

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:

Lodi Chrome
316 North Main Street
Lodi, California 91016

ID Number: CAR 000 143 776

Reggie Mason
10524 North Davis Road
Stockton, California 95209

Larsson Family Trust,
dated May 23, 1996,
Douglas and Susan Larsson, Trustees
1239 Hiedelberg Way
Lodi, California 95242

Respondents.

Docket SRPD RPDD06/07SCC-4378

CORRECTIVE ACTION CONSENT
AGREEMENT

Health and Safety Code
Sections 25187 and 25200.14

INTRODUCTION

1. The Department of Toxic Substances Control (Department) and the Larsson Family Trust, dated May 23, 1996, (Respondent) enter into this Corrective Action Consent Agreement (Consent Agreement) and agree as follows.

1.1. (a) Jurisdiction exists pursuant to Health and Safety Code, section 25187, which authorizes the Department to issue an order to require corrective action when the Department determines that there is or may be a release of hazardous waste or hazardous waste constituents into the environment from a hazardous waste facility.

(b) Health and Safety Code, section 25359.5, authorizes the Department to issue an order to fence and/or post a site where a release of hazardous substance poses a public health risk.

1.2. The parties enter into this Consent Agreement to avoid the expense of litigation and to carry out promptly the corrective action described below. This Agreement is not intended to waive the rights of any party regarding, or to release or relieve any obligation of, Reggie Mason (Mason) individually or dba Lodi Chrome in relation to the matters herein.

1.3. Respondent is the owner of a hazardous waste facility located at 316 North Main Street, Lodi, California 91016 (Facility).

1.4. Larsson leased the property to Mason. Lodi Chrome is a plating facility and part of its operations generated various hazardous waste streams including cyanide, chromium, copper, nickel, and corrosive and fine hazardous powder from chrome polishing operations.

1.5. The terms used in this Consent Agreement are as defined in California Code of Regulations, title 22, section 66260.10, except as otherwise provided.

1.6. Respondent agrees to implement all Department approved workplans and to undertake all actions required by the terms and conditions of this Consent Agreement, including any portions of this Consent Agreement incorporated by reference.

1.7. Respondent waives any right to request a hearing on this Consent Agreement pursuant to Health and Safety Code section 25187.

FINDINGS OF FACT

2.1. On September 7, 2005, the Department issued an Enforcement Order (Docket HWCA No. 20040427), to Mason for the violations of the Hazardous Waste Control Law, Chapter 6.5 of Division 20 of the California Health and Safety Code, section 251000, et seq., and its implementing regulations set forth at California Code of Regulations, title 22, division 4.5, sections 66250, et seq., pertaining to the storage, handling, management, and disposal of hazardous waste including failure to remove significant quantities of spilled hazardous waste fine powder from chrome polishing

operations from the floor of the facility. Mason also failed to remove significant quantities of spilled hazardous waste plating bath chemicals from the floor of the facility. The concrete floor of the facility is not coated with an impermeable barrier to prevent migration of spilled chemicals into the underlying soil, and the floor had visible signs of corrosion and chemical staining. A true and correct copy of said Enforcement Order is attached hereto as Attachment A and is incorporated herein by this reference.

2.2. On April 26, 2006, the Department and Mason entered into a Stipulation and Order (Docket HWCA No. 20040427) in which Mason admitted the violations set forth in the Enforcement Order. A true and correct copy of said Stipulation and Order is attached hereto as Attachment B and is incorporated herein by this reference.

2.3. On August 30, 2006, by letter, Mason informed the Department that Mason is in financial hardship and that Mason could not fulfill the Stipulation and Order.

2.4. On January 10, 2007, a preliminary site investigation revealed that Mason had ceased operation of the facility on or about June 1, 2006, and that the hazardous waste (identified below) had been stored at the facility since that time. The Department's Hazardous Waste Tracking System manifest report shows that the last manifested shipment of hazardous waste offsite from Mason occurred on March 7, 2006. The Department's employees also observed crystallized material on the floor adjacent to tanks containing hazardous waste. This crystallization is attributed to the release of hazardous liquids onto the floor that later evaporated. In addition, staining and deterioration of the walls adjacent to the plating bathes was also observed by the Department's employees. The stains are similar in color to the adjacent plating bath and is attributed to releases of hazardous liquids onto the wall. On January 18, 2007 samples taken by the Department revealed hazardous levels of Chromium, Nickel, Copper, Cyanide, and Corrosives (acid and alkaline) at the site located in and around the former process tanks including crystallized waste deposited on the floor.

2.5. On May 3, 2007, the hazardous soil and liquid wastes in the baths and drums were containerized and removed from the Site. Respondent's other actions in

stabilizing the site are set forth at Attachment C attached hereto and incorporated herein by this reference.

2.6. The Site is situated in a primarily mixed "residential", "commercial" and "light industrial" area with an approximate population of 350 persons in a half mile radius (Environmental Justice Geographic Assessment Tool, United States Environmental Protection Agency). A residential home is located adjacent to the site.

2.7. The Department has determined that the requirements of Health and Safety Code section 25359.5 for a Fence and/or Post Order have been met.

2.8. There has been a release of hazardous substances on, under, or into the land of this Site, and this order is necessary to protect the public health.

2.9. The release does not comply with the terms of a current permit or interim status document or regulation of the Department.

2.10. The Site poses a public health risk if human contact is made with the hazardous substance or the nearby surrounding contaminated area.

2.11. There is a likelihood of human or domestic animal contact at this Site.

PROJECT COORDINATOR

3. Within 14 days of the effective date of this Consent Agreement, DTSC and Respondent shall each designate a Project Coordinator and shall notify each other in writing of the Project Coordinator selected. Each Project Coordinator shall be responsible for overseeing the implementation of this Consent Agreement and for designating a person to act in his/her absence. All communications between Respondent and DTSC, and all documents, report approvals, and other correspondence concerning the activities performed pursuant to this Consent Agreement shall be directed through the Project Coordinators. Each party may change its Project Coordinator with at least seven days prior written notice.

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WORK TO BE PERFORMED

4. Respondent agrees to perform the work required by this Consent Agreement in accordance with the applicable state and federal laws, their implementing regulations, and the applicable DTSC and the United States Environmental Protection Agency guidance documents.

FACILITY INVESTIGATION (FI)

5.1. Within 60 days of the effective date of this Consent Agreement, Respondent shall submit to DTSC a Workplan for a Facility Investigation ("FI Workplan") including a Current Conditions Report (CCR). The FI Workplan is subject to approval by DTSC and shall be developed in a manner consistent with the Scope of Work for a Facility Investigation contained in Attachment E. DTSC will review the FI Workplan and notify Respondent in writing of DTSC's approval or disapproval.

5.2. The FI Workplan shall detail the methodology to: (1) gather data needed to make decisions on interim measures/ stabilization during the early phases of the RCRA Facility Investigation; (2) identify and characterize all sources of contamination; (3) define the nature, degree and extent of contamination; (4) define the rate of movement and direction of contamination flow; (5) characterize the potential pathways of contaminant migration; (6) identify actual or potential human and/or ecological receptors; and (7) support development of alternatives from which a corrective measure will be selected by DTSC. A specific schedule for implementation of all activities shall be included in the FI Workplan.

5.3. Respondent shall submit a FI Report, including a Risk Assessment Report, to DTSC for approval in accordance with DTSC-approved FI Workplan schedule. The FI Report shall be developed in a manner consistent with the Scope of Work for a Facility Investigation contained in Attachment E. If there is a phased investigation