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THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
AND
THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES
AND
THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION
AND
THE UNITED STATES AIR FORCE

IN THE MATTER OF:	)	Federal Facility Agreement Under CERCLA Section 120
The U.S. Department of the Air Force	)	
March Air Force Base	)	Administrative Docket Number: 90-31

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The U.S. Department of the Air Force	)	
March Air Force Base	)	Administrative Docket Number: 90-31

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:

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 the public health, welfare and the environment;

(b) Establish a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at the Site in accordance with CERCLA, the NCP, Superfund guidance and policy, RCRA, RCRA guidance and policy, and applicable State law;

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

(d) Ensure the adequate assessment of potential injury to natural resources, and the prompt notification of and cooperation with the Federal and State Natural Resources Trustees necessary to guarantee the implementation of response actions achieving appropriate cleanup levels.

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 shall be identified, proposed to the Parties, and implemented as early as possible.

(b) Establish requirements for the performance of a Remedial Investigation ("RI") to determine fully the nature and extent of the threat to the public health or welfare or the environment caused by the release and threatened release of hazardous substances, pollutants, or contaminants at the Site and to establish requirements for the performance of a Feasibility Study ("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 actions(s) in accordance with CERCLA and applicable State law and meet the requirements of CERCLA section 120(e)(2), 42 U.S.C. § 9620(e)(2), pertaining to interagency agreements;

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

(f) Coordinate response actions at the Site with the mission and support activities at March AFB;

(g) Expedite the cleanup process, as necessary, to protect human health and the environment;

(h) Provide for State involvement in the initiation, development, selection and enforcement of remedial actions to be undertaken at March AFB, including the review of all applicable data as it becomes available and the development of studies, reports, and action plans; and to identify and integrate State ARARs into the remedial action process.

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

2. PARTIES

2.1 The Parties to this Agreement are EPA, the Air Force, the California Department of Health Services (DHS), and the California Regional Water Quality Control Board, Santa Ana Region (RWQCB). The terms of the Agreement shall apply to and be binding upon all the Parties.

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 Air Force 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. The Air Force will notify EPA and DHS and the RWQCB of the identity and assigned tasks of each of its contractors performing work under this Agreement upon their selection.

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. § 9620(e)(1), and the Resource Conservation and Recovery Act (RCRA) sections 6001, 3008(h) and 3004(u) and (v), and 7003, 42 U.S.C. § 6961, 6928(h), 6924(u) and (v), and 6973, the Clean Water Act, 33 U.S.C. § 1251 et seq., and Executive Order 12580;

(b) EPA enters into those portions of this Agreement that relate to remedial actions pursuant to CERCLA section 120(e)(2), 42 U.S.C. § 9620(e)(2), RCRA sections 6001, 3008(h) and 3004(u) & (v), and 7003, 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), and 6973, the Clean Water Act, 33 U.S.C. § 1251 et seq., and Executive Order 12580;

(c) The Air Force enters into those portions of this Agreement that relate to the RI/FS pursuant to CERCLA section 120(e)(1), 42 U.S.C. § 9620(e)(1), RCRA sections 6001, 3008(h) and 3004(u) & (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), the Clean Water Act, 33 U.S.C. § 1251 et seq., Executive Order 12580, the National Environmental Policy Act, 42 U.S.C. § 4321, and the Defense Environmental Restoration Program (DERP), 10 U.S.C. § 2701 et. seq.;

(d) The Air Force enters into those portions of this Agreement that relate to remedial actions pursuant to CERCLA section 120(e)(2), 42 U.S.C. § 9620(e)(2), RCRA sections 6001, 3008(h), and 3004(u) & (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), the Clean Water Act, 33 U.S.C. § 1251 et seq., the National Environmental Policy Act, 42 U.S.C. § 4321 et seq., Executive Order 12580 and the DERP; and

(e) The California Department of Health Services and Regional Water Quality Control Board enter into this Agreement pursuant to CERCLA sections 120(f) and 121, 42 U.S.C. § 9620(f) and 9621, and California Health and Safety Code, section 102, and

Division 20, chapters 6.5 and 6.8, and Division 7 of the California Water Code.

(f) The Department of Health Services (DHS) is the lead State agency for this Federal Facility.

4. DEFINITIONS

4.1 Except as noted below or otherwise explicitly stated, the definitions provided in CERCLA, CERCLA case law, and the NCP shall control the meaning of terms used 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 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). "Air Force" shall mean U.S. Air Force, its employees, members, agents, and authorized representatives. "Air Force" shall also include the Department of Defense (DOD), to the extent necessary to effectuate the terms of this Agreement, including, but not limited to, appropriations and Congressional reporting requirements.

(c). "ARARs" 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. § 9620(a)(1).

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

(e). "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 holiday shall be due on the following business day.

(f). "DHS" shall mean the Department of Health Services, its successors and assigns, and its duly authorized representatives.

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

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

(i). "Federal Facility" shall include March Air Force Base and any real property subject to the jurisdiction of the Commander, 22nd Air Refueling Wing.

(j). "Feasibility Study" or "FS" 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. The Air Force shall conduct and prepare the FS in a manner to support the intent and objectives of Section 17 (Statutory Compliance/RCRA-CERCLA Integration).

(k). "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. A conference call will suffice for an in-person meeting at the concurrence of the Remedial Project Managers.

(l). "National Contingency Plan" or "NCP" shall refer to the regulations contained in 40 CFR 300.1 et seq.

(m). "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.

(n). "Natural Resources Trustee(s) Notification and Coordination" shall have the same meaning 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.

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

(r). "Person" shall have the same meaning as provided in CERCLA Section 101(21), 42 U.S.C. § 9601(21), California Health and Safety Code sections 25118, Porter-Cologne Water Quality Control Act section 13050(c).

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

(t). "Remedial Design" or "RD" shall have the same meaning as provided in the NCP.

(u). "Remedial Investigation" or "RI" means that investigation conducted pursuant to CERCLA and the NCP, as supplemented by the substantive provisions of the EPA RCRA Facilities Assessment guidance. 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. The Air Force shall conduct and prepare the RI in a manner to support the intent and objectives of Section 17 (Statutory Compliance/RCRA-CERCLA Integration).

(v). "Remedial Project Manager" or "RPM" in this Agreement shall have the meaning and authority provided in Section 18, below.

(w). "Remedy" or "Remedial Action" or "RA" shall have the same meaning as provided in section 101(24) of CERCLA, 42 U.S.C. § 9601(23), and the NCP, and may consist of Operable Units.

(x). "Remove" or "Removal" shall have the same meaning as provided in section 101(23) of CERCLA, 42 U.S.C. § 9601(23), and the NCP.

(y). "RWQCB" shall mean the Regional Water Quality Control Board, Santa Ana Region, its successors and assigns, and its duly authorized representatives.

(z). "Site" shall include the Federal Facility of March Air Force Base as defined above, the facility as defined above, any area off the facility to or under which a release of hazardous substances has migrated, or threatens to migrate, from a source on or at March AFB. For the purposes of obtaining permits, the terms "on-site" and "off-site" shall have the same meaning as provided in the NCP.

(aa). "State" shall mean the State of California and its employees and authorized representatives, and shall refer to both DHS and RWQCB unless otherwise specified.

5. DETERMINATIONS

5.1 This Agreement is based upon the placement of March Air Force Base ("March AFB"), Riverside County, California, on the National Priorities List by the Environmental Protection Agency on November 21, 1989, 54 Federal Register at page 48187.

5.2 March AFB is a facility under the jurisdiction, custody, or control of the Department of Defense within the meaning of Executive Order 12580, 52 Federal Register 2923, 29 January 1987. The Department of the Air Force is authorized to act in behalf of the Secretary of Defense for all functions delegated by the President through E.O. 12580 which are relevant to this Agreement.

5.3 March AFB is a Federal Facility under the jurisdiction of the Secretary of Defense within the meaning of CERCLA section 120, 42 U.S.C. § 9620, and Superfund Amendments and Reauthorization Act of 1986 (SARA) section 211, 10 U.S.C. § 2701 et seq., and subject to the Defense Environmental Restoration Program (DERP).

5.4 The Air Force 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. § 9621(d)(2)(A)(ii).

5.5 The authority of the Air Force to exercise the delegated removal authority of the President pursuant to CERCLA section 104, 42 U.S.C. § 9604 is not altered by this Agreement.

5.6 The actions to be taken pursuant to this Agreement are reasonable and necessary to protect the public 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. § 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. § 9601(22), 9604, 9606, and 9607.

5.9 With respect to these releases, the Air Force is an owner, operator, and/or generator subject to the provisions of 42 U.S.C. § 9607 and within the meaning of California Health and Safety Code section 25323.5(a), and is a person within the meaning of California Health and Safety Code section 25118 and California Water Code section 13050(c).

5.10 Included as an Attachment to this Agreement is a map showing source(s) of suspected contamination and the areal extent of known 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. § 9607(f)), the Secretary of Defense 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.

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 CERCLA guidance and policy; the NCP; pertinent provisions of RCRA and 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 Air Force agrees to undertake, seek adequate funding for, fully implement and report on the following tasks, with participation of the Parties as set forth in this Agreement:

(a) Remedial Investigations of the Site;

(b) Federal and State Natural Resource Trustee Notification and Coordination for the Site;

(c) Feasibility Studies for the Site;

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

(e) Operation and maintenance of response actions at the Site.

6.3 The Parties agree to:

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

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

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

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. § 9620, and 10 U.S.C. § 2705, the Air Force will normally be responsible for issuing

primary and secondary documents to EPA, and the State. As of the effective date of this Agreement, all draft, draft final and final deliverable documents 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 and the State 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 reports that are major, discrete, portions of RI/FS and/or RD/RA activities. Primary documents are initially issued by the Air Force in draft subject to review and comment by EPA and the State. Following receipt of comments on a particular draft primary document, the Air Force 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 issuance of a draft final document if dispute resolution is not invoked or as modified by decision of the dispute resolution process.

