation of a dispute to the Administrator of EPA pursuant to Subsection 12.6 above, the Administrator will review and resolve the dispute within twenty-one (21) days. Upon request, and prior to resolving the dispute, the EPA Administrator shall meet and confer with the Assistant Secretary of the Department of Energy, DTSC Director, and the RWQCB's Executive Officer to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide the Department of Energy, DTSC and the RWQCB with a written final decision setting forth resolution of the dispute. The duties of the Administrator set forth in this Section shall not be delegated.

12.8 The pendency of any dispute under this Section shall not affect any Party'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 timetable and deadline or schedule.

12.9 When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Hazardous Waste Management Division Director for EPA Region 9 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. DTSC or the RWQCB may request the EPA Hazardous Waste Management Division Director to order work stopped for the reasons set out above. To the extent possible, the Party seeking a work stoppage shall consult with the other Parties prior to initiating a work stoppage request. After work stoppage, if a Party believes that the work stoppage is inappropriate or may have potential significant adverse impacts, the Party may meet with the other Parties to discuss the work stoppage. Following this meeting and further consideration of this issue, the EPA Hazardous Waste Management Division Director will issue, in writing, a final decision with respect to the work stoppage. The final written decision of the EPA Hazardous Waste Management Division Director may immediately be subject to formal dispute resolution. Such dispute may be brought directly to either the DRC or the SEC, at the discretion of the Party requesting dispute resolution.

12.10 Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in this Section, the Department of Energy 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.

12.11 Except as set forth in Section 31.2, resolution of a dispute pursuant to this Section of the Agreement constitutes a final resolution of any dispute arising under this Agreement. All Parties shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Section of this Agreement.

12.12 Whenever the dispute resolution process provided for in this Section is invoked, DTSC and RWQCB shall have one vote between them regardless of the fact that they may have more than one representative representing them at the particular stage of dispute resolution. It shall be their responsibility to determine their position on the issue in dispute and to cast one vote on their behalf.

Go to Table of Contents

13. Enforceability

13.1 The Parties agree that:

(a) Upon the effective date of this Agreement, any standard, regulation, condition, requirement or order which has become effective under CERCLA and is incorporated into this Agreement is enforceable by any person pursuant to CERCLA Section 310, and any violation of such standard, regulation, condition, requirement or order will be subject to civil penalties under CERCLA Sections 310(C) and 109;

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

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

(d) Any final resolution of a dispute pursuant to Section 12 (Dispute Resolution) of this Agreement which establishes a term, condition, timetable, deadline or schedule shall be enforceable by any person pursuant to CERCLA Section 310(c), and any violation of such terms, condition, timetable, deadline or schedule will be subject to civil penalties under CERCLA Sections 310(c) and 109.

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

13.3 Nothing in this Agreement shall be construed as a restriction or waiver of any rights the EPA, DTSC or the RWQCB may have under CERCLA, including but not limited to any rights under Sections 113 and 310, 42 U.S.C. Sections 9613 and 9659. The Department of Energy does not waive any rights it may have under CERCLA Section 120, SARA Section 211 and Executive Order 12580.

13.4 The Parties agree to exhaust their rights under Section 12 (Dispute Resolution) prior to exercising any rights to judicial review that they may have.

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

Go to Table of Contents

14. Stipulated Penalties

14.1 In the event that the Department of Energy fails to submit a primary document listed in Section 7 (Consultation) to EPA, DTSC and the RWQCB pursuant to the appropriate timetable or deadline in accordance with the requirements of Agreement, or fails to comply with a term or condition of this Agreement which relates to an operable unit remedial action or to a final remedial action, EPA may assess a stipulated penalty against the Department of Energy. DTSC or the RWQCB may also recommend to EPA that a stipulated penalty be assessed. 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.

14.2 Upon determining that the Department of Energy has failed in a manner set forth in Subsection 14.1, EPA shall so notify the Department of Energy in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, the Department of Energy 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 Department of Energy 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.

14.3 The annual reports required by CERCLA Section 120(e)(5), 42 U.S.C. § 9620(e)(5), shall include, with respect to each final assessment of a stipulated penalty against the Department of Energy under this Agreement, each of the following:

(a) The Federal Facility responsible for the failure;

(b) A statement of the facts and circumstances giving rise to the failure;

(c) A statement of any administrative or other corrective action taken at the relevant Federal Facility, or a statement of why such measures were determined to be inappropriate;

(d) A statement of any additional action taken by or at the Federal Facility to prevent recurrence of the same type of failure; and

(e) The total dollar amount of the stipulated penalty assessed for the particular failure.

14.4 Stipulated penalties assessed pursuant to this Section shall be payable to the Hazardous Substances Response Trust Fund from funds authorized and appropriated for that specific purpose. EPA, DTSC and the RWQCB agree, to the extent allowed by law, to divide equally any stipulated penalties paid on of LLNL Site 300, with 50% allocated to EPA, 25 % allocated to DTSC, and 25% allocated to the RWQCB.

14.5 In no event shall this Section give rise to a stipulated penalty in excess of the amount set forth in CERCLA Section 109, 42 U.S.C. § 9609.

14.6 This Section shall not affect the Department of Energy's ability to obtain an extension of a timetable, deadline or schedule pursuant to Section 9 (Extensions).

14.7 Nothing in this Agreement shall be construed to render any officer or employee of the Department of Energy personally liable for payment of any stipulated penalty assessed pursuant to this Section.

Go to Table of Contents

15. Funding

15.1 It is the expectation of the Parties to this agreement that all obligations of the Department of Energy arising under this Agreement will be fully funded through Congressional appropriations. Consistent with Congressional limitations on future funding, the Department of Energy 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.

15.2 The purpose of this Paragraph is to assure that the Parties adequately communicate and exchange information about funding concerns that affect the implementation of the Agreement.

(a) EPA, DOE, DTSC and RWQCB Remedial Project Managers shall meet periodically throughout each Fiscal Year ("FY") to discuss projects being funded in the current FY, the status of the current year projects, and events causing or expected to cause significant changes

to any activity necessary to meet target dates, deadlines, and any other requirements under this Agreement. DOE shall provide information for these meetings that shows, to the extent possible, projected and actual costs of accomplishing such activities.

(b) EPA, DTSC, and the RWQCB may comment annually on DOE San Francisco Operations Office ("DOE-SAN") cost estimates for the corresponding activities established under this Agreement for each budget year. DOE-SAN will consider any comments received and include those comments along with these cost estimates in submittals sent from DOE-SAN to DOE-HQ for the relevant budget year.

(c) In or about June of each year, DOE shall provide EPA, DTSC, and the RWQCB with current five-year planning cost estimates based upon revisions to DOE's Five-Year Plan. These estimates will be based on the Activity Data Sheets ("ADS") level. This submission shall include a correlation of relevant ADS with activities required under the Agreement.

(d) DOE will provide to EPA, DTSC, and the RWQCB a copy of the President's Budget Request to Congress and sections of the DOE congressional Budget Request pertaining to the Environmental Restoration and Waste Management Program. After the President has submitted the budget to Congress, DOE shall notify EPA, DTSC, and the RWQCB in a timely manner of any differences between the estimates submitted in accordance with Paragraph 15.2(b) above and the actual dollars that were included in the President's budget submission to Congress.

(e) Whenever DOE proposes a reprogramming, requests a supplemental appropriation, or intends to transfer funds in a manner that is likely to or will affect the ability of DOE to conduct activities under this Agreement, DOE shall notify EPA, DTSC and the RWQCB of its plans and, prior to such a transfer of funds or the submittal of the reprogramming or supplemental appropriation request to Congress, shall consult with them about the effect that such an action is likely to or will have on the activities required under the Agreement.

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

15.4 No provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established requiring the payment or obligation of such funds shall be appropriately adjusted. EPA and DOE agree that any requirement for the payment or obligation of funds by DOE established by the terms of this Agreement shall be subject to the availability of appropriated funds.

15.5 After appropriations have been received from Congress, DOE, EPA, DTSC, and RWQCB Remedial Project Managers will review the level of available appropriated funds and the most recent estimated cost of conducting activities required under the Agreement. If funding is requested as described in this Section, and if appropriated funds are not available to fulfill the Department of Energy's obligations under this Agreement, the Parties shall attempt to agree upon appropriate adjustments to the date that require the payment or obligation of such funds. Subject to the terms of this Agreement, if no agreement on appropriate adjustments can be reached, EPA, DTSC and the RWQCB reserve the right to initiate any other action, or to take any response action, which would be appropriate absent this Agreement. Initiation of any such actions shall not release the Parties from

their other obligations under this Agreement. Acceptance of this paragraph, however, does not constitute a waiver by DOE that its obligations under this Agreement are subject to the provisions of the Anti-Deficiency Act, 31 U.S.C. Section 1341. In any action by EPA, DTSC, or the RWQCB to enforce any provision of this Agreement, DOE may raise as a defense that its failure or delay was caused by the unavailability of appropriated funds.

15.6 If appropriated funds are available to DOE's Office of Environmental Restoration (or other relevant DOE office to the extent they are responsible for implementing this Agreement), to fulfill DOE's obligations under this Agreement, DOE shall obligate the funds in amounts sufficient to support the requirements specified in the Agreement unless otherwise directed by Congress or the President, or unless those requirements are modified in accordance with provisions of this Agreement.