(b) Secondary documents include those reports that are discrete portions of the primary documents and are typically input or feeder documents. Secondary documents are issued by the Air Force in draft subject to review and comment by EPA and the State. Although the Air Force 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 Air Force shall complete and transmit drafts of the following primary documents for each remedial action to EPA and the State, for review and comment in accordance with the provisions of this Section.

(1) RI/FS Workplans, including Sampling and Analysis Plans

(2) Quality Assurance Project Plans (QAPPs)

(3) Community Relations Plans (May be amended as appropriate to address Operable Units. Any such amendments shall not be subject to the threshold requirements of subsection 7.10. Any disagreement regarding amendment of the CRP shall be resolved pursuant to Section 12 (Dispute Resolution).)

(4) RI Reports (incorporating Risk Assessments)

(5) FS Reports

(6) Proposed Plans

(7) Records of Decision (RODs)

(8) Remedial Designs (RDs)

(9) Remedial Action Work Plans (to include operation and maintenance plans, and schedules for RA).

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

(c) Primary documents may include target dates for subtasks as provided in subsections 7.4(b) and 18.3. The purpose of target dates is to assist the Air Force 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 Air Force shall complete and transmit drafts of the following secondary documents for each remedial action to EPA and the State for review and comment.

(1) Site Characterization Summaries (part of RI)

(2) Sampling and Data Results

(3) Treatability Studies (only if generated)

(4) Initial Screenings of Alternatives

(5) Risk Assessments

(6) Well closure methods and procedures

(7) Detailed Analyses of Alternatives

(8) Post-Screening Investigation Work Plans

(b) Although EPA and the State may comment on the drafts for 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 may be held more frequently as needed 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 documents 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, including any permitting requirements which may be a source of ARARs. At that time, the State shall identify potential State ARARs as required by CERCLA section 121(d)(2)(A)(ii), 42 U.S.C. § 9621(d)(2)(A)(ii), which are pertinent to those activities for which it is responsible and the document being addressed. Draft ARAR determinations shall be prepared by the Air Force in accordance with CERCLA section 121(d)(2), 42 U.S.C. § 9621(d)(2), the NCP and pertinent guidance issued by EPA.

(b) The State lead agency will contact other State and local governmental agencies which are a source of potential ARARs. The proposed ARARs obtained from the identified agencies will be submitted to the Air Force, along with a list of those agencies who failed to respond to the state lead agency's solicitation of proposed ARARs. The Air Force 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 reexamined throughout the RI/FS process until a ROD is issued.

7.7 Review and Comment on Draft Documents:

a) The Air Force shall complete and transmit each draft primary document to EPA, DHS and RWQCB on or before the corresponding deadline established for the issuance of the document. The Air Force 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 and DHS and RWQCB may concern all aspects of it (including completeness) and should include, but is not limited to, technical evaluation of any aspect to 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 Air Force shall make an oral presentation of the document to the Parties at the next scheduled meeting of the Remedial Project Managers following transmittal of the draft document or within fourteen (14) days following the request, whichever is sooner. Comments by the EPA and the State shall be provided with adequate specificity so that the Air Force 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 Air Force, the EPA or the State, as appropriate, shall provide a copy of the cited authority or reference. EPA or the State may extend the sixty (60) day comment period for an additional thirty (30) days by written notice to the Air Force prior to the end of the sixty (60) day period. On or before the close of the comment period, EPA, DHS and RWQCB shall transmit their written comments to the Air Force. In appropriate circumstances, this time period may be further extended in accordance with Section 9 (Extensions).

(c) Representatives of the Air Force shall make themselves readily available to EPA and the State 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 Air Force on the close of the comment period.

(d) In commenting on a draft document which contains a proposed ARAR determination, EPA or the State shall include a reasoned statement of whether it objects to any portion of the proposed ARAR determination. To the extent that EPA or the State 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 Air Force shall give full consideration to all written comments. Within fifteen (15) days following the close of the comment period on a draft secondary document or draft primary document the Parties shall hold a meeting to discuss all comments received. On a draft secondary document the Air Force shall, within sixty (60) days of the close of the comment period, transmit to the EPA and the State its written response to the comments received. On a draft primary document the Air Force shall, within sixty (60) days of the close of the comment period, transmit to EPA and the State a draft final primary document, which shall include the Air Force's response to all written comments received within the comment period. While the resulting draft final document shall be the responsibility of the Air Force, it shall be the product of consensus to the maximum extent possible.

(f) The Air Force may extend the sixty (60) day period for either responding to comments on a draft document or for issuing the draft final primary document for an additional thirty (30) days by providing written notice to EPA and the State. 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 or, if invoked, at completion of the dispute resolution process should the Air Force's position be sustained. If the Air Force's determination is not sustained in the dispute resolution process, the Air Force 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. (These restrictions do not apply to the Community Relations Plan.)

(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 conditions 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 the public health or the environment, in evaluating the selection of remedial alternatives, or in protecting human health and the environment.

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

8. DEADLINES

8.1. All deadlines agreed upon before the effective date of this Agreement shall be made an Appendix to this Agreement. To the extent that deadlines have already been mutually agreed upon by the Parties prior to the effective date 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 forty-five (45) days after the effective date of this Agreement, the Air Force shall propose, and announce and make available for public comment in the same manner as Section 36 specifies for this Agreement, proposed deadlines for completion of the following draft primary documents for each remedial action identified as of the date of EPA execution of this Agreement:

(a) RI/FS Workplans, including Sampling and Analysis Plans

(b) Quality Assurance Project Plans (QAPPs)

(c) Community Relations Plan

(d) RI Reports

(e) FS Reports

(f) Proposed Plans

(g) Records of Decision

Within sixty (60) days after the effective date of this Agreement, or the end of the public comment period on the Agreement, whichever is later, EPA and the State shall review and provide comments to the Air Force regarding the proposed deadlines. Within fifteen (15) days following receipt of the comments the Air Force 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 the State, and shall become an Appendix to this Agreement.

8.3 Within twenty-one (21) days of issuance of the Record of Decision for any operable unit or for the final remedy, the Air Force shall propose deadlines for completion of the following draft primary documents:

(a) Remedial Designs

(b) Remedial Action Work Plans (to include operation and maintenance plans, and schedules for RA)

These deadlines shall be proposed, finalized and published using the same procedures set forth in Subsection 8.2 above.

8.4 For any operable units not identified as of the effective date of this Agreement, the Air Force shall propose deadlines for all documents listed in Subsection 7.3(a)(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.

9. EXTENSIONS

9.1 Timetables, deadlines and schedules shall be extended upon receipt of a timely request for extension and when good cause exists for the requested extension. Any request for extension by 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 State's performance of this Agreement;

(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 nonconcurrence an explanation of the basis for its position.

9.5 If there is consensus among the Parties that the requested extension is warranted, the Air Force 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 Within seven days of receipt of a statement of nonconcurrence with the requested extension, the requesting Party may invoke dispute resolution.

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

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 Air Force; 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 Air Force, the Air Force 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.

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 public 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 Air Force shall then take immediate action to notify the appropriate State and local agencies and affected members of the public.

11.2 Work Stoppage

In the event 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 Section 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. § 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 Air Force's authority with respect to removal actions conducted pursuant to section 104 of CERCLA, 42 U.S.C. § 9604.

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

(e) All reviews conducted by EPA and the State pursuant to 10 U.S.C. § 2705(b)(2) will be expedited so as not to unduly jeopardize fiscal resources of the Air Force for funding the removal actions.

(f) If a Party determines that there may be an endangerment to the public health or 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 Air Force take such response actions as may be necessary to abate such danger or threat and to protect the public health or 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 Air Force shall provide the other Parties with timely notice and opportunity to review and comment upon any proposed removal action for the Site, in accordance with 10 U.S.C. § 2705(a) and (b). The Air Force agrees to provide the information described below pursuant to such obligation.

(b) For emergency response actions, the Air Force shall provide EPA and the State with notice in accordance with Subsection 11.1. Such oral notification shall, except in the case of extreme emergencies, include adequate information concerning the Site background, threat to the public health and 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 Air Force On-Scene Coordinator recommendations. Within forty-five (45) days of completion of the emergency action, the Air Force will furnish EPA and the State 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 Air Force will provide EPA and the State 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.

(d) All activities related to ongoing removal actions shall be reported by the Air Force in the progress reports as described in Section 19 (Remedial Project Managers).

11.5 Any dispute among the Parties as to whether a proposed nonemergency response action is (a) properly considered a removal action, as defined by 42 U.S.C. § 9601(23), or (b) consistent with the final remedial action, shall be resolved pursuant to Section 12 (Dispute Resolution). Such dispute may be brought directly to the

DRC or the SEC at any Party's request. For purposes of this Subsection 11.5, the term "nonemergency response action" includes, but is not limited to, any removal action for which consultation, as required by 10 U.S.C. § 2705, is practical, or any removal action which has extended beyond one-hundred and twenty (120) days from the initiation of the on-site removal activities.

11.6 The Parties shall first seek to resolve any dispute as to whether the Air Force will take a removal action requested by any Party under Subsection 11.3(f) through the dispute resolution process contained in Section 12 (Dispute Resolution), but that process shall be modified for disputes on this specific subject matter in accordance with Subsection 12.12. EPA and the State reserve any and all rights each may have with regard to whether the Air Force will take a removal action requested by any Party pursuant to Subsection 11.3(f) once the dispute resolution process specified in this subsection is exhausted, and notwithstanding Subsection 31 (Covenant Not to Sue and Reservation of Rights).

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. This dispute resolution procedure may be invoked by EPA, by the Air Force, or collectively by the Parties representing the State of California as a unit. 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 receipt 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 Dispute Resolution Committee (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 Manager 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 the DRC is the Deputy Director for Superfund, Hazardous Waste Management Division, EPA Region 9. The Air Force's designated member is the Director of Environmental Management, Strategic Air Command. The DHS representative is the Chief of the Site Mitigation Branch, Region 4. The RWQCB representative is the Assistant Executive Officer for the Santa Ana Region. 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 Senior Executive Committee (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 Air Force's representative on the SEC is the Deputy Assistant Secretary of the Air Force for Environment, Safety, and Occupational Health. The DHS representative on the SEC is the DHS Regional Administrator, Region 4. The RWQCB representative on the SEC is the Executive Officer for the Santa Ana 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 Air Force or the State may, within

fourteen (14) days of the Regional Administrator's issuance of EPA's position, issue a written notice elevating the dispute to the Administrator of EPA for resolution in accordance with all applicable laws and procedures. In the event the Air Force or the State elects not to elevate the dispute to the Administrator within the designated fourteen (14) day escalation period, the Air Force and the State shall be deemed to have agreed with the Regional Administrator's written position with respect to the dispute.

12.7 Upon escalation 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 Air Force's Secretariat Representative, DHS Chief Deputy Director, and RWQCB's Executive Officer to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide the Air Force and the State 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. The State 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 considerations 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 Air Force 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 provided in Subsection 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 The following modified dispute resolution procedure shall only apply to disputes arising under Subsection 11.6, concerning a decision by the Air Force to not undertake a removal action as requested under Subsection 11.3(f). This provision shall apply to such disputes in lieu of the procedures specified in Subsections 12.5, 12.6 and 12.7.

(a) For purposes of this modified dispute resolution procedure, the EPA and State representatives on the Dispute Resolution Committee (DRC) and Senior Executive Committee (SEC) shall remain the same as in Subsections 12.4 and 12.6, while the Air Force member of the DRC shall be the Director of Environmental Management, Strategic Air Command, and the Air Force member of the SEC shall be the Vice Commander in Chief, Strategic Air Command.

(b) After submission of a Subsection 11.6 matter to dispute, as described in Subsection 12.2, the DRC shall handle the dispute under the procedure described in Subsection 12.5, except that the DRC shall have ten (10) days rather than twenty one (21)

days to unanimously resolve the dispute, and shall forward an unresolved dispute to the SEC within four (4) days rather than seven (7) days.

(c) If agreement is not reached by the DRC, 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 in seven (7) days, the Air Force SEC member shall issue a written position on the dispute. EPA or the State may, within four (4) days of the issuance of the Air Force SEC member's position, issue a written notice elevating the dispute to the Deputy Assistant Secretary of the Air Force for Environment, Safety, and Occupational Health (currently designated SAF/MIQ), for resolution in accordance with all applicable laws and procedures. In the event EPA or the State elects not to elevate the dispute to SAF/MIQ within the designated four (4) day elevation period, EPA and the State shall be deemed to have agreed with the Air Force SEC member's written position with respect to the dispute.

(d) Upon escalation of a dispute to SAF/MIQ pursuant to Subsection 12.12(c), above, SAF/MIQ will review and seek to resolve the dispute in a manner acceptable to all Parties within seven (7) days. Upon request, and prior to issuing a recommended resolution, SAF/MIQ shall meet and confer with the EPA Administrator's Representative, the DHS Chief Deputy Director, and the RWQCB Executive Officer to discuss the issue under dispute. SAF/MIQ shall provide EPA and the State with a proposed resolution of the dispute. In the event EPA or the State does not concur with the SAF/MIQ proposed resolution of the dispute, such nonconcurrence will be transmitted in writing to SAF/MIQ within seven (7) days of receipt of his/her issuance of the proposed resolution. Failure to transmit such nonconcurrence will be presumed to signify concurrence. If EPA or the State does not concur, such agency will retain any right it possesses with regard to the issue raised in the dispute under Subsection 11.6.

12.13 For the purposes of the dispute resolution process, and other decisions of the Parties that may be taken to dispute resolution, the Parties agree as follows:

(a) DHS and RWQCB, as agencies of the State of California, will jointly designate which of the two agencies shall voice the State's

position for various issues and subjects, and which of the two agencies shall voice the State's position for all other issues or subjects which have not been specifically designated. DHS and RWQCB shall provide EPA and the Air Force with an initial designation in writing within 30 days after the execution of this Agreement. This initial designation is subject to modification by DHS and RWQCB. DHS and RWQCB shall notify EPA and the Air Force in writing of such modification within 10 days after the modification is made.

(b) DHS and RWQCB shall represent the State with a single voice, as designated in accordance with Subsection 12.13(a) above, throughout the dispute resolution process (Section 12) and in all decisions of the Parties which may be taken to dispute resolution, including but not limited to the following:

(1) Invocation of dispute resolution for Draft Final Primary Documents (Subsection 7.8);

(2) Subsequent modification of final documents (Subsection 7.10);

(3) Agreement on deadlines (Section 8);

(4) Extension of deadlines (Section 9);

(5) Work stoppage (Subsection 11.2);

(6) Enforcement of the terms of this Agreement (Subsection 13.5);

(7) Termination of the Agreement (Section 30);

(8) State support services (Section 34);

(9) State participation contingency (Section 35);

(10) Effective date and public comment (Section 36).

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 or the State may have under CERCLA and applicable State law, including but not limited to any rights under sections 113 and 310, 42 U.S.C. § 9613 and 9659. The Air Force 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.

14. STIPULATED PENALTIES

14.1 In the event that the Air Force fails to submit a primary document listed in Section 7 (Consultation) to EPA and the State pursuant to the appropriate timetable or deadline, established pursuant to Section 8 (Deadlines), in accordance with the requirements of this Agreement, or fails to comply with a term or condition of this Agreement which relates to an operable unit or final remedial action, EPA may assess a stipulated penalty against the Air Force. The State 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 Air Force has failed in a manner set forth in Subsection 14.1, EPA shall so notify the Air Force in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, the Air Force 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 Air Force 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 Air Force 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 only in the manner and to the extent expressly provided for in acts authorizing funds for, and appropriations to, the DOD. EPA and the State agree, to the extent allowed by law, to divide equally any stipulated penalties paid on behalf of March AFB with fifty (50) percent allocated to the EPA Hazardous Substance Response Trust Fund and fifty (50) percent allocated to the DHS and 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 Air Force'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 Air Force personally liable for the payment of any stipulated penalty assessed pursuant to this Section.

15. FUNDING

15.1 It is the expectation of the Parties to this Agreement that all obligations of the Air Force arising under this Agreement will be fully funded. The Air Force agrees to seek sufficient funding through the DOD budgetary process to fulfill its obligations under this Agreement.

15.2 In accordance with CERCLA section 120 (e)(5)(B), 42 U.S.C. § 9620 (e)(5)(B), the Air Force shall include, in its submission to the Department of Defense annual report to Congress, the specific cost

estimates and budgetary proposals associated with the implementation of this Agreement.

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

15.4 If appropriated funds are not available to fulfill the Air Force's obligations under this Agreement, EPA and the State reserve the right to initiate an action against any other person, or to take any response action, which would be appropriate absent this Agreement.

15.5 Funds authorized and appropriated annually by Congress under the "Environmental Restoration, Defense" appropriation in the Department of Defense Appropriation Act and allocated by the Deputy Assistant Secretary of Defense for Environment to the Air Force will be the source of funds for activities required by this Agreement consistent with section 211 of CERCLA, 10 U.S.C. Chapter 160. However, should the Environmental Restoration, Defense appropriation be inadequate in any year to meet the total Air Force CERCLA implementation requirements, the DOD shall employ and the Air Force shall follow a standardized DOD prioritization process which allocates that year's appropriations in a manner which maximizes the protection of human health and the environment. A standardized DOD prioritization model shall be developed and utilized with the assistance of EPA and the states.

16. EXEMPTIONS

16.1 The obligation of the Air Force 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 The State reserves any statutory right it may have to challenge any Presidential Order relieving the Air Force of its obligations to comply with this Agreement.

17. STATUTORY COMPLIANCE/RCRA-CERCLA INTEGRATION

17.1 The Parties intend to integrate the Air Force'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. § 9061 et. seq.; to satisfy the corrective action requirements of RCRA section 3004(u) & (v), 42 U.S.C. § 6924(u) & (v), for a RCRA permit, and RCRA section 3008(h), 42 U.S.C. § 6928 (h), for interim status facilities; and to meet or exceed all applicable or relevant and appropriate federal and State laws and regulations, to the extent required by CERCLA section 121, 42 U.S.C. § 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. § 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 ongoing activities outside the scope of this Agreement at March AFB 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 Air Force for ongoing 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.

18. REMEDIAL PROJECT MANAGERS

18.1 On or before the effective date of this Agreement, EPA, the Air Force, DHS and RWQCB shall each designate a Remedial Project Manager and an alternate (each hereinafter referred to as Remedial Project Manager), for the purpose of overseeing the implementation of this agreement. The Remedial Project Managers shall be responsible on a daily basis 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 Air Force, EPA, and the State on all documents, including reports, comments, and other correspondence concerning the activities performed pursuant to this Agreement, shall be directed through the Remedial Project Managers.

18.2 The Air Force, EPA, DHS, and RWQCB may change their respective Remedial Project Managers. The other Parties shall be notified in writing within five days of the change.

18.3 The Remedial Project Managers shall meet to discuss progress as described in Subsection 7.5. Although the Air Force has ultimate responsibility for meeting its respective deadlines or schedule, the Remedial Project Managers shall assist in this effort by consolidating the review of primary and secondary documents whenever possible, and by scheduling progress meetings to review reports, 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 Air Force will provide to the other Parties a draft agenda and summary of the status of the work subject to this Agreement. Unless the Remedial Project Managers agree otherwise, the minutes of each progress meeting, with the meeting agenda and all documents discussed during the meeting (which were not previously provided) as attachments, shall constitute a progress report, which will be sent to all Remedial Project Managers within ten business days after the meeting ends. If an extended period occurs between Remedial Project Manager progress meetings, the

Remedial Project Managers may agree that the Air Force shall prepare an interim progress report and provide it to the other Parties. The report shall include the information that would normally be discussed in a progress meeting of the RPMs. Other meetings shall be held more frequently upon request by any Remedial Project Manager.

18.4 The authority of the Remedial Project Managers 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 taking photographs and making such other reports on the progress of the work as the Remedial Project Managers 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 Remedial Project Manager 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.

(f) The authority vested by the National Contingency Plan, Section 300.120(b)(1), in the Air Force RPM as On Scene Coordinator and Remedial Project Manager, which will be exercised in consultation with the EPA and State RPMs and in accordance with the procedures specified in this Agreement.