15.7 The participation by EPA, DTSC, and the RWQCB under this Section is limited solely to the aforementioned and is in no way to be construed to allow EPA, DTSC, or the RWQCB to become involved with the internal DOE budget process, nor to become involved in the Federal budget process as it proceeds from DOE to the Office of Management and Budget and ultimately to Congress through the President's submittal. Nothing herein shall affect DOE's authority over its budgets and funding level submissions.

Go to Table of Contents

16. Exemptions

16.1 The obligation of the Department of Energy to comply with the provisions of this Agreement may be relieved by:

(a) A Presidential order of exemption issued pursuant to the provisions of CERCLA Section 120(j)(1), 42 U.S.C. § 9620(j)(1), or RCRA Section 6001, 42 U.S.C. § 6961; or

(b) The order of an appropriate court.

16.2 DTSC and the RWQCB reserve any statutory right they may have to challenge any Presidential Order relieving the Department of Energy of its obligations to comply with this Agreement.

Go to Table of Contents

17. Statutory Compliance/RCRA-CERCLA Integration

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

17.2 Based upon the foregoing, the Parties intend that any remedial action selected, implemented and completed under this Agreement will be protective of human health and the environment such that remediation of releases covered by this Agreement shall obviate the need for further corrective action under RCRA (i.e., no further corrective action shall be required). The Parties agree that with respect to releases of hazardous waste covered by this Agreement, RCRA shall be considered an applicable or relevant and appropriate requirement pursuant to CERCLA Section 121, 42 U.S.C. Section 9621.

17.3 The Parties recognize that the requirement to obtain permits for response actions undertaken pursuant to this Agreement shall be as provided for in CERCLA and the NCP. The parties recognize that other activities at LLNL Site 300 may require the issuance of permits under Federal and State laws. This Agreement does not affect the requirements, if any, to obtain such permits. However, if a permit is issued to the Department of Energy for hazardous waste management activities at the Site, the issuing party shall reference and incorporate in a permit condition any appropriate provision, including appropriate schedules (and the provision for extension of such schedules), of this Agreement into such permit. The Parties intend that any judicial review of any permit condition which references this Agreement shall, to the extent authorized by law, only be reviewed under the provisions of CERCLA.

17.4 The Parties agree that closure of Pits 1 and 7 shall be implemented as removal actions in accordance with Appendix C of this Agreement.

Go to Table of Contents

18. Remedial Project Managers

18.1 On or before the effective date of this Agreement, EPA, the Department of Energy, DTSC, and the RWQCB shall each designate a Remedial Project Manager and an alternate (each hereinafter referred to as Remedial Project Manager or RPM), for the purpose of overseeing the implementation of this agreement. The RPMs shall be responsible for assuring proper implementation of the RI/FS and the RD/RA in accordance with the terms of the Agreement. In addition to the formal notice provisions set forth in Section 21 (Notification), to the maximum extent possible, communications among the Department of Energy, EPA, DTSC and the RWQCB on all documents, including reports, comments, and other correspondence concerning the activities performed pursuant to this Agreement, shall be directed through the RPMS.

18.2 The Department of Energy, EPA, DTSC and the RWQCB may change their respective RPMS. The other Parties shall be notified in writing within five days of the change.

18.3 The RPMs shall meet to discuss progress as described in Subsection 7.5. Although the Department of Energy has ultimate responsibility for meeting its respective deadlines or schedule, the RPMs shall assist in this effort by consolidating the review of primary and secondary documents whenever possible, and by scheduling progress meetings to review documents, evaluate the performance of environmental monitoring at the Site, review RI/FS or RD/RA progress, discuss target dates for elements of the RI/FS to be conducted in the following one hundred and eighty (180) days, resolve disputes, and adjust deadlines or schedules. At least one week prior to each scheduled progress meeting, the Department of Energy will provide to the other Parties a draft agenda and summary of the status of the work subject to this Agreement. The Department of Energy shall take notes and provide them to the other Parties. Unless the RPMs agree otherwise, the notes of each

progress meeting, with the meeting agenda and all documents discussed during the meeting (which were not previously provided) as attachments, shall constitute draft meeting notes, which will be sent to all RPMs within twenty-one calendar days after the meeting ends. The other Parties shall have five (5) working days to submit comments on the draft notes to the Department of Energy. If no comments are received within the five days, the draft notes shall become final. Other meetings shall be held more frequently upon request by any RPM. Technical advisors to any Party, including persons working under contract for the Party, may participate in such meetings.

18.4 The authority of the RPMs shall include, but is not limited to:

(a) Taking samples and ensuring that sampling and other field work is performed in accordance with the terms of any final work plan and QAPP;

(b) Observing, and obtaining photographs and making such other reports on the progress of the work as the RPMs deem appropriate, subject to the limitations set forth in Section 25 (Access to Federal Facility) hereof;

(c) Reviewing records, files and documents relevant to the work performed;

(d) Determining the form and specific content of the RPM meetings and of progress reports based on such meetings; and

(e) Recommending and requesting minor field modifications to the work to be performed pursuant to a final work plan, or in techniques, procedures, or design utilized in carrying out such work plan.

18.5 The authority vested by the National Contingency Plan, Section 300.120(b)(1), in the DOE RPM as the On-Scene Coordinator and Remedial Project Manager shall be exercised in consultation with the EPA, DTSC and RWQCB RPMs and in accordance with the procedures specified in this Agreement.

18.6 Additional work or modification of work shall be handled as follows:

(a). Except as provided in Section 7.10 for subsequent modification of final documents, the EPA, DTSC or RWQCB RPMs may at any time request additional work or modification of work, including minor field modifications, which they believe is necessary to accomplish the purposes of this Agreement.

(b). Minor field modifications may be requested and approved orally.

(c). Other requests must be provided in writing to the DOE RPM with copies to all other RPMS. DOE agrees to give full consideration to all such requests. DOE may either accept or reject any such requests received, and must do so in writing, with a statement of reasons, within thirty (30) days of receipt or as otherwise agreed to by the RPMS.

(d). If there is no consensus concerning whether or not the work should be conducted, dispute resolution may only be invoked at the time of review of the subsequent corresponding primary document, in accordance with the procedures set forth in Sections 7 (Consultation) and 12 (Dispute Resolution).

(e). Any additional work or modification to work agreed to pursuant to Subsection 18.6(a) shall be completed in accordance with the standards, specifications, and schedule determined or approved by the Parties under the terms of this Agreement.

18.7 The Remedial Project Manager for the Department of Energy, or a designee acting as the DOE RPM, shall be responsible for day-to-day field activities at the Site. The Department of Energy RPM or his/her designee shall be present at the Site or reasonably available to supervise work during all hours work is performed at the Site pursuant to this Agreement. For all times that such work is being performed, the Department of Energy RPM shall inform the appropriate officials at LLNL Site 300 of the name and telephone number of the designated employee responsible for supervising the work.

18.8 The RPMs shall be reasonably available to consult on work performed pursuant to this Agreement and shall make themselves available to each other for the pendency of this Agreement. The absence of EPA, DTSC, the RWQCB, or Department of Energy RPM from the Facility shall not be cause for work stoppage of activities taken under this Agreement.

Go to Table of Contents

19. Permits

19.1. The Parties recognize that under Sections 121(d) and 121(e)(1) of CERCLA, 42 U.S.C. Sections 9621(d) and 9621(e)(1), and the NCP, portions of the response actions called for by this Agreement and conducted entirely on-site are exempted from the procedural requirement to obtain a Federal, State, or local permit but must satisfy all the applicable or relevant and appropriate Federal and State standards, requirements, criteria, or limitations which would have been included in any such permit.

19.2 This Section is not intended to relieve the Department of Energy from any and all regulatory requirements, including obtaining a permit, whenever it proposes a response action involving either the movement of hazardous substances, pollutants, or contaminants off-site, or the conduct of a response action off-site.

19.3 The Department of Energy shall notify EPA, DTSC and the RWQCB in writing of any permit required for off-site activities as soon as it becomes aware of the requirement. The Department of Energy agrees to obtain any permits necessary for the performance of any work under this Agreement. Upon request, the Department of Energy shall provide EPA, DTSC and the RWQCB copies of all such permit applications and other documents related to the permit process. Copies of permits obtained in implementing this Agreement shall be appended to the appropriate submittal or progress report. Upon request by the Department of Energy RPM, the Remedial Project Managers of EPA, DTSC and the RWQCB will assist LLNL Site 300 to the extent feasible in obtaining any required permit.

Go to Table of Contents

20. Quality Assurance

20.1 DOE shall prepare and implement a Quality Assurance Program Plan (QAPP) in accordance with the requirements of the NCP and applicable EPA guidance. The QAPP shall include designation

of a Quality Assurance Officer with the responsibilities set forth in the NCP and applicable EPA guidance.

The Department of Energy agrees to use, at a minimum, laboratory methods and procedures which are functionally equivalent to the methods and procedures used in the EPA Contract Laboratory Program and the DTSC Certified Laboratory Program. In determining whether a material meets the regulatory definition of a "hazardous waste," the Department of Energy shall comply with both the requirements of 40 CFR Part 261, and the requirements of Title 22 of the California Code of Regulations, unless and until the State of California is authorized pursuant to RCRA Section 3006, in which case only the California requirements shall apply except as otherwise provided in Federal law or regulation.