18.5 Any minor field modification proposed by any Party pursuant to this Section must be approved orally by all Parties' Remedial Project Managers to be effective. The Air Force Remedial Project Manager will make a contemporaneous record of such modification and approval in a written log, and a copy of the log entry will be provided as part of the next progress report. Even after

approval of the proposed modification, no Remedial Project Manager will require implementation by a government contractor without approval of the appropriate Government Contracting Officer.

18.6 The Remedial Project Manager for the Air Force shall be responsible for day-to-day field activities at the Site. The Air Force Remedial Project Manager or other designated employee of March AFB shall be present at the Site or reasonably available to supervise work during all hours of work performed at the Site pursuant to this Agreement. For all times that such work is being performed, the Air Force Remedial Project Manager shall inform the command post at March AFB of the name and telephone number of the designated employee responsible for supervising the work.

18.7 The Remedial Project Managers 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, the State, or Air Force Remedial Project Managers from the facility shall not be cause for work stoppage of activities taken under this Agreement.

19. PERMITS

19.1 The Parties recognize that under sections 121(d) and 121(e)(1) of CERCLA, 42 U.S.C. § 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 Air Force 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 Air Force shall notify EPA and the State in writing of any permit required for off-site activities as soon as it becomes aware of the requirement. The Air Force agrees to obtain any permits necessary for the performance of any work under this Agreement. Upon request, the Air Force shall provide EPA and the

State 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 Air Force Remedial Project Manager, the Remedial Project Managers of EPA and the State will assist March AFB to the extent feasible in obtaining any required permit.

20. QUALITY ASSURANCE

20.1 In order to provide quality assurance and maintain quality control regarding all field work and sample collection performed pursuant to this Agreement, the Air Force agrees to designate a Quality Assurance Officer (QAO) who will ensure and document that all work is performed in accordance with approved work plans, sampling plans and QAPPs. The QAO shall maintain for inspection a log of quality assurance field activities and provide a copy to the Parties upon request.

20.2 To ensure compliance with the QAPP, the Air Force shall arrange for access, upon request by EPA or the State, to all laboratories performing analysis on behalf of the Air Force pursuant to this Agreement.

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

Richard Russell
Remedial Project Manager, March AFB
U.S. Environmental Protection Agency, Region 9
Hazardous Waste Management Division, H-7-3
1235 Mission Street
San Francisco, CA 94103;

and

Jesus I. Sotelo
California Department of Health Services
Toxic Substances Control Division
Region 4, Site Mitigation Unit
245 West Broadway, Suite 350
Long Beach, CA 94710

and

Kenneth R. Williams
Santa Ana Regional Water Quality Control Board
6809 Indiana Ave., Suite 200
Riverside, CA 92506

and

D. Joan Poland
22 CSG/DEV
Civil Engineering Building 2506
March AFB, CA 92518-5000

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

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. All quality assured data shall be supplied within sixty (60) days of its collection. If the quality assurance procedure is not completed within sixty (60) days, raw data or results shall be submitted within the sixty (60) day period and quality assured data or results shall be submitted as soon as they become available.

22.2 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.

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 IRP. 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 other non-disclosure provisions of the Freedom of Information Act, 5 U.S.C. § 552, or the California Public Records Act, section 6250, et.seq. of the California Government Code, 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 or 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 The Parties will not 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 that Party.

23.4 Subject to section 120(j)(2) of CERCLA, 42 U.S.C. § 9620(j)(2), any documents required to be provided by Section 7 (Consultation), and analytical data showing test results 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 and Community Relations).

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.

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.

25. ACCESS TO FEDERAL FACILITY

25.1 Without limitations on any authority conferred on EPA or the State by statute or regulation, EPA, the State or their authorized representatives, shall be allowed to enter March AFB at reasonable times for purposes consistent with the provisions of the Agreement, subject to any statutory and regulatory requirements necessary to protect national security or mission essential activities. Such access shall include, but not be limited to, reviewing the progress of the Air Force 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, the State, or the Remedial Project Managers deem necessary.

25.2 The Air Force shall honor all reasonable requests for access by the EPA or the State, conditioned upon presentation of proper credentials. The Air Force Remedial Project Manager will provide briefing information, coordinate access and escort to

restricted or controlled-access areas, arrange for base passes and coordinate any other access requests which arise.

25.3 EPA and the State shall provide reasonable notice to the Air Force Remedial Project Manager to request any necessary escorts. EPA and the State shall not use any camera, sound recording or other recording device at March AFB without the permission of the Air Force Remedial Project Manager. The Air Force shall not unreasonably withhold such permission.

25.4 The access by EPA and the State, granted in Subsection 25.1 of this Section, shall be subject to those regulations necessary to protect national security or mission essential activities. Such regulation shall not be applied so as to unreasonably hinder EPA or the State from carrying out their responsibilities and authority pursuant to this Agreement. In the event that access requested by either EPA or the State is denied by the Air Force, the Air Force 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 Air Force 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. § 9620(j), regarding the issuance of Site Specific Presidential Orders as may be necessary to protect national security.

25.5 If EPA or the State requests access in order to observe a sampling event or other work being conducted pursuant to this Agreement, and access is denied or limited, the Air Force agrees to reschedule or postpone such sampling or work if EPA or the State so requests, until such mutually agreeable time when the requested access is allowed. The Air Force shall not restrict the access rights of the EPA or the State to any greater extent than the Air Force restricts the access rights of its contractors performing work pursuant to this Agreement.

25.6 All Parties with access to March AFB pursuant to this Section shall comply with all applicable health and safety plans.

25.7. To the extent the activities pursuant to this Agreement must be carried out on other than Air Force property, the Air Force shall use its best efforts, including its authority under CERCLA section 104, to obtain access agreements from the owners which shall provide reasonable access for the Air Force, EPA, and the State and

their representatives. The Air Force may request the assistance of the State in obtaining such access, and upon such request, the State will use its best efforts to obtain the required access. In the event that the Air Force is unable to obtain such access agreements, the Air Force shall promptly notify EPA and the State.

25.8 With respect to non-Air Force property on which monitoring wells, pumping wells, or other response actions are to be located,the Air Force 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.

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

26. PUBLIC PARTICIPATION AND COMMUNITY RELATIONS

26.1 The Parties agree that any proposed removal actions and 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. § 9313(k) and 9617, relevant community relations provisions in the NCP, EPA guidances, and, to the extent they may apply, State statutes and regulations. The State agrees to inform the Air Force of all State requirements which it believes pertain to public participation. 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 Air Force shall develop and implement a community relations plan (CRP) addressing the environmental activities and elements of work undertaken by the Air Force.

26.3 The Air Force shall establish and maintain an administrative record at a place, at or near the Federal Facility,

which is freely accessible to the public, which 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 Air Force to the other Parties. The administrative record developed by the Air Force shall be updated and new documents supplied to the other Parties on at least a quarterly basis. An index of documents in the administrative record will accompany each update of the administrative record.

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.

27. FIVE YEAR REVIEW

27.1 Consistent with 42 U.S.C. § 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.

28. TRANSFER OF REAL PROPERTY

28.1 The Parties recognize that the Department of Defense shall retain liability in accordance with CERCLA Section 107, 42 U.S.C. § 9607, notwithstanding any change in ownership of the real property comprising the Federal Facility. The Air Force shall not transfer any real property 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 the real property comprising the Federal Facility which includes either (a) an area within which any release of hazardous substance has come to be located, or (b) any other property which is necessary for performance of the remedial action, the Air Force shall give written notice of that condition to the recipient of the property; and at least thirty (30) days prior to any such transfer, the Air Force shall notify all Parties of the transfer of any real property subject to this Agreement and the provisions made for any additional remedial actions, if required.

28.2 Until six months following the effective date of the final regulations implementing CERCLA section 120(h)(2), 42 U.S.C. § 9620(h)(2), the Air Force agrees to comply with the most recent version of the regulations as proposed and all other substantive and procedural provisions of CERCLA section 120(h) and Subsection 28.1 of this Section.

29. AMENDMENT OR MODIFICATION OF AGREEMENT

29.1 This Agreement can be amended or modified solely upon written consent of all 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.

30. TERMINATION OF THE AGREEMENT

30.1 At the completion of the remedial action, the Air Force shall prepare a Project Closeout Report certifying that all requirements of this Agreement have been completed. The provisions of this Agreement shall be deemed satisfied and terminated upon receipt by the Air Force of written notice from EPA, with concurrence of the State, that the Air Force 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 Air Force request for such notice, EPA shall provide a written statement of the basis for its denial and describe the Air Force 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.

31. COVENANT NOT TO SUE AND RESERVATION OF RIGHTS

31.1 In consideration for the Air Force's compliance with this Agreement, and based on the information known to the Parties or reasonably available on the effective date of this Agreement, EPA, the Air Force, and the State agree that compliance with this Agreement shall stand in lieu of any administrative, legal, and equitable remedies against the Air Force available to them regarding the releases or threatened releases of hazardous substances including hazardous wastes, pollutants or contaminants at the Site which are the subject of any RI/FS conducted pursuant to this Agreement and which have been or will be adequately addressed by the remedial actions provided for under this Agreement.

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

32. OTHER CLAIMS

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

State shall not be held as a party to any contract entered into by the Air Force to implement the requirements of this Agreement.

32.2 This Agreement shall not restrict any Party from taking any legal or response action for any matter not part of the subject matter of this Agreement.

33. RECOVERY OF EPA EXPENSES

33.1 The Parties agree to amend this Agreement at a later date in accordance with any subsequent national resolution of the issue of cost reimbursement. Pending such resolution, EPA reserves any rights it may have with respect to cost reimbursement.

34. STATE SUPPORT SERVICES

34.1 Compensation for state support services rendered in connection with this Agreement is governed by the provisions of the Defense/State Memorandum of Agreement (DSMOA) which was executed on May 31, 1990, between DHS on behalf of the State of California and the Department of Defense.