20.2 To ensure compliance with the QAPPs, the Department of Energy shall authorize access, upon request by EPA, DTSC or the RWQCB, to all laboratories performing analysis on behalf of the Department of Energy pursuant to this Agreement. The Party requesting access to a laboratory shall notify the Department of Energy at least 24 hours prior to the time-access is required, unless the requesting Party has reason for conducting an unannounced inspection. Within twenty-four (24) hours after conducting an unannounced inspection, the inspecting Party shall provide the Department of Energy with written notice of the fact that an unannounced inspection was conducted. Such notice will set out the reasons justifying the fact that the inspection was unannounced.

Go to Table of Contents

21. Notification

21.1 All Parties shall transmit primary and secondary documents, and comments thereon, and all notices required herein by next day mail, hand delivery, or facsimile. Time limitations shall commence upon receipt.

21.2 Notice to the individual Parties pursuant to this Agreement shall be sent to the addresses specified by the Parties. Initially these shall be as follows:

Remedial Project Manager, LLNL Site 300 (H-7-5)
U.S. Environmental Protection Agency, Region 9
Hazardous Waste Management Division
75 Hawthorne Street
San Francisco, CA 94105

LLNL Site 300 Remedial Project Manager
California Department of Toxic Substances Control
Site Mitigation Branch
700 Heinz Avenue, Bldg. F
Berkeley, CA 94710

LLNL Site 300 Remedial Project Manager
Central Valley Regional Water Quality Control Board
3443 Routier Road, Suite A
Sacramento, CA 95727-3098

and,

LLNL Site 300 Remedial Project Manager
Michael C. Brown, L-574
U.S. Department of Energy
San Francisco Operations Office, LLNL Site Office
7000 East Avenue
Livermore, CA 94551

Notice shall also be provided to:

Albert Lamarre, L-528
LLNL Site 300 Project Leader
Lawrence Livermore National Laboratory
7000 East Avenue
Livermore, CA 94551

21.3 All routine correspondence may be sent via first class mail to the above addressees.

Go to Table of Contents

22. Data and Document Availability

22.1 Each Party shall make all sampling results, test results or other data or documents generated through the implementation of this Agreement available to the other Parties upon request. Where at all possible it is the intent of the Parties that the data provided shall have been verified through the sampling Party's quality assurance validation program prior to release. Where a Party to this Agreement requests data that has not been so validated, the sampling Party shall provide the requesting Party with the raw data within fifteen (15) days of receipt of the request, unless otherwise agreed upon by the requesting and providing Parties. Such raw data shall be appropriately marked to clarify that the results have not been validated.

22.2 Within 10 days of receiving a request for a sampling schedule from another Party, DOE shall provide the requesting Party a current schedule for sampling to be conducted by DOE or its contractors at the site. The schedule shall show the proposed locations, approximate dates, and types of sampling. Whenever EPA, DTSC, or the RWQCB plan to conduct sampling activities, the sampling Party's Remedial Project Manager shall notify the other Parties' Remedial Project Managers not less than 10 days in advance of any sample collection. If it is not possible to provide 10 days prior notification, the sampling Party's Remedial Project Manager shall notify the other Remedial Project Managers as soon as possible after becoming aware that samples will be collected. Each Party shall allow, to the extent practicable, split or duplicate samples to be taken by the other Parties or their authorized representatives.

Go to Table of Contents

23. Release of Records

23.1 The Parties may request of one another access to or a copy of any record or document relating to

this Agreement or the Environmental Restoration Program. If the Party that is the subject of the request (the originating Party) has the record or document, that Party shall provide access to or a copy of the record or document; provided, however, that no access to or copies of records or documents need be provided if they are subject to claims of attorney-client privilege, attorney work product, deliberative process, enforcement confidentiality or properly classified for national security under law or executive order.

23.2 Records or documents identified by the originating Party as confidential pursuant to non-disclosure provisions of the Freedom of Information Act, 5 U.S.C. Section 552, or the California Public Records Act, Section 6250 et seq., of the California Government Code, other than those specified in Section 23.1, shall be released to the requesting Party, provided the requesting Party states in writing that it will not release the record or document to the public without prior approval of the originating Party after opportunity to consult and, if necessary, contest any preliminary decision to release a document in accordance with applicable statutes and regulations. Records or documents which are provided to the requesting Party and which are not identified as confidential may be made available to the public without further notice to the originating Party.

23.3 No Party will assert one of the above exemptions, including any available under the Freedom of Information Act or California Public Records Act, even if available, if no governmental interest would be jeopardized by access or release as determined solely by the originating Party.

23.4 Subject to Section 120(j)(2) of CERCLA, 42 U.S.C. Section 9620(j)(2), any documents required to be provided by Section 7 (Consultation), and analytical data available under Section 22 (Data and Document Availability) will always be releasable and no exemption shall be asserted by any Party.

23.5 This Section does not change any requirement regarding press releases in Section 26 (Public Participation, Community Relations, and Administrative Record).

23.6 A determination not to release a document for one of the reasons specified above shall not be subject to Section 12 (Dispute Resolution). Any Party objecting to another Party's determination may pursue the objection through the determining Party's appeal procedures.

Go to Table of Contents

24. Preservation of Records

24.1 Despite any document retention policy to the contrary, the Parties shall preserve, during the pendency of this Agreement and for a minimum of ten years after its termination, all records and documents contained in the Administrative Record and any additional records and documents retained in the ordinary course of business which relate to the actions carried out pursuant to this Agreement. After this ten-year period, each Party shall notify the other Parties at least 45 days prior to destruction of any such documents. Upon request by any Party, the requested Party shall make available such records or copies of any such records, unless withholding is authorized and determined appropriate by law.

Go to Table of Contents

25. Access to Federal Facility

25.1 Without limitations on any authority conferred on EPA, DTSC or the RWQCB by statute or regulation, EPA, DTSC, the RWQCB, or their authorized representatives, shall be allowed to enter LLNL Site 300 at reasonable times for purposes consistent with the Provisions of the Agreement, subject to any statutory and regulatory requirements, or any requirements contained in DOE Orders or LLNL laboratory procedures, necessary to protect national security or mission essential activities. Such access shall include, but not be limited to, reviewing the progress of the Department of Energy in carrying out the terms of this Agreement; ascertaining that the work performed pursuant to this Agreement is in accordance with approved work plans, sampling plans and QAPPs; and conducting such tests as EPA, DTSC, the RWQCB, or the Remedial Project Managers deem necessary. The Department of Energy Remedial Project Manager or his/her designee will provide briefing information, coordinate access and escort to restricted or controlled access areas, arrange for facility passes and coordinate any other access requests which arise.

25.2 EPA, DTSC and the RWQCB shall provide reasonable notice to the Department of Energy Remedial Project Manager to request any necessary escorts. No camera or other recording device of any kind is allowed to be brought on to Site 300 by a visitor. If any of the Parties wish to have photographs taken or other types of recordings made during their visit, they shall notify the DOE RPM or his/her designee in advance and suitable arrangements, such as provision of a photographer, will be made.

25.3 The access by EPA, DTSC and the RWQCB granted in Subsection 25.1 of this Section, shall be subject to those regulations, requirements or procedures necessary to protect national security or mission essential activities. Such regulation shall not be applied so as to unreasonably hinder EPA, DTSC or the RWQCB from carrying out their responsibilities and authority pursuant to this Agreement. In the event that access requested by EPA, DTSC or the RWQCB is denied by the Department of Energy, the Department of Energy shall provide an explanation within 48 hours of the reason for the denial, including reference to the applicable regulations, and, upon request, a copy of such regulations. The Department of Energy shall expeditiously make alternative arrangements for accommodating the requested access. The Parties agree that this Agreement is subject to CERCLA Section 120(j), 42 U.S.C. Section 9620(i), regarding the issuance of Site Specific Presidential Orders as may be necessary to protect national security.

25.4 If EPA, DTSC or the RWQCB request access in accordance with Section 25.3 in order to observe a sampling event or other work being conducted pursuant to this Agreement, and access is denied or limited, the Department of Energy agrees to reschedule or postpone such sampling or work if EPA, DTSC or the RWQCB so requests, until such mutually agreeable time when the requested access is allowed

25.5 All Parties with access to LLNL Site 300 pursuant to this Section shall comply with all applicable health and safety plans.

25.6 To the extent the activities pursuant to this Agreement must be carried out on other than Department of Energy property, the Department of Energy shall use its best efforts, including its authority under CERCLA Section 104, to obtain access agreements from the owners and/or lessees which shall provide reasonable access for the Department of Energy, the EPA, DTSC, the RWQCB, and their representatives. The Department of Energy may request the assistance of DTSC and/or the RWQCB in obtaining such access, and upon such request, DTSC and/or the RWQCB will use its (their) best efforts to obtain the required access. In the event that the Department of Energy is unable

to obtain such access agreements, the Department of Energy shall promptly notify EPA, DTSC and the RWQCB.

25.7 With respect to non-Department of Energy property on which monitoring wells, pumping wells, or other response actions are to be located, the Department of Energy shall use its best efforts to ensure that any access agreements shall provide for the continued right of entry for all Parties for the performance of such remedial activities. In addition, any access agreement shall provide that no conveyance of title, easement, or other interest in the property shall be consummated without the continued right of entry.

25.8 Nothing in this Section shall be construed to limit EPA's, DTSC's or the RWQCB's full right of access as provided in 42 U.S.C. Section 9604(e) and California Health and Safety Code Section 25185, except as that right may be limited by 42 U.S.C. Section 9620(j)(2), Executive Order 12580, or other applicable national security regulations or Federal law.

Go to Table of Contents

26. Public Participation, Community Relations, and Administrative Record

26.1 The Parties agree that any proposed remedial action alternative(s) and plan(s) for remedial action at the Site arising out of this Agreement shall comply with the administrative record and public participation requirements of CERCLA Sections 113(k) and 117, 42 U.S.C. S 9313(k) and 9617, relevant community relations provisions in the NCP, and EPA guidances including the administrative record requirements in 40 CFR Part 300.800 and the "Final Guidance on Administrative Records for Selecting CERCLA Response Actions," OSWER Directive 9833.3A-1, 12/3/90 (or current version). Additionally, State statutes and regulations, including California Health and Safety Code 25356.1 and 25358.7 shall be followed. The provisions of this Section shall be carried out in a manner consistent with, and shall fulfill the intent of, Section 17 (Statutory Compliance -- RCRA/CERCLA Integration).

26.2 The Department of Energy shall implement the community relations plan (CRP) addressing the environmental and public participation activities. The CRP shall fully describe how DOE will meet the requirements of CERCLA Sections 113(k) and 117, as well as other applicable State and Federal guidelines and requirements.

26.3 The Department of Energy shall establish and maintain at LLNL in Livermore an administrative record which is freely accessible to the public. In addition, DOE shall maintain an information repository in Tracy, which shall contain at a minimum a copy of the index to the administrative record, a copy of each primary document, and other documents of general interest related to the activities conducted under this Agreement. The administrative record shall provide the documentation supporting the selection of each response action. The administrative record shall be established and maintained in accordance with relevant provisions in CERCLA, the NCP, and EPA guidances. A copy of each document placed in the administrative record, not already provided, will be provided by the Department of Energy to the other Parties upon request. The index for the administrative record developed by the Department of Energy shall be updated and provided to the other Parties on at least a quarterly basis.

26.4 Except in case of an emergency, any Party issuing a press release with reference to any of the work required by this Agreement shall advise the other Parties of such press release and the contents

thereof, at least 48 hours prior to issuance.

Go to Table of Contents

27. Five-Year Review

27.1 Consistent with 42 U.S.C. Section 9621(c) and in accordance with this Agreement, if the selected remedial action results in any hazardous substances, pollutants or contaminants remaining at the Site, the Parties shall review the remedial action program at least every five (5) years after the initiation of the final remedial action to assure that human health and the environment are being protected by the remedial action being implemented.

27.2 If, upon such review, any of the Parties proposes additional work or modification of work, such proposal shall be handled under Subsection 7.10 of this Agreement.

27.3 To synchronize the five-year reviews for all operable units and final remedial actions, the following procedure will be used: Review of operable units will be conducted every five years, counting from the initiation of the first operable unit until initiation of the final remedial action for the Site. At that time a separate review for all operable units shall be conducted. Review of the final remedial action (including all operable units) shall be conducted every five years thereafter.

Go to Table of Contents

28. Transfer of Real Property Interest

28.1 The Department of Energy shall retain liability in accordance with CERCLA, notwithstanding any change in ownership or possession of the real property interests comprising the Federal Facility. The Department of Energy shall not transfer any real property interests comprising the Federal Facility except in compliance with Section 120(h) of CERCLA, 42 U.S.C. § 9620(h). Prior to any transfer of any portion of any real property interest comprising the Federal Facility which includes an area within which any release of hazardous substance has come to be located, or of property which is necessary for performance of the remedial action, the Department of Energy shall give written notice of that condition to the recipient of such real property interest. At least thirty (30) days prior to any transfer subject to Section 120(h) of CERCLA, the Department of Energy shall notify all Parties of the transfer of any real property interest subject to this Agreement and the provisions made for any additional remedial actions, if required.

28.2 DOE shall take appropriate actions to ensure that all activities and removal or remedial actions to be undertaken pursuant to this Agreement will not be impeded or impaired by any transfer involving an interest or right in real property relating to Site 300, including any fixtures located thereon owned by the United States. Such steps shall include, but need not be limited to, providing the following in any deed, lease, or other instrument evidencing such transaction:

(a) Notification of the existence of this Agreement;

(b) That the Parties to this Agreement shall have the rights of access to and over such property which are set forth in Subsections 25.1 and 25.7;

(c) Provisions for compliance with all health and safety plans approved in accordance with this

Agreement, and for the operation of any response or remedial actions on such property (including but not limited to, monitoring wells, pumping wells and treatment facilities);

(d) That no subsequent transaction relating to such property shall be made without provisions in the documents evidencing such transaction for such rights of access, for compliance with all health and safety plans approved in accordance with this Agreement, and for the operation of any removal or remedial actions on such property (including but not limited to, monitoring wells, pumping wells and treatment facilities);

(e) That those involved in subsequent transactions relating to such property provide copies of the instrument evidencing such transaction to each of the Parties to this Agreement by certified mail within fourteen (14) days after the effective date of such transaction.

Go to Table of Contents

29. Amendment or Modification of Agreement

29.1 This Agreement can be amended or modified solely by a formal written amendment or modification signed by all the Parties. Such amendments or modifications may be proposed by any Party and shall be effective the third business day following the day the last Party to sign the amendment or modification sends its notification of signing to the other Parties. The Parties may agree to a different effective date.

Go to Table of Contents

30. Termination of the Agreement

30.1 The provisions of this Agreement shall be deemed satisfied and terminated upon receipt by the Department of Energy of written notice from EPA, with concurrence of DTSC and the RWQCB, that the Department of Energy has demonstrated that all the terms of this Agreement have been completed. If EPA denies or otherwise fails to grant a termination notice within 90 days of receiving a written Department of Energy request for such notice, EPA shall provide a written statement of the basis for its denial and describe the Department of Energy actions which, in the view of EPA, would be a satisfactory basis for granting a notice of completion. Such denial shall be subject to dispute resolution.

30.2 This provision shall not affect the requirements for periodic review at maximum five-year intervals of the efficacy of the remedial actions, nor shall it affect the requirements of Section 24 (Preservation of Records).

Go to Table of Contents

31. Covenant Not to Sue and Reservation of Rights

31.1 In consideration for the Department of Energy's compliance with this Agreement, and based on the facts and circumstances known to EPA, DTSC, and the RWQCB as of the effective date of this Agreement, EPA, DTSC, and the RWQCB hereby agree not to initiate any administrative or judicial enforcement action to compel the work specifically required hereunder for so long as this Agreement remains effective and for so long as DOE is in compliance with the requirements of this Agreement.

However, in the event that DOE is delayed in fulfilling its obligations as set forth in this Agreement as a result of insufficient availability of funding, and the Parties are unable to agree to an extension of schedules, as provided for in Section 9 (Extensions), the covenant set forth above shall terminate. These provisions notwithstanding, nothing in this Agreement shall preclude EPA, DTSC or the RWQCB from exercising any administrative, legal, or equitable remedies available to them to require additional response actions by the Department of Energy in the event that: (1)(a) conditions previously unknown or undetected by EPA, DTSC or the RWQCB arise or are discovered at the Site, or (b) EPA, DTSC or the RWQCB 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 are no longer protective of human health, welfare, or the environment. To the extent deemed appropriate by EPA, DTSC or the RWQCB after consultation with the Department of Energy, such additional response actions shall be implemented through the amendment process described in Section 29 of this Agreement, or in accordance with Section 7 of this Agreement addressing modification of final documents.

31.2 Notwithstanding this Section, or any other Section of this Agreement, DTSC and the RWQCB shall retain any statutory right they may have to obtain judicial review of any final decision of the EPA on selection of remedial action pursuant to any authority DTSC and the RWQCB may have under CERCLA, including Sections 121(e)(2), 121(f), 310, and 113.

Go to Table of Contents

32. Other Claims

32.1 Except as set forth in Section 31 (Covenant Not to Sue and Reservation of Rights), nothing in this Agreement shall constitute or be construed as a bar or release from any claim, cause of action or demand in law or equity by or against any person, partnership, or corporation not a signatory to this Agreement for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous waste, pollutants, or contaminants found at, taken to, or taken from the Federal Facility. Unless specifically agreed to in writing by the Parties, EPA, DTSC and the RWQCB shall not be held as a party to any contract entered into by the Department of Energy to implement the requirements of this Agreement.

32.2 This Agreement shall not restrict EPA, DTSC or the RWQCB from taking any legal or response action for any matters not part of the subject matter of this Agreement.

Go to Table of Contents

33. Recovery of EPA Expenses

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, in consultation with DOE, DTSC, and the RWQCB, determines that sufficient funds have not been appropriated to meet any post Fiscal Year 1992 commitments established by this Agreement, EPA may terminate this Agreement by written notice to DOE, DTSC, and the RWQCB.