34.2 In the event that the DSMOA is terminated or no longer in effect for any reason, and until a new DSMOA takes effect, the Parties agree to the provisions in this subsection and the remainder of Section 34. The Air Force agrees to request funding and reimburse the State, subject to the conditions and limitations set forth in this Section, and subject to Section 15 (Funding), for all reasonable costs it incurs in providing services in direct support of the Air Force's environmental restoration activities pursuant to this Agreement at the Site.

34.3 Reimbursable expenses shall consist only of actual expenditures required to be made and actually made by the State in providing the following assistance to March Air Force Base:

(a) Timely technical review and substantive comment on reports or studies which the Air Force prepares in support of its response actions and submits to the State.

(b) Identification and explanation of unique State requirements applicable to military installations 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 State requirements, or in accordance with agreed upon conditions between the State and the Air Force that are established in the framework of this Agreement.

(d) Support and assistance to the Air Force in the conduct of public participation activities in accordance with federal and State requirements for public involvement.

(e) Participation in the review and comment functions of Air Force Technical Review Committees.

(f) Other services specified in this Agreement.

34.4 Within ninety (90) days after the end of each quarter of the federal fiscal year, the State shall submit to the Air Force 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 either the National Contingency Plan (NCP) or the requirements 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 Air Force has the right to audit cost reports used by the State to develop the cost summaries. Before the beginning of each fiscal year, the State shall supply a budget estimate of what it plans to do in the next year in the same level of detail as the billing documents.

34.5 Except as allowed pursuant to Subsections 34.6 or 34.7 below, within ninety (90) days of receipt of the accounting provided pursuant to Subsection 34.4 above, the Air Force shall reimburse the State in the amount set forth in the accounting.

34.6 In the event the Air Force 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 a bilateral dispute resolution process set forth at Subsection 34.10 below.

34.7 The Air Force shall not be responsible for reimbursing the State for any costs actually incurred in the implementation of this Agreement in excess of one percent (1%) of the Air Force total lifetime project costs incurred through construction of the remedial action(s). This total reimbursement limit is currently estimated to be a sum of $600,000 over the life of the Agreement. Circumstances could arise whereby fluctuations in the Air Force estimates or actual final costs through the construction of the final remedial action creates a situation where the State receives reimbursement in excess of one percent of these costs. Under these circumstances, the State remains entitled to payment for services rendered prior to the completion of a new estimate if the services are within the ceiling applicable under the previous estimate. This Section (34) does not cover the costs of services rendered prior to October 17, 1986; services at properties not owned by the Federal government; and activities funded from sources other than Defense Environmental Restoration Account appropriations.

(a) Funding of support services must be constrained so as to avoid unnecessary diversion of the limited Defense Environmental Restoration Account funds available for the overall cleanup, and

(b) Support services should not be disproportionate to overall project costs and budget.

34.8 Either the Air Force or the State may request, on the basis of significant upward or downward revisions in the Air Force's estimate of its total lifetime costs through construction used in Subsection 34.7 above, a renegotiation of the cap. Failing an agreement, either the Air Force or the State may initiate dispute resolution in accordance with Subsection 34.10 below.

34.9 The State agrees to seek reimbursement for its expenses solely through the mechanisms established in this Section, and reimbursement provided under this Section shall be in settlement of

any claims for State response costs relative to the Air Force's environmental restoration activities at the Site.

34.10 Section 12 (Dispute Resolution) notwithstanding, this Subsection shall govern any dispute between the Air Force and the State regarding the application of this Section or any matter controlled by this Section including, but not limited to, allowability of expenses and limits on reimbursement. The provisions of Subsection 12.13 (State single voice) shall apply to this Section. While it is the intent of the Air Force and the State that these procedures shall govern resolution of disputes concerning State reimbursement, informal dispute resolution is encouraged.

(a) The Air Force, DHS and RWQCB RPMs shall be the initial points of contact for coordination of dispute resolution under this Subsection.

(b) If the Air Force, DHS and RWQCB RPMs are unable to resolve a dispute, the matter shall be referred to the DRC representatives (identified in Subsection 12.4) of the Air Force, DHS and RWQCB as soon as practicable, but in any event within five (5) working days after the dispute is elevated by the RPMs.

(c) If the DRC representatives of the Air Force, DHS and RWQCB are unable to resolve the dispute within ten (10) working days, the matter shall be elevated to the SEC representatives (identified in Subsection 12.6) of the Air Force, DHS and RWQCB.

(d) In the event the SEC representatives of the Air Force, DHS and RWQCB are unable to resolve a dispute, the State retains any legal and equitable remedies it may have to recover its expenses. In addition, DHS and/or RWQCB may withdraw from this Agreement by giving sixty (60) days notice to the other Parties.

34.11 Nothing herein shall be construed to limit the ability of the Air Force to contract with the State for technical services that could otherwise be provided by a private contractor including, but not limited to:

(a) Identification, investigation, and cleanup of any contamination beyond the boundaries of March Air Force Base;

(b) Laboratory analysis; or

(c) Data collection for field studies.

34.12 Nothing in this Agreement shall be construed to constitute a waiver of any claims by the State for any expenses incurred prior to the effective date of this Agreement.

35. STATE PARTICIPATION CONTINGENCY

35.1 If DHS and/or RWQCB fail(s) to sign this Agreement within thirty (30) days of notification of the signature by both EPA and the Air Force, this Agreement will be interpreted as if that Agency were not a Party and any reference to that Agency in this Agreement will have no effect. In addition, all other provisions of this Agreement notwithstanding, if that Agency does not sign this Agreement within the said thirty (30) days, March AFB shall only have to comply with any State requirements, conditions, or standards, including those specifically listed in this Agreement, which March AFB would otherwise have to comply with absent this Agreement.

35.2 In the event that the State does not sign this Agreement,

(a) the Air Force agrees to transmit all primary and secondary documents to appropriate State agencies at the same time such documents are transmitted to EPA; and

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

36. EFFECTIVE DATE AND PUBLIC COMMENT

36.1 This Agreement is effective upon signature by all the Parties to this Agreement.

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 EPA, as the last signatory, executes this Agreement, the Air Force shall announce the availability of this Agreement to the public for a minimum forty-five

(45) day period of review and comment, but ending no earlier than the date on which comments from EPA and the State are due, under Section 8, on proposed deadlines. Publication shall include publication in at least two major local newspapers of general circulation.

36.4 Promptly upon the completion of the comment period, the Air Force shall transmit to the other Parties copies of all comments received within the comment period. The Parties shall review all such comments and, within thirty (30) days after the close of the comment period, the Air Force shall prepare a written response to the public comments, for the review and concurrence of the other Parties. Within sixty (60) days after the close of the comment period, the Parties shall determine that either:

(a) the Agreement shall remain effective in its present form; or

(b) the Parties will seek to modify the Agreement pursuant to Section 29 (Amendment or Modification of Agreement), in response to the comments received. Absent or pending an amendment of the Agreement pursuant to Section 29, the Agreement will remain effective in its form as originally executed.

36.5 Any response action underway upon the effective date of this Agreement shall be subject to oversight by the Parties.

37. APPENDICES AND ATTACHMENTS

37.1 Appendices shall be an integral and enforceable part of this Agreement. They shall include the most current versions of:

(a) All deadlines which have been or will be established in accordance with Section 8 (Deadlines) and which may be extended in accordance with Section 9 (Extensions). [Appendix A]

(b) Comprehensive RI/FS Workplan Outline. [Appendix B]

(c) All final primary and secondary documents which will be created in accordance with Section 7 (Consultation).

37.2 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 they are 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) [Attachment A]

(b) Chemicals of Concern [Attachment B]

(c) Statement of Facts [Attachment C]

(d) Installation Restoration Program Activities [Attachment D]

(e) Natural Resource Trustee Notification(s)

38. COUNTERPARTS

38.1 This Federal Facility Agreement may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

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.

UNITED STATES AIR FORCE

DATE

DONALD O. ALDRIDGE
Lieutenant General, USAF
Vice Commander-in-Chief
Strategic Air Command

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE

DANIEL W. MCGOVERN
Regional Administrator
U.S. Environmental Protection Agency
Region 9

STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES

9/17/90
DATE

JOHN A. HINTON, P.E.
Regional Administrator, Region 4
Toxic Substances Control Program
California Department of Health Services

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD

DATE

GERARD THIBEAULT
Executive Officer
Regional Water Quality Control Board,
Santa Ana Region

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.

UNITED STATES AIR FORCE

DATE

DONALD O. ALDRIDGE
Lieutenant General, USAF
Vice Commander-in-Chief
Strategic Air Command

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE

DANIEL W. MCGOVERN
Regional Administrator
U.S. Environmental Protection Agency
Region 9

STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES

DATE

JOHN A. HINTON, P.E.
Regional Administrator, Region 4
Toxic Substances Control Program
California Department of Health Services

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD

9/18/90
DATE

GERARD THIBEAULT
Executive Officer
Regional Water Quality Control Board,
Santa Ana Region

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.

UNITED STATES AIR FORCE

Sep 27, 1990
DATE

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for DANIEL W. MCGOVERN
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APPENDIX A

ALL DEADLINES WHICH HAVE BEEN OR WILL BE ESTABLISHED IN ACCORDANCE WITH SECTION 8 (DEADLINES) AND WHICH MAY BE EXTENDED IN ACCORDANCE WITH SECTION 9 (EXTENSIONS).

In accordance with Section 8.1 of this Agreement, and prior to the effective date of this Agreement, the Parties have agreed upon the following deadlines for submission of primary documents by March Air Force Base:

NONE

APPENDIX B

COMPREHENSIVE RI/FS WORKPLAN OUTLINE

The following outline lists topics to be included, at a minimum, in the Comprehensive RI/FS Workplan for March Air Force Base. The workplan shall also include additional topics and tasks, as appropriate, set forth in the Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA (OSWER Directive 9355.3-01, Interim Final, October 1988) and applicable State Law.

I. INTRODUCTION

Introduction stating the purpose and objectives of the Comprehensive CERCLA Workplan and how it will guide the RI/FS process at March Air Force Base ("March"). The Workplan will describe tasks to fulfill the following objectives:

A. Confirm, characterize, and define the lateral and vertical extent of chemicals of concern at each site or potential release location known or suspected to be a source of contaminant release;

B. Supplement and refine the existing geological, geochemical, hydrogeological, and chemical data base for the study sites;

C. Evaluate the chemical migration pathways, and specifics of groundwater movement that influence the migration of chemicals known or suspected to be related to a confirmed site or potential release location;

D. Evaluate potential risks and hazards to public health and the environment;

E. Identify Federal and State applicable or relevant and appropriate requirements ("ARARs");

F. Identify investigative efforts needed to satisfy RCRA-CERCLA Integration;

G. Identify and evaluate remedial alternatives in accordance with EPA RI/FS guidance;

H. Identify PRPs and coordinate remedial alternative selection; and

I. Modify this workplan based on new information received during the course of the investigation.

II. MARCH AIR FORCE BASE CERCLA RESPONSE STRATEGY

A. Integration of the Air Force Installation Restoration Program and Federal and State cleanup programs

B. Approach to the March CERCLA Response Strategy

1. Overview of the CERCLA Remedial Response Process (as applied at March)

   (a) NPL listing

   (b) Actions completed under IRP
      (1) Area 5
      (2) Panero
      (3) Pritchard
      (4) Swimming Pool Fill
      (5) Sites 2, 4, 15, 18
      (6) Off-base residential alternate water supply
      (7) Removal Actions
      (8) Underground storage tanks
      (9) Other sites investigated

2. List of March AFB tasks grouped by CERCLA Remedial Response Process activities

C. Remedial Investigation

Remedial Investigations (RIs) will be performed for both operable units and for the final remedy. The overall RI will consider contaminant releases on the March Air Force Base and a characterization of any off-base impacts from these releases and use information collected from operable unit RIs.

1. Prescoping Tasks

   (a) Review existing data

      (1) Data evaluation/validation

         In accordance with EPA guidelines and specifications
         -- Quality Assurance/Quality Control ("QA/QC") of data
         -- QA/QC standard operating procedures
         -- Specific QA/QC procedures
         -- Data validation package
         -- Interference check sample analysis
         -- Laboratory audits

(b) Preliminary Assessments and Location Files

(c) Site Inspection

2. Scoping Tasks

(a) Site Planning

(1) March AFB Conceptual Model

-- Background, Setting, Site Description, History

-- Studied Sites
  -- Confirmed sites
  -- Partially Studied Potential Release Locations

-- Unstudied Sites
  -- Unstudied Potential Release Locations
  -- Newly discovered Potential Release Locations

-- Removal Actions

-- Actions Completed Under IRP
  -- Area 5
  -- Panero Site
  -- Pritchard Site
  -- Sites 2, 4, 15, 18
  -- Swimming Pool Fill
  -- Off-base residential alternate water supply
  -- Removal Actions
  -- Underground storage tanks
  -- Other sites investigated

-- Operable Units
  --Groundwater remediation (Area 5 and off-base contamination)
  --Others

-- CERCLA/RCRA Integration
  -- Conduct an Expanded Source Investigation using investigative methods delineated in EPA RCRA Facility Assessment ("RFA") Guidance

(2) Comprehensive CERCLA Workplan

-- Purpose and Objective Within the CERCLA Process
-- Annual Review. Update plan if requested by a Party. Request is subject to Dispute Resolution.

(3) Site Management

-- Agency Coordination

-- March AFB shall provide the Agency for Toxic Substances and Disease Registry ("ATSDR") with all necessary environmental investigation results, including that of the remedial investigation. The ATSDR will conduct a health assessment for March.

-- Appropriate Federal and State agencies for Natural Resources Damage Assessment

-- Reporting

-- Periodic reports (per Section 18.3)
-- Data results

-- Administrative Record

In accordance with CERCLA Section

113(k) and EPA guidelines
-- Listing of Administrative Record
-- Location(s) of repository

(b) Project Planning

(1) Remedial action objectives

(2) Identify operable units

(3) Identify removal actions

(4) Identify remedial actions

(5) Applicable or Relevant and Appropriate Requirements

ARARs will be identified for each remedial action. ARARs are to be identified at the following points in the remedial planning process:

-- During scoping of the RI/FS
-- During the site characterization phase
-- During a development of remedial alternatives in Operable Unit ("OU") Feasibility Studies and the site-wide FS
-- During screening of alternatives
-- During detailed analysis of alternatives
-- When alternative(s) is (are) selected
  - Identify ambient or chemical-specific ARARs
  - Identify performance, design, or action-specific ARARs
  - Identify location-specific ARARs

(6) Initial Data Quality Objectives

(7) Health & Safety Plan

-- Contingency Plan(s)
-- Facility Background
-- Key personnel and responsibilities
-- Job hazard analysis
-- Risk assessment summary
-- Air monitoring plan
-- Personal protective equipment
-- Work zones and security measures
-- Decontamination procedures
-- General safe work practices
-- Emergency response plans
-- Training requirements
-- Medical surveillance program
-- Documentation
-- Regulatory requirements

(8) Quality Assurance Project Plan (QAPP)

-- Title page with provisions for approval signatures
-- Table of contents
  Project Description
  Project organization and responsibility
  Quality assurance objectives

in terms of precision, accuracy, completeness, representativeness, and comparability
Sample procedures
Sample chain-of-custody procedures
Field sampling operation
Laboratory operation
Calibration procedures and frequency for field and laboratory equipment
Analytical procedures
Data reduction, validation, and reporting
Internal quality control checks and frequency
Performance and system audits
Internal audits
External audits
Preventative maintenance
Schedule of equipment, maintence, integral, and critical spare parts
Specific routine procedures used to assess data
Precision, accuracy, and completeness
Corrective action
Quality assurance report to management

(9) Risk Assessment using EPA's Risk Assessment Guidance for Superfund

A Baseline Risk Assessment includes a human health assessment and an ecological assessment. Both studies cover a range of complexity, quantification, and level of effort.

(10) Data Management Plan

Description of the storage and retrieval system used for data/information gathered during the RI/FS investigation
- Data Management System
Quality control
Data security

- Data Processing Procedures
  - Field collection procedures
  - Site description
- Numbering methodology
  - Site identification number
  - Sample type and identification number
  - Other codes
  - QA/QC sample identification

(11) Sampling and Analysis Plans

Discuss interrelationships among existing RI tasks

- Preliminary Pathways Assessment
  - Groundwater Pathways Preliminary Assessment
- Preliminary Groundwater Operable Unit(s)
  - Groundwater Operable Unit to include at a minimum Area 5 and off-base contamination

Each Sampling and Analysis Plan will include the following:

- Objective of sampling effort
- Site background
- Maps of all pertinent locations and sampling points
- Rationale for sampling locations and numbers of samples
- Request for analysis
- Field methods and procedures
- Site safety plan

(12) Community Relations Plan (RI/FS)

To include, but is not limited to:

- Revisions and additions to the CRP
- Analysis of community attitudes toward proposed action(s)
- Preparation and dissemination of information
- Establishment of a public information repository
- Arrangement for briefings, press conferences
- Description of the Technical Review Committee ("TRC")

3. Site Characterization

   (a) Field Investigation

   (b) Define nature and extent of contamination

   (c) Identify receptors

   (d) Redefine Operable Units

   (e) Assessment of Risk

4. Supplemental Survey(s) and Investigation(s)

   (a) Collection of additional data for site characterization

   (b) Treatability Studies

5. Final RI Report

   (a) For Each Operable Unit

      (1) Summary of site conditions and conclusions
      (2) Data management, validation, and evaluation

   (b) Site-Wide

      (1) Summary of site conditions and conclusions
      (2) Data management, validation, and evaluation

D. Feasibility Study

The objective of the Feasibility Study (FS) is to develop and evaluate a range of remedial options that ensure the protection of human health and the environment. The FS process will be in accordance with the NCP and current EPA guidance. Feasibility Studies will be performed for both operable unit and for the final remedy. The final remedy FS will be considered from a site-wide perspective and will use information from operable unit RIs and FSs. Tasks shall include, but not be limited to the following:

1. Description of the current situation

   (a) The Air Force shall summarize the current situation based on previous investigative

work and new data and information to be obtained in upcoming tasks.

(b) Identify actual and potential exposure pathways that should be addressed in selecting remedial action alternatives.

(c) Alternatives development and screening

(d) Evaluation criteria for detailed analysis of alternatives

(1) Short-term effectiveness
(2) Long-term effectiveness
(3) Reduction of toxicity, mobility, or volume
(4) Implementability
(5) Cost
(6) Compliance with ARARs
(7) Overall protection of human health and the environment
(8) State acceptance, to the extent known
(9) Community acceptance, to the extent known

(e) Assessment of risk

(1) Re-evaluate indicator chemicals
(2) Identify potential exposure pathways
(3) Determine target concentrations at human exposure points
(4) Estimate target release rates
(5) Assess chronic risk for noncarcinogens
(6) Assess potential short-term health effects of each remedial alternative

(f) Reporting and communication during detailed analysis

2. Final Feasibility Study Report(s)

The FS shall be consistent with CERCLA, the NCP, the EPA Guidance on Conducting RI/FSs Under CERCLA, Interim Final, October 1988, any subsequent revision thereof, and other pertinant EPA guidances.