Go to Table of Contents

34. Reimbursement of DTSC and RWQCB Expenses

34.1 The Department of Energy agrees to request funding and reimburse DTSC and the RWQCB, subject to the conditions and limitations set forth in this Section, and subject to Section 15 (Funding), for reasonable costs they incur in providing services in direct support of the Department of Energy's environmental restoration activities pursuant to this Agreement at the Site, beginning October 17,1990, the date the Interim Letter of Agreement was signed by the parties.

34.2 Reimbursable costs shall consist only of actual expenditures required to be made and actually made by DTSC and the RWQCB in providing the following assistance to LLNL Site 300:

(a) Timely technical review and substantive comment on reports or studies which the Department of Energy prepares in support of its response actions and submits to DTSC and the RWQCB, or any other technical review in support of this Agreement.

(b) Identification and explanation of unique State requirements applicable to federal facilities in performing response actions, especially State applicable or relevant and appropriate requirements (ARARs).

(c) Field visits to ensure investigations and cleanup activities are implemented in accordance with appropriate DTSC or RWQCB requirements, or in accordance with agreed-upon conditions between DTSC, the RWQCB and the Department of Energy that are established in the framework of this Agreement.

(d) Support and assistance to the Department of Energy in the conduct of public participation activities in accordance with Federal and State requirements for public involvement.

(e) Preparation for and participation in technical meetings.

(f) Other services specified in this Agreement.

34.3 Within one hundred twenty (120) days after the end of each quarter of the Federal fiscal year, DTSC and the RWQCB shall submit to the Department of Energy an accounting of all state costs actually incurred during that quarter in providing direct support services under this Section. Such accounting shall be accompanied by cost summaries and be supported by documentation which meets Federal auditing requirements. The summaries will set forth employee-hours and other expenses by major type of support service. All costs submitted must be for work directly related to implementation of this Agreement and not inconsistent with the National Contingency Plan (NCP) and the requirements as described in OMB Circulars A-87 (Cost Principles for State and Local Governments) and A-128 (Audits for State and Local Cooperative Agreements with State and Local Governments) and Standard Forms 424 and 270. The Department of Energy has the right to audit cost reports used by DTSC and the RWQCB to develop the cost summaries. Before the beginning of each fiscal year, DTSC and the RWQCB shall supply a budget estimate of what they plan to do in the next year in the same level of detail as the billing documents.

34.4 Except as allowed pursuant to Subsection 34.5 below, within ninety (90) days of receipt of the accounting provided pursuant to Subsection 34.3 above, the Department of Energy shall reimburse DTSC and the RWQCB in the amount set forth in the accounting.

(a) DOE shall reimburse the RWQCB for costs specified in this Section in the form of a check made payable to the State Water Resources Control Board/Cleanup and Abatement Acct. Each check shall reference DOE/Site 300. DOE shall send each check to:

State Water Resources Control Board
Division of Administrative Services
Accounting Office
P. 0. Box 100
Sacramento, CA 95812

(b) DOE shall reimburse DTSC for costs specified in this Section in the form of a check made payable to the Department of Toxic Substances Control. Each check shall reference DOE/Site 300. DOE shall send each check to:

Department of Toxic Substances Control
400 P Street
P. 0. Box 806
Sacramento, CA 95812-0806
ATTN: Toxics Cost Recovery

34.5 In the event the Department of Energy contends that any of the costs set forth in the accounting provided pursuant to Subsection 34.3 above are not properly payable, the matter shall be resolved through the dispute resolution process set forth at Subsection 34.10 below.

34.6 The amount of reimbursable costs payable under this Agreement shall be as follows. Any invoiced amounts exceeding the yearly cap at the end of the first year's cap shall roll over to the second year. Any invoiced amounts exceeding the yearly cap at the end of the second year shall roll over and be included in the negotiation of reimbursable costs for subsequent years pursuant to Subsection 34.7.

(a) The amount of reimbursable costs payable to the RWQCB for work under this Agreement shall not exceed seventy six thousand five hundred dollars ($76,500) for the period November 1, 1990 through September 30, 1991. The amount of reimbursable costs payable to the RWQCB for work under this Agreement shall not exceed eighty five thousand dollars ($85,000) for the period October 1, 1991 through September 30, 1992.

(b) The amount of reimbursable costs payable to DTSC for work under this Agreement shall not exceed two hundred ninety thousand dollars ($290,000) for the period November 1, 1990 through September 30, 1991. The amount of reimbursable costs payable to DTSC for work under this Agreement shall not exceed two hundred fourteen thousand dollars ($214,000) for the period October 1, 1991 through September 30, 1992.

34.7 Prior to the end of the second year, the amount of reimbursable costs for the subsequent years shall be renegotiated in accordance with any then existing agreement on the subject between DOE, DTSC and the RWQCB.

34.8 If no such agreement has been reached between DOE, DTSC and the RWQCB, DOE, DTSC and the RWQCB agree to negotiate in good faith a cap for future reimbursable costs. If DOE, DTSC and

the RWQCB are unable to reach agreement after such negotiations, they shall refer any unresolved issues to dispute resolution in accordance with Subsection 34.10.

34.9 DTSC and the RWQCB agree to seek reimbursement for their expenses under this Agreement solely through the mechanism established in this Section, and reimbursement provided under this Section shall be in settlement of any claims for DTSC or RWQCB response costs relative to the Department of Energy's environmental restoration activities at the Site, except that DTSC and RWQCB reserve from this limitation their claims for legal costs incurred in the review and negotiation of this Agreement. DTSC and RWQCB retain all of their legal and equitable remedies to recover these legal costs.

34.10 Notwithstanding Section 12 of the Agreement, this subsection shall govern any dispute between the Department of Energy and DTSC or RWQCB regarding the application of this Section or any matter controlled by this Section including, but not limited to, allowable expenses and limits on reimbursement.

(a) Informal resolution. Whenever practicable, DOE shall attempt to resolve informally any dispute over the award or administration of financial assistance including any matter controlled by this Section 34. DOE, DTSC or RWQCB representatives may initiate the informal process by requesting that the involved parties attempt to resolve any issue covered by the Section 34. Such informal resolution shall begin with the representative of the DOE contracting officer who signed the grant to the state agency implementing the LOST recovery provisions of this Agreement and the contract representative of DTSC or RWQCB attempting to resolve the issue. If they are not successful, they may elevate the issue to the Manager, DOE San Francisco Field office who is the Contracting Officer for purposes of dispute resolution pursuant to 10 CFR 600.26(a) and the Regional Administrator, DTSC or the Executive Officer, RWQCB for resolution. If these parties are unable to agree on resolution, each of the involved parties will issue a written decision setting forth their position on the issue. The written position of DOE shall be deemed to be the Contracting Officer's determination from which a formal appeal may be taken. This written position will be issued within 21 days after the parties agree that they are unable to informally resolve the issue.

(b) Final Determination. The parties agree that the regulations for handling of financial assistance disputes and appeals as set forth in 10 CFR 600.26 and 10 CFR 1024 shall apply to disputes and appeals that may arise under this Section 34 or the grant issued hereunder. DTSC or RWQCB may appeal the DOE Contracting Officer's determination to either the DOE Financial Assistance Appeals Board (Board) or to a Federal Court of competent jurisdiction under 28 U.S.C. 1346(a)(2) or 28 U.S.C. 1491 (a)(1). Any decision by DTSC or RWQCB to appeal the Contracting officer's determination to the Board or to the Federal Court or to make no appeal shall be solely at the discretion of DTSC or RWQCB. Should DTSC or RWQCB not elect to file an appeal with the Board in the timeframes set forth in 10 CFR 600.26(b) or to a Federal Court within one (1) year of its receipt of the Contracting Officer's determination, the Contracting Officer's determination shall be final and conclusive as between the parties except for fraud or gross mistakes amounting to fraud. In the event that DTSC or RWQCB files an appeal of the Contracting Officer's determination in a Federal Court, DOE agrees that it will not interpose as a defense or jurisdictional challenge, DTSC or RWQCB's failure to elect to appeal to the Board.

34.11 Nothing in this Agreement shall be construed to constitute a waiver of any claims by DTSC

and the RWQCB for any expenses incurred prior to the effective date of this Agreement.

34.12 If the Department of Energy, DTSC and the RWQCB are unable to resolve any issues in dispute through the dispute resolution process of Subsection 34.10, DTSC and the RWQCB may withdraw as a Party to this agreement by providing written notice of its withdrawal to each of the remaining parties. Such withdrawal by DTSC or the RWQCB shall terminate all of the rights and obligations the withdrawing Party may have under this Agreement; provided, however, that any actions taken under or pursuant to this Agreement by the withdrawing Party prior to its withdrawal shall continue to have full force and effect as if the withdrawing Party were still a Party to this Agreement.

34.13 No funds are obligated by this Agreement. Actual obligation of federal funds and payment of reimbursable costs will be made pursuant to separate grants between DOE and the SWRCB on behalf of the RWQCB, and DOE and DTSC, respectively. The grants will be entered into upon execution of this Agreement by RWQCB and DTSC. The grants will contain all the agreements between the parties with respect to reimbursement as set forth in this Section 34 and will be in conformance with federal rules and regulations governing financial assistance activities.

Go to Table of Contents

35. DTSC, RWQCB Participation Contingency

35.1 If DTSC or the RWQCB fail to sign this Agreement within thirty (30) days of notification of the signature by both EPA and the Department of Energy, this Agreement will be interpreted as if that State agency were not a Party and any reference to that State Agency in this Agreement will have no effect.

35.2 In the event that DTSC and the RWQCB do not sign this Agreement,

(a) The Department of Energy agrees to transmit all primary and secondary documents to appropriate State and local agencies at the same time such documents are transmitted to EPA; and,

(b) EPA intends to consult with the appropriate State and local agencies with respect to the above documents and during implementation of this Agreement.

Go to Table of Contents

36. Effective Date and Public Comment

36.1 This Agreement is effective as to EPA and DOE upon signature by these Parties. This Agreement is effective as to DTSC and/or the RWQCB upon their respective signature, but in no event before it is effective as to DOE and EPA.

36.2 The provisions of this Section shall be carried out in a manner consistent with, and shall fulfill the intent of Section 17 (Statutory Compliance/RCRA-CERCLA Integration).

36.3 Within fifteen (15) days after both DOE and EPA execute this Agreement, the Department of Energy shall announce the availability of this Agreement to the public for a forty-five (45) day period

of review and comment, including publication in at least two major local newspapers of general circulation. Comments received shall be transmitted to the other Parties within seven (7) days of the end of the comment period. The Parties shall have fourteen (14) days after receipt to such comments and shall meet within seven (7) days after the 14-day review period to either:

(a) Determine that this Agreement should be made effective in its present form, in which case EPA shall promptly notify all Parties in writing that the Agreement remains in effect without revision; or

(b) If the determination in Subsection 36.2(a) is not made, the Parties shall meet to discuss and agree upon any proposed changes. Within twenty-eight (28) days of the close of the public comment period, or within such other time period mutually agreed upon among the Parties, the Parties shall agree upon any proposed changes. Upon resolution of any proposed changes, the Agreement, as modified, shall be re-executed by the Parties, with EPA signing last, and shall become effective on the date that it is signed by EPA. Until the modified Agreement becomes effective, the Agreement currently in effect shall remain in effect.

(c) In the event the Parties cannot agree to modify this Agreement to reflect public comments pursuant to 36.2(b), the Parties shall submit their written notices of position, concerning those provisions still in dispute, directly to the Dispute Resolution Committee. Upon resolution of any proposed changes, the Agreement, as modified, shall be re-executed by the Parties, with EPA signing last, and shall become effective on the date that it is signed by EPA. If the Dispute Resolution Committee is unable to resolve the dispute within twenty-one (21) days, the dispute shall be elevated to the Senior Executive Committee for resolution, who shall have twenty-one (21) days to resolve the dispute. Until the modified Agreement becomes effective, the Agreement currently in effect shall remain in effect.

(d) In the event the Parties cannot agree to modify this Agreement to reflect public comments pursuant to either 36.2(b) or 36.2(c) and the contemplated modification will impose substantial additional obligations on a Party, the Party so obligated may withdraw from this Agreement. Withdrawal by the Department of Energy shall not alter the obligation of the Department of Energy to comply with CERCLA Section 120, 42 U.S.C. Section 9620, or limit the enforcement powers available to EPA, DTSC or the RWQCB.

36.4 Any response action under way upon the effective date of this Agreement shall be subject to oversight by the Parties.

Go to Table of Contents

37. Facility Closure

37.1 Except as otherwise provided by law, closure of the Federal Facility will not affect the Department of Energy's obligation to comply with the terms of this Agreement and to specifically ensure the following:

(a) Continuing rights of access for EPA, DTSC and the RWQCB, in accordance with the terms and conditions of Section 25 (Access to Federal Facility);

(b) Availability of a Remedial Project Manager to fulfill the terms and conditions of the

Agreement;

(c) Designation of alternate DRC members as appropriate for the purposes of implementing Section 12 (Dispute Resolution); and

(d) Adequate resolution of any other problems identified by the Remedial Project Managers regarding the effect of facility closure on the implementation of this Agreement.

37.2 Facility closure will not constitute a Force Majeure under Section 10 (Force Majeure), nor will it constitute good cause for extensions under Section 9 (Extensions), unless mutually agreed by the Parties.

Go to Table of Contents

38. DOE Five-Year Plan

38.1 DOE has issued an Environmental Restoration and Waste Management Five-Year Plan ("the Five-Year Plan"), updated annually, which identifies, integrates, and prioritizes compliance and clean-up activities at all DOE facilities and sites. The Five-Year Plan is intended to assist DOE in addressing environmental requirements at its facilities and sites and in developing and supporting its budget requests. It is the intent of DOE that the terms of the Five-Year Plan shall be consistent with the provisions of this FFA, including all requirements and schedules contained herein. It is also the intent of DOE that the Five-Year Plan be drafted and updated in a manner that ensures that the provisions of this FFA 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 FFA.

38.2 The Parties understand that DOE has developed a national prioritization system for inclusion in the Five-Year Plan and that based upon its application of the national prioritization system, DOE may conclude that changes to certain of the provisions and/or milestones established by this FFA are appropriate. In that event, DOE agrees that it will pursue these changes only in accordance with the terms and conditions of this FFA. DOE also agrees that pending any resolution of the issues associated with its requested changes pursuant to this Section, the provisions and deadlines in effect pursuant to this FFA shall remain in effect and be enforceable in accordance with the terms and conditions of the FFA.

Go to Table of Contents

39. Appendices and Attachments

39.1 Appendices shall be integral and enforceable parts of this Agreement. They shall include the most current versions of:

(a) Deadlines for Completion of the RI/FS and the Records of Decision;

(b) Final Primary and Secondary Documents Previously Reviewed, and Documents Currently Under Review; and,

(c) Removal Actions;

(d) Documents Submitted in Accordance with the Interim, Letter Agreement;

(e) Legal Description of LLNL Site 300.

39.2 Attachments shall be for information only and shall not be enforceable parts of this Agreement. The information in these attachments is provided to support the initial review and comment upon this Agreement, and is only intended to reflect the conditions known at the signing of this Agreement. None of the facts related therein shall be considered admissions by, nor are they legally binding upon, any Party with respect to any claims unrelated to, or persons not a Party to, this Agreement. They shall include:

(a) Map of Federal Facility (see also Subsection 5.10);

(b) Chemicals of concern; and,

(c) Statement of Facts.

Each undersigned representative of a Party certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party to this Agreement.

IT IS SO AGREED:

Date: June 25/92

Donald W. Pearman, Jr.
Manager
San Francisco Field Office
U.S. Department of Energy

Each undersigned representative of a Party certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party to this Agreement.

IT IS SO AGREED:

Date: June 29/92

Daniel W. McGovern
Regional Administrator
United States Environmental
Protection Agency, Region 9

Each undersigned representative of a Party certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party to this Agreement.

IT IS SO AGREED:

Date: May 26/92

Howard Hatayama
Regional Administrator
Region II
California Department of
Toxic Substances Control

Each undersigned representative of a Party certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party to this Agreement.

IT IS SO AGREED:

Date: May 18/92

William H. Crooks
Executive Director
Central Valley Regional Water
Quality Control Board
Toxic Substances Control

Go to Table of Contents

Appendix A: Deadlines for Completion of the RI/FS and the Records of Decision

The deadlines in this Appendix A are enforceable.

The Parties agree that a schedule for submitting draft RI/FS reports, Proposed Plans, and Records of Decision will be incorporated into this Appendix in accordance with Subsection 8.2 and 8.3 of this Agreement. A schedule will be developed for each of the Operable Units (OUs) listed below and for the overall Site ROD.

OUs are discrete actions which represent incremental steps towards comprehensively addressing site problems. The OUs at Site 300 are based on areas identified in the LLNL Site 300 Environmental Restoration Workplan (UCAR-10247, Rev. 2, October 1989) and EPA's RCRA Facility Assessment (June, 1988) and are defined as follows:

Operable Unit 1:	GSA and Off-site Area[1]
Operable Unit 2:	Building 834[1]
Operable Unit 3:	Pit 6 Complex[1]
Operable Unit 4:	High Explosives Process Area[1]
Operable Unit 5:	East and West Firing areas Pit 7 Complex (Tritium Area) East Firing Area/Building 850
Operable Unit 6:	Building 833 Pit 8 Pit 9 16 Dry Wells covered in Dry Well RI dated 11/89 and Addendum dated 1/90 Building 812 Wastewater Out Flow Any other SWMUs (solid waste management units) or AOCs (areas of concern) identified in Table A-1 which have not been addressed in OUs 1 through 5[2] Will also summarize findings of all OUs and present conclusions regarding the need for

	additional remediation beyond that determined for OUs I through 5 in order to address cumulative or additional risks.
Notes:	
1	This OU includes any dry wells in the geographic area covered by this OU which are not included in OU 6.
2	DOE shall identify SWKUs and AOCs which have not been addressed in OUs 1 through 5 in a letter report to the other Parties in accordance with the schedule for OU 6. The report shall include any sampling data or other information available to DOE pertaining to the nature and extent of any releases which may have occurred from such SWMUs or AOCS. After review of the report by the regulatory agencies, the agencies and DOE shall determine whether further action at these SWMUs/AOCs is needed, and, if so, whether the schedule for OU 6 should be modified or a new OU and schedule added to this Appendix.