(a) Operable unit
(b) Site-wide

III. POST RI/FS ACTIVITIES

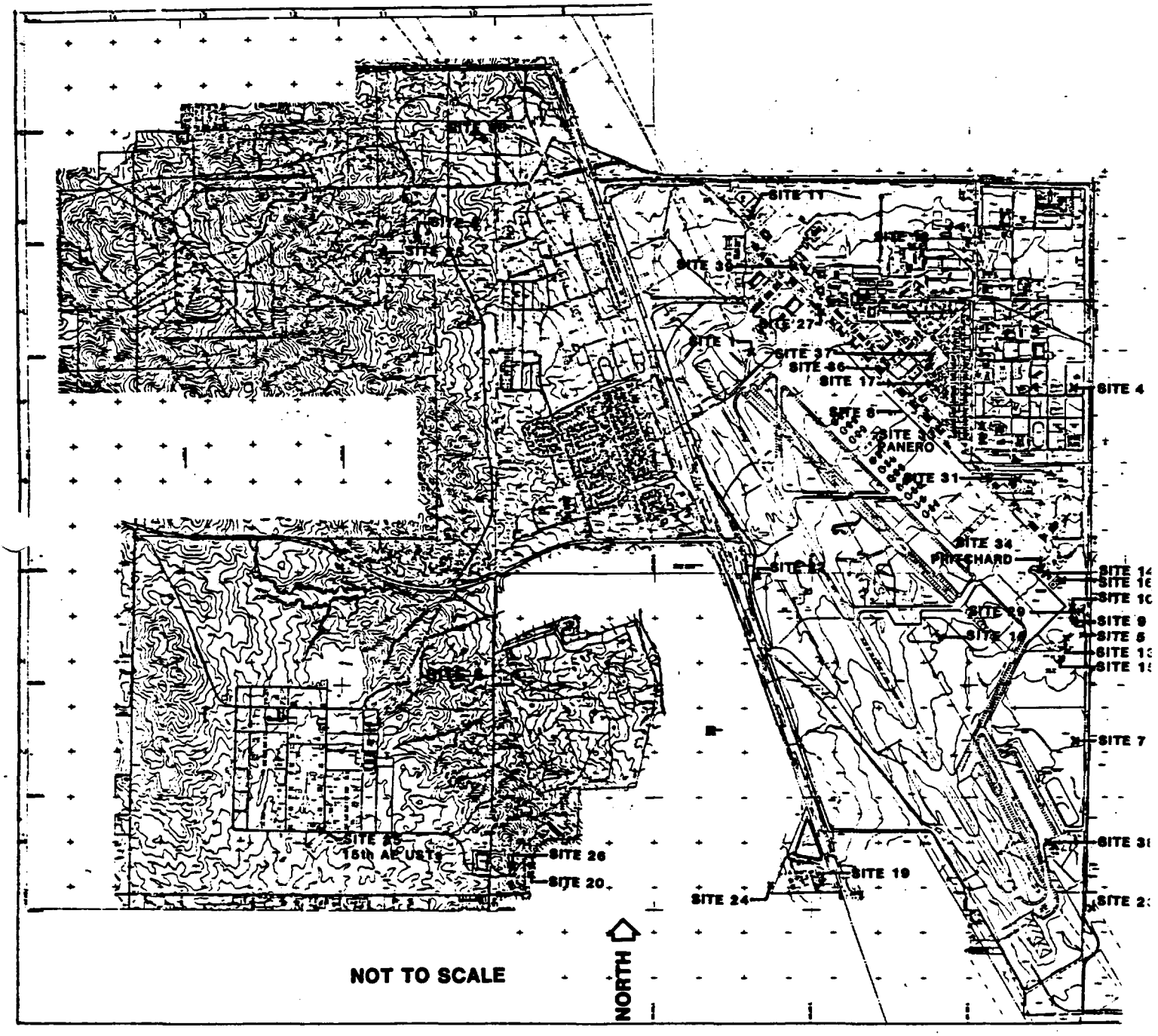
A. Proposed Plan

B. Public Comment

C. Record of Decision and Responsiveness Summary

****

ATTACHMENT A



MARCH AFB INSTALLATION RESTORATION PROGRAM SITES

INSTALLATION RESTORATION PROGRAM
SITES

SITE [a]		STATUS
01-84	Aircraft Isolation Project	PA/SI (NFADD)
02-84	Waste Oil Pit/Solvent Tanks	RI/FS (Phase II-S4)
03-84	Landfill #5	PA/SI (NFADD)[b]
04-84	Landfill #6	RI/FS (Phase II-S4)
05-84	Landfill #3 (Area 5)	RI/FS (Phase II-S4)[c]
06-84	Landfill #4	PA/SI (NFADD)
07-84	Fire Protection Training Area #2 (Area 5)	RI/FS (Phase II-S4)[c]
08-84	Flightline Shop Zone	PA/SI (NFADD)
09-84	Main Oil/Water Separator (Area 5)	RI/FS (Phase II-S4)[c]
10-84	Flightline Drainage Channel	PA/SI (NFADD)
11-84	Bulk Fuel Storage Area Spill	PA/SI (NFADD)
12-84	Civil Engineering Storage Yard	PA/SI (NFADD)
13-84	Tank Truck Spill Site	PA/SI (NFADD)
14-84	Liquid Fuel Pump Station Overflow	PA/SI (NFADD)
15-84	Fire Protection Training Area #3	RI/FS (NFADD & Stage 4)
16-84	East March Sludge Drying Beds	PA/SI (NFADD)
17-84	Swimming Pool Fill	RI/FS, RD (Phase IV)
18-84	Engine Test Cell	RI/FS (Phase II-S4)
19-84	West March Sludge Drying Beds	PA/SI (NFADD)
20-84	Landfill #7	PA/SI (NFADD)
21-84	Coudures Effluent Pond	PA/SI (NFADD)
22-84	Landfill #2	PA/SI (NFADD)
23-84	East March Effluent Pond	PA/SI (NFADD)
24-84	Landfill #1	PA/SI (NFADD)
25-84	Munitions Residue Burial Site	PA/SI (NFADD)
26-84	Water Treatment Plant Sludge	PA/SI (NFADD)
27-87	Building #422 Underground POL Tanks	PA/SI (NFADD)
28-87	Zone Monitoring #1 (Sites 5,7,9,10,13,15)	N/A
29-84	Fire Training Area #1 (Area 5)	RI/FS (Phase II-S4)[c]
30-84	Construction Rubble Burial Site	PA (Deleted 1984)
31-84	Unconfirmed Solvent Disposal	PA (Deleted 1984)
32-84	Building Demolition Areas	PA (Deleted 1984)
33-88	Panero Aircraft Fueling System	RI/FS, RD (Phase II-S4)
34-88	Pritchard Aircraft Fueling System	RI/FS (Phase II-S4)
35-88	15th Air Force Leaking USTs	RI/FS, RD (Phase IV)
36-89	Building #458 Leach Pit	PA (Identified 6/89)
37-89	PCB Contamination Bldg. 317	PA (Verify cleanup)
38-89	PCB Contamination Bldg. 1305	PA (Verify cleanup)
39-89	Abandoned gas station Bldg. 2406	PA (Conduct testing)

(a) Date of inclusion on IRP list is not part of the Site no. but is included for informational purposes only.
(b) Site will be reinvestigated because of additional information.
(c) A Removal Action activity is currently being prepared for Area #5 sites.

Preliminary Assessment/Site Inspection (PA/SI) Remedial Action/Feasibilty Study (RI/FS) Remedial Design (RD) No Further Action Decision Document (NFADD)

D.J. Poland - 11 Jan 90

ATTACHMENT B

CHEMICALS OF CONCERN

This description of the toxicity of chemicals of concern at March Air Force Base is for reference only and should not be interpreted as describing effects on any individual person.

Arsenic
- Acute: dermatitis, mild bronchitis; poison
- Chronic: cirrhosis of the liver, leukemia

Benzene
- Acute: Central Nervous System (CNS) depression (headache, dizziness, drowiness and nausea)
- Chronic: suppression of blood cells, leukopenia (a reduction of leukocytesa); anemia and thrombocytopenia (decrease in blood platelets)

Beryllium
- Acute: dermatitis, conjunctivitis, very toxic
- Chronic: lung lesions with respiratory damage and death

Cadmium
- Acute: irritation of upper respiratory tract, cough, pain in chest, chills, generalized weakness
- Chronic: emphysema, kidney damage, anemia

Carbon tetrachloride
- Acute: dry, scaly, fissured dermatitis, eye contact produces irritation
- Chronic: central nervous system depression, coma, death from acute renal failure

Chromium
- Acute: coughing, wheezing, headache, shortness of breath, pain on deep inspiration, fever, weight loss
- Chronic: lacrimation, inflamation of the conjunctiva, nasal itch and soreness, epistaxis (nosebleed), ulceration and perforation of nasal septum, congested nasal mucosa, chronic asmatic bronchitis, dermitis, ulceration of the skin, cutaneous discoloration and dental erosion

1,2 - Dibromoethane (ethylene dibromide)
- Acute: skin ulcers, blistering, severe vomiting, damage to respiratory system
- Chronic: believed to be carcinogenic by inhalation exposure

1,2 - Dichloroethane

Acute:	nausea, vomiting, mental confusion, dizziness and pulmonary edema; eye and skin irritation
Chronic:	loss of appetite, nausea, vomiting, stomach pain, CNS changes, liver and kidney damage

Lead

Acute:	encephalopathy (seizures, coma)
Chronic:	loss of appetite, anemia, malaise, weakness, insomnia, headache, and colic; loss of speech and motor skills

Mercury

Acute:	nausea, abdominal pain, vomiting, diarrhea, headache; pulmonary irritation and neural damage
Chronic	anemia, hypothyroidism and excitability

Nickel

Acute:	limited or absent respiratory motions, a significant decrease in pneumatization of of pulmonary areas
Chronic:	cancers of the lung and sinus, dermatitis

Phenol

Acute:	severe skin and eye damage; pallor, weakness, sweating, headache, ringing of ears, cyanosis, shock, excitement, frothing of the nose and mouth
Chronic:	loss of appetite, vomiting, excessive salivation, headache, dizziness, and skin eruption; liver and kidney damage

Selenium

Acute:	irritates the membranes of the eyes, nose, throat, and respiratory tract; marked pallor, coated tongue, gastrointestinal disorders, nervousness; headache
Chronic:	pneumonia and degeneration of the liver and kidneys in animals; may cause cancer of the liver in humans

Silver

Acute:	argyrosis (dark discoloration of skin)
Chronic:	tumors

1,1,2,2 - Tetrachloroethane

Acute: tremors, vertigo, headache, abdominal pain, and anorexia

Chronic: possible human carcinogen

Tetrachloroethylene (PCE)

Acute: nausea, vomiting, headache, dizziness, drowsiness and tremors; eye and skin irritation

Chronic: headache, fatigue and dizziness; liver and kidney damage

Toluene

Acute: Central nervous system depression (headache, dizziness, fatigue, muscle weakness); eye and skin irritation

Chronic: no known adverse, long-term effects

Trichloroethylene (TCE)

Acute: Central nervous system depression (headache, dizziness, vertigo, tremors, irregular heartbeat, fatigue, nausea, vomiting, blurred vision); skin and eye irritation

Chronic: liver and kidney damage, central nervous system depression

Vinyl Chloride

Acute: headache, dizziness, abdominal pain, numbness and tingling of the extremities; skin and eye irritation

Chronic: liver damage; enlargement of the spleen, decreased pulmonary function

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ATTACHMENT C

STATEMENT OF FACTS

For the purposes of this Agreement the following constitutes a summary of the facts upon which this Agreement is based. None of the facts related herein shall be considered admissions by any Party, nor shall they be used by any person for purpose unrelated to this Agreement.