Table A-1: LLNL Site 300

Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)*		
Area	**SWMU No.**	**Designation**
GSA	4	Bldg. 872 Dry Well
	7	Bldg. 873 Acid Dip Dry Well
	9	Bldg. 873 Cleaning Pad Dry Well
	12	Bldg. 874 Photo-waste Dry Well
	17	Bldg. 874 Acid Dip Dry Well
	20	Bldg. 875 Equipment Wash-down Dry Well
	30	Bldg. 879 Drainage System (Storm Sewer)
	AOC 1	Bldg. 875 Solvent Storage Drainage Pad
	AOC 2	Bldg. 879 Stained Gravel Area
Bldg. 834 Complex	44	Bldg. 834D Brine System Sump
	45	Bldg. 834C Dry Well
	46	Bldg. 834B Dry Well
High Explosives Process Area	58	Bldg. 806/807 Lagoon
	67,68	Bldg. 807 Lagoons (A & B)

	74	Bldg. 809 Disposal Slope
	78	Bldg. 810 Dry Well
	80	Bldg. 814 Lagoon
	87	Bldg. 817B Lagoon
	97	Bldg. 819 Lagoon
	102	Bldg. 823 Waste-water Outfall
	106	Bldg. 825 Lagoon
	109	Bldg. 826 Lagoon
	110	Bldg. 827B Dry Well
	114	Bldg.827 C/D Lagoon
	118	Bldg. 827 D/E Flume
	122	Bldg. 827E Lagoon
	130	Bldg. 828 Lagoon
	131	Bldg. 829 Burn Pit 1
	133	Bldg. 829 Burn Pit 2
	136	Bldg. 829 Burn Pit 3
	AOC 5	Bldg. 829 Drying Area
Pit 6	139	Pit 6
East Firing Area	150	Pit 1
	151	Pit 2
	152	Pit 3
	153	Pit 4
	154	Pit 5
	155	Pit 7
	167	Bldg. 850 Drainage Ditch
Bldg 833	40	Bldg. 833 Brine System Drainage Outfall
	43	Bldg. 833 Ext'r Drainage System Outfall
	48	Bldg. 835 Dry Well
	49	Bldg. 836 Dry Well Drainage
Pit 9	141	Pit 9
Pit 8	148	Bldg. 801 Dry Well
	149	Pit 8
B812	140	Bldg. 812 Waste-water Outflow
B854	AOC 3	Bldg. 854 Environmental Testing Complex
B830	AOC 6	Bldg. 830
* From RCRA Facility Assessment, prepared for US EPA Region 9 by A.T. Kearney, Inc., June 1988.		

Go to Table of Contents

Appendix B: Final Primary Documents Previously Reviewed, and Documents Currently Under Review

1. The following primary documents have been reviewed by EPA and the State prior to the effective date of this Agreement:

Draft Community Relations Plan

2. The following primary documents are currently undergoing review by EPA and the State. DOE shall submit draft final documents, including responses to comments submitted by EPA and the State, within seventy-five (75) days of the close of the review period in accordance with Section 7 (Consultation and Review):

Quality Assurance Project Plan

Go to Table of Contents

Appendix C: Removal Actions

The Department of Energy shall implement the following activities as removal actions and shall comply with applicable requirements of the NCP and this Agreement pertaining to such removal actions.

A. Off-site Ground Water Plumes

DOE shall continue operation of the groundwater pump-and-treat system in the Eastern General Services Area (GSA). In addition, within 21 days of the effective date of this Agreement, DOE shall submit a schedule for the installation and operation of the pump-and-treat system for the Central GSA.

B. Closure of Pits 1 and 7

Within 21 days of the effective date of this Agreement, DOE shall submit a schedule to implement the closure plan for Pits 1 and 7, which was approved by DHS and EPA on March 25, 1991 and is hereby incorporated by reference into this Appendix as a removal action.

C. Pits 3 and 5

Within 21 days of the effective date of this Agreement, DOE shall submit a schedule for submission of the removal documents required by the NCP pertaining to proposed removal actions for Pits 3 and 5.

D. Monthly Reports

DOE shall include a summary of progress made in carrying out the above-referenced removal actions

in each monthly report submitted in accordance with Subsection 6 of this Agreement.

Go to Table of Contents

Appendix D: Documents Submitted In Accordance with the Interim Letter Agreement

The following documents have been submitted, or are to be submitted in accordance with the Interim Letter Agreement signed by EPA, DOE, and LLNL on October 17, 1990.

> [NOTE: The status of these documents as preliminary drafts or draft documents will be established in the schedule to be submitted pursuant to Subsection 8.2 of this Agreement.]

A. Remedial Action Documents. These dates are incorporated into the schedules contained in Appendix A to this Agreement.		
Document	**Deadline**	**Date Submitted**
Remedial Investigation and Feasibility Study for the Building 834 Complex	12/31/90	12/31/90
Feasibility Study for the GSA Area	12/31/90	12/31/90
Remedial Investigation for the Pit 6 Complex	12/31/90	12/31/90
Feasibility Study for the Pit 6 Complex	3/30/91	3/30/91
Remedial Investigation for the East Firing Area/Building 850 Complex	12/31/90	12/31/90
Feasibility Study for the East Firing Area/Building 850 Complex	4/30/91	4/30/91
Feasibility Study for the High Explosives Process Area	Schedule to be submitted in accordance with Section 8.2.	
Underground Tanks Investigation Report	12/31/90	12/31/90
Remedial Investigation for the Building 833 Complex	5/31/91	6/4/91
Feasibility Study for the Building 833 Complex	Schedule to be submitted in accordance with Section 8.2.	
B. Removal Action Documents. These dates are incorporated into the schedules contained in Appendix D to this Agreement.		
Document	**Deadline**	**Date Submitted**
Preliminary draft alternatives analysis and NPDES permit application	10/19/90	10/19/90
Draft removal proposal for off-site GW plume	11/30/90	11/18/90
Final removal proposal for off-site GW plume	1/15/91	1/22/91
FONSI (to Regional Board)	1/15/91	1/15/91

Go to Table of Contents

Appendix E: Legal Description of UC LLNL Site 300

All that land delineated on the following recorded maps: Map of Survey, United States Atomic Energy Commission Property, Counties of Alameda and San Joaquin, State of California, filed in Book 4 of Surveys, page 3, in the office of the County Recorder, Alameda County and filed in Book 11 of Surveys, page 34, in the office of the County Recorder, San Joaquin County; Map of Survey, United States Atomic Energy Commission Property, County of San Joaquin, State of California, filed in Book of Surveys, Volume 10, page 118, in the office of the County Recorder, San Joaquin County; EXCLUDING that parcel of land described in Quitclaim Deed from United States of America to the State of California recorded in Book 4188 of Official Records, page 324, San Joaquin County Records, and that parcel of land described in Quitclaim Deed from the United States of America to Robert F. & Carol J. Burns in Book 3887 of Official Records, page 369, San Joaquin County Records; INCLUDING that parcel of land described in Grant Deed from Connolly Ranch, Inc. to the United States of America, Department of Energy in Instrument Number 91-020198, San Joaquin County Records.

Containing 6800 acres, more or less.

Go to Table of Contents

Attachment B: Chemicals of Concern

1. **Chloroform.** Toxic effects of chloroform include local irritation of the skin and eyes, central nervous system depression, gastrointestinal irritation, liver and kidney damage, cardiac arrhythmia, ventricular tachycardia, and bradycardia. Exposure to chloroform by inhalation, intragastric administration, or intraperitoneal injection produces liver and kidney damage in laboratory animals. Chloroform is classified as a B2 probable human carcinogen based on animal data.

2. **Trans-1,2-dicholorethene (Trans-1,2-DCE).** Exposure to high vapor concentrations of Trans-1,2-DCE has been found to cause nausea, vomiting, weakness, tremor and cramps in humans. Repeated exposure via inhalation of 800 mg/m^3 was reported to produce fatty degeneration of the liver in rats. Trans-1,2-DCE can inhibit aminopyrine demethylation in rat liver microsomes in vitro; it may thus interact with the hepatic drug-metabolizing monooxygenase system. EPA has not evaluated this chemical for evidence of human carcinogenic potential.

3. **Tetrachloroethane (PCE, Perchloroethylane).** Short-term exposure to PCE through ingestion and inhalation may cause nausea, vomiting, headache, dizziness, drowsiness, and tremors. Skin contact with PCE in the liquid state causes irritation and blistering. Both the liquid and vapor state are irritating to the eyes. Long term exposure may cause liver and kidney damage. PCE has been classified by the IARC in Category 3 (possible human carcinogen).

4. **Trichloroethylene (TCE).** Acute exposure to TCE depresses the central nervous system, causing such symptoms as headache, dizziness, vertigo, tremors, irregular heartbeat, fatigue, nausea, vomiting and blurred vision. TCE in a gaseous state may cause irritation of the eyes, nose, and throat. TCE in a liquid state may cause burning irritation and damage to the eyes. Repeated or prolonged skin contact with the liquid may cause dermatitis. Long-term effects may include liver and kidney injury. TCE is included in IARC Category 3 (possible human

carcinogen).

5. **Tritium.** Radiation has been shown to be a carcinogen, mutagen, and teratogen. At sufficiently high doses, radiation acts as a complete carcinogen, serving as both initiator and promoter. At lower doses, radiation produces a delayed response in the form of increased incidence of cancer long after the exposure period.

   According to the Kirk-Othmer Encyclopedia of Chemical Technology, since tritium decays with emission of low-energy radiation, it does not constitute an external radiation hazard. It does, however, present a serious hazard through ingestion and subsequent exposure of vital body tissue to internal radiation. The body will assimilate tritiated water and distribute it throughout body fluids quickly and efficiently. When exposed to tritiated water vapor via inhalation, people will absorb 98-99% of the activity inspired through the respiratory system. Uniform distribution throughout body fluids occurs within 90 minutes.

Go to Table of Contents

Attachment C: Statement of Facts

Lawrence Livermore National Laboratory Site 300 ("Site 300") is a Federally owned research facility currently operated by the University of California (UC) for the Department of Energy.

Site Description

Location and Size: Site 300 is located 15 miles east of Livermore and 65 miles southeast of San Francisco, California in the sparsely populated hills of the Diablo Range near Tracy, California. (See Attachment 1). Site 300, which covers an area of approximately 11 square-miles, is adjacent to Corral Hollow Road on its southern boundary. About one-sixth of Site 300 lies in Alameda County; the remainder is in San Joaquin County. The surrounding land is primarily agricultural.

Operational History: LLNL Site 300 began operation as a research complex at this location in the 1950's. It is currently a high explosive (HE) non-nuclear test facility that supports research carried out as part of the Defense System Programs and the Beam Research Programs.

Major Facility Components: LLNL Site 300 is divided into a General Services Area (GSA) located in the southeast corner of the Facility property adjacent to Corral Hollow Road and programmatic operation areas distributed throughout Site 300. The GSA contains nine major buildings that house all administrative and support functions such as site administration, police/security, fire department, medical, crafts and plant engineering, stores, mechanical and electrical engineering, cafeteria, and service stations. Programmatic operations include high explosives (HE) formulation, pressing, machining, dynamic testing, and environmental testing. The programmatic operations area is subdivided into the Main Environmental Testing Area, the HE Process Area, the East Firing Area and the West Firing Area.

Facility Processes: The Facility is operated as a non-nuclear high explosives site. Materials testing and high explosives diagnostic work are conducted there in support of nuclear weapons development. High explosives waste is collected in clarifier systems then burned in a high explosives burn area. Trash contaminated with high explosives and other reactive waste

chemicals is also disposed of in the burn area. Historically, landfills were used for disposal of test shot debris contaminated with beryllium and depleted uranium. Use of landfills at Site 300 was discontinued in November 1988. A closure and postclosure plan for two RCRA landfills has been submitted to EPA, DHS, and RWQCB. Hazardous waste storage areas are maintained, with material sent to the Lawrence Livermore National Laboratory main site in Livermore for on-site treatment or disposal or shipment to an off-site facility.

Site Geology and Hydrogeology: Site 300 is located on the eastern side of the Altamont Hills, (part of the Coast Range physiographic province), between the Livermore and San Joaquin Valleys. The saturated zone beneath Site 300 generally includes two or more aquifers, a water-table (unconfined) aquifer, and a lower, confined aquifer that is under artesian pressure. The general direction of ground-water flow beneath the northern portion of Site 300 is north-eastward. There is evidence that the Elk Ravine Fault has significant effects upon the ground-water system. Within the northern portion of Site 300, the ground water west and southwest of the Elk Ravine Fault appears to exist largely as a single perched water body which occurs at depths of about 20 to 40 feet beneath the surface in valley areas, and which may reach depths as great as 300 feet beneath major ridges. The northwestern boundary of this perched groundwater body is beneath the Pit 7 (SWMU 1155) complex.

In the Landfill Pit 1 area, a semi-confined aquifer has been reported by LLNL. Aquifer gradients roughly follow the dip of the bedrock sequence. It is believed that regionally, groundwater flow in the semi-confined aquifer is controlled by the bedding structure of the anticline (flow direction to the northeast).

A perched water table system underlies the Pit 7 (SWMU 1155) complex and is encountered in both alluvial and bedrock sediments. The northwest boundary of the perched water table system is near the north end of Pit 7 (SWMU 1155). The northeasterly to easterly groundwater gradient closely conforms to the dip of the bedding in the Neroly Formation. Further to the south, the hydraulic gradient appears to trend southeasterly. The Facility has reported that there is evidence to indicate that shallow alluvium is capable of permitting ground water to flow southeastward from Pit 7 along the axis of the valley. In the Pit 7 (SWMU #155) area, slug and bail tests were conducted. Hydraulic conductivity estimations ranged from 5.7 x 10[-7] to 1.3 x 10[-4] (cm/sec).

Hazardous Substance Releases

1. The following information has been summarized from the "LLNL Site 300 Environmental Restoration Work Plan" dated October, 1989:

> In 1982, LLNL began an initial assessment of the environmental effects of the discharge of Trichloroethylene (TCE) in several areas of Site 300. By 1983, five locations within Site 300 were found to have TCE in soil and/or ground water. Recent ground water monitoring has revealed the presence of TCE in ground water near the Pit 7 Complex, at Pit 6, Pit 8, and at Building 833. In 1988, LLNL detected TCE and Perchloroethylene (PCE) in ground water collected from a shallow off-site monitor well near the GSA.
>
> Rinse-water discharges from buildings within the HE Process Area have historically been disposed of in unlined lagoons adjacent to the processing buildings. Use of these lagoons was terminated in 1985.

Debris from high explosives tests was previously disposed of in landfills at the northern end of Site 300. In 1984, tritium levels in four monitoring wells at these landfills rose above the California drinking water standard of 20,000 picoCuries per liter (pCi/L). A program of investigation was then begun, and to date, three areas with tritium in ground water have been discovered: the Pit 7 Complex, East Firing Area (EFA), and the Building 850 Area.

2. In 1988, the U. S. Environmental Protection Agency, Region 9, conducted a RCRA Facility Assessment (RFA) to identify and evaluate Solid Waste Management Units (SWMUs) and other Areas of Concern (AOCS) for potential releases of hazardous constituents into the environment. The RFA identified 179 SWMUs. Of these, 45 SWKUs and two AOCs were inferred to have a high potential for the release of hazardous wastes or constituents to soil or ground water. Thirty-seven SWMUs and two AOCs were considered to have a high potential for current and ongoing generation of subsurface gas. The release potential for several SWKUs was indeterminate, due to a lack of information.

3. In 1988, EPA evaluated LLNL Site 300 under the Hazard Ranking System (HRS) for inclusion on the National Priorities List under CERCLA. The HRS evaluation concluded that:

Chloroform, trichloroethylene, trans-1,2-dichloroethene (Trans-1,2-DCE), and tetrachloroethane (PCE) have been detected in the watertable aquifer in the Bldg 834 area at maximum concentrations of 600 ppb, 240,000 ppb, 6300 ppb, and 6300 ppb, respectively. TCE was not detected in background well W-834-M2, approximately 600 ft. from the center of the plume at Building 834, upgradient of well W-834-T2. Both these wells are screened in the upper', watertable aquifer. TCE concentrations of up to 40,000 ppb have been detected in Well W-834-T2.

There has also been an observed release within the deep regional aquifer. Both Chloroform and TCE have also been detected in samples collected from Well W-834-Tl in the Building 834 study area. Well W-834-Tl is screened in the deep, regional aquifer.

Environment and Population at Risk

Hazardous wastes and/or hazardous constituents may further migrate from Site 300 into the environment by the following pathways:

(a) Groundwater: Releases from the Facility have migrated into the upper aquifer (on site and off-site) and TCE and chloroform have been detected in the deeper aquifer below the Facility indicating a downward migration of contaminants. Since the direction of the general groundwater flow is eastward, contaminated groundwater has the potential to migrate toward the agricultural areas of the central San Joaquin Valley.

(b) Soil: Hazardous constituents have already been detected in soils under and around the Facility. The continued presence of hazardous constituents in the groundwater may cause on-going soil contamination.

Potentially affected receptors include 4 water supply wells on site. Of these on-site water supply wells, only 3 are currently in use. Well W4 draws water from both the upper and lower

aquifers on site. There are four off-site, private water supply wells within a 3 mile radius of Site 300. They provide water for the California Department of Forestry facility, the Connolly Ranch, the Gallo Ranch, and the California State Department of Parks and Recreation. There are no municipal wells, water lines, or other alternate water supplies in the area. Releases from the Facility could affect a total population of 352 people who are served by groundwater within the 3 mile radius.

Go to Table of Contents

Go to CERCLA Agreements
Go to Selected EM Cleanup and Compliance Agreements

EM HOME | DOE HOME | SEARCH | WEBSITE OUTLINE
FEEDBACK | INTERACTIVE MAP | WHAT'S NEW
PRIVACY AND SECURITY NOTICE

About This Document
Posted 05/09/1996 (mw)