A. March Air Force Base ("March") is located approximately 60 miles east of Los Angeles and 90 miles north of San Diego, in Riverside County, California. March covers approximately 7,000 contiguous acres. March was established in 1918 as a "Winged Calvary Post", and was the first Air Force Base established in the West. March has served as a primary flying and anti-aircraft training base, a tactical bomber and pursuit training base, and as a Strategic Air Command (SAC) bomber and air-to-air refueling operations base. The Headquarters 15th Air Force, located at March, supervises SAC's western operations. The primary mission of the host unit, the 22nd Air Refueling Wing, is to maintain an effective air-to-air refueling operations capability. A map of the facility is attached to this Agreement (Attachment A).

B. Generation of hazardous substances at March has resulted primarily from industrial operations, fire protection training, and fuels management. Major industrial operations include vehicle maintenance, plating and cleaning, aircraft maintenance and corrosion control, pneumatic and hydraulic equipment repair, aircraft ground equipment inspection and repair, and special weapons maintenance. These processes generate varying quantities of waste oils, fuels, solvents, and cleaners.

C. As part of the Department of Defense Installation Restoration Program (IRP) (Attachment D, Installation Restoration Program), the Air Force identified 38 disposal or spill sites at March Air Force Base. These sites are shown on the map in Attachment A. Disposal of solid waste, mainly municipal-type refuse, occurred in eight landfills (Sites 3, 4, 5, 6, 20, 22, 24, 30). These landfills were used for varying periods of time from 1941 to 1980. Since no sites on March have been identified as being designated exclusively for chemical waste disposal, some, if not all, of these landfills probably received industrial waste oils and solvents. Fuel and other combustible chemical wastes were incinerated during fire training exercises conducted in three

fire training areas (Sites 7, 15, 29) from the early 1940's to 1951. Site 15 is still in use as a fire training area, but the Air Force has advised that only "off-spec" JP-4 jet fuel is now disposed and ignited there. Other suspected waste disposal sites include fuel storage and transfer sites (Sites 11, 13, 14, 27, 33, 34, 39), shop/maintenance areas (Sites 1, 2, 8, 10, 12, 18, 31, 36), wastewater treatment plant effluent ponds and sludge drying beds (Sites 16, 19, 21, 23, 26), waste oil/water separator area (Site 9), munitions residue burial site (Site 25), building demolition area (Site 32), two sites where it is believed that all earlier PCB contamination has been removed (Sites 37, 38), and the swimming pool fill (Site 17) where it is believed that paints, solvents, asbestos, and possibly transformers were placed prior to burial. Site 28 is a sampling site only.

D. Various hazardous wastes including TCE, transformer oil, paints, and used motor oils were disposed on the base and have contributed to identifiable groundwater contamination on and immediately east and southeast of March Air Force Base.

E. March is situated in the northern end of the Perris Valley, within the San Jacinto Basin. The beneficial uses of the groundwater in this areas include: (a) private domestic supply, (b) municipal and industrial supply, and (c) agricultural supply. The groundwater basin in the vicinity of March has no apparent laterally continuous groundwater confining zones. Groundwater flow is generally to the south-southeast.

F. March discontinued use of its wells for on-base water supply in 1984, when TCE and PCE contamination of the groundwater was discovered. March has a residential population of about 2600 and a daytime population of about 5000. Some private wells off-base are now contaminated and the Air Force is providing bottled water to residents affected.

G. March Air Force Base was <u>proposed</u> for inclusion of EPA's National Priority List (NPL) of Superfund sites on July 14, 1989. EPA received no objections to the proposed listing, and the base was published as a <u>final</u> listing (no longer in proposed category) on November 21, 1989.
****

ATTACHMENT D

PART I

MARCH AIR FORCE BASE
INSTALLATION RESTORATION PROGRAM

BACKGROUND

The Installation Restoration Program (IRP) was developed by the Department of Defense and the Air Force to assess past hazardous waste disposal and spill sites on military installations and to develop remedial actions consistent with the National Contingency Plan (NCP) for those sites which pose a threat to human health and welfare or the environment.

The IRP consists of the following four phases.

- Phase I - Records search.
- Phase II - Field work at the sites identified in Phase I.
- Phase III - Research and development, if needed.
- Phase IV - Implementation of existing technology, or technology developed in Phase III.

HISTORY

Phase I of the March AFB IRP began in September of 1983 (CH2M HILL, 1984). The Phase I study consisted of interviewing employees, and reviewing aerial photographs and base records. Eighty-one current and former employees were interviewed and eighteen outside agencies were contacted. The records search identified thirty potentially contaminated sites for further investigation. Two of those sites were eliminated from further consideration because the material disposed of at those sites consisted of inert rubble (wood, concrete, metal, etc.).

Phase II-Stage 1 began in October of 1985 with the development of a plan of action for testing the twenty-eight sites identified by Phase I. In March of 1987 Phase II-Stage 1 was completed. This study consisted of the collection of soil, water, and gas samples from the 28 sites. The Stage 1 study indicated that further investigation was needed at 5 of the 28 sites to determine the type and extent of contamination in the soil and groundwater. Phase IV-Remedial Action was recommended for one site (Site 9-Main Oil/Water Separator). It was recommended that remedial action be postponed until other contamination in the area encompassing Site 9 could be evaluated during Stage 4 investigations. It was also recommended that No Further Action Decision Documents (NFADDs) be developed for the 22 sites identified for no further study in the Phase II-Stage 1 investigation (Engineering Science, 1986). Following completion of the Phase II-Stage 1 onsite work, aerial photographs were reviewed to locate Fire Training Area No. 1 (Site 29). This site was included as a study area for the Phase II-Stage 2 investigation.
Also identified during Stage 1 were three regions of groundwater contamination on-base and two off-base contaminated private water wells. The three areas are contaminated above state action levels with trichloroethylene (TCE), and tetrachloroethylene (PCE). The base began supplying bottled water to the two off-base families in June 1986.

The IRP Phase II-Stage 2 investigation began in June 1987. This investigation was performed for the six sites recommended for further study by the Phase II-Stage 1 investigation. The six sites include Site 2 (Waste Oil Pit/Solvent Tanks), Site 4 (Landfill No.6), Site 5 (Landfill No. 3), Site 7 (Fire Training Area No.2), Site 18 (Engine Test Cell), and Site 29 (Fire Training Area No.1). Since Site 5, 7, 9, and 29 are located in close proximity to each other, and since the contaminant plumes from these sites appear to be commingled, the sites are referred to as Area 5. The Stage 2 investigation recommended that additional work be performed to better define the extent of contamination and possible migration pathways (Engineering Science, 1988a).

The Phase II-Stage 3 investigation for Area 5 began in July 1988. The purpose of this investigation was to better define the extent of the soil and groundwater contamination. This study was completed in December 1988 (Engineering Science, 1988b).

In addition to the six sites recommended for further investigation during the Phase II-Stage 2 study, the Air Force requested that three additional sites be investigated in the Phase II-Stage 4 study because of the potential for contamination. The three sites added to the study for investigation include Site 15 (Fire Protection Training Area), and the Panero and Pritchard Aircraft Fueling Systems. The Phase II-Stage 4 investigation began in December 1988 and is expected to be completed by November 1990. Also, one of the sites (Site 17 Swimming Pool) identified for no further study in the Phase II-Stage 1 investigation has been recommended for further study because of new information obtained in 1988. During an underground storage tank (UST) survey of the 15th Air Force Headquarters area in 1988, three leaking tanks were identified. These tanks have also been added to the IRP list.
Currently, the IRP list consists of 39 Sites. This list includes the 22 No Further Action Decision Documents (NFADDs) sites and sites that were identified after the initial investigation. Regulatory Agencies have not concurred with the conclusions reported in these NFADDs.
****

ATTACHMENT D

PART II

MARCH AIR FORCE BASE

INSTALLATION RESTORATION PROGRAM
DOCUMENTS

1. Installation Restoration Program (IRP) Records Search Report, April 1984, CH2M Hill.

2. IRP, Stage 1 Technical Operations Plan, September 1985, Engineering-Science.

3. IRP, Confirmation/Quantification, Stage 1, Draft Report, September 1986 (6 vol.), Engineering-Science. Final Report, March 1987 (3 vol.).

4. IRP, Confirmation/Quantification, Stage 2, Draft Report, October 1987 (5 vol.), Engineering-Science. Final Report, June 1988 (5 vol.).

5. IRP, Stage 3, RI/FS Workplan, Area #5, Draft Report, February 1988, Engineering-Science.

6. IRP, Stage 3, Quality Assurance Program Plan, Area #5, Draft Report, February 1988, Engineering-Science.

7. IRP, Stage 3, RI/Preliminary FS, Area #5, Draft Report, January 1989 (2 vol.), Engineering-Science. Final Report, September 1989 (2 vol.).

8. IRP, Stage 4, RI/FS, Quality Assurance Project Plan, Draft Report, January 1989, The Earth Technology Corporation.

9. IRP, Stage 4, RI/FS, Work Plan, Draft Report, January 1989, The Earth Technology Corporation.

10. IRP, Technical Documents to Support a No Further Action for Sites #1, #3, #6, #8, #10, #11, #12, #13, #14, #15, #16, #19, #20, #21, #22, #23, #24, #25, #26, and #27, June 1988, Engineering-Science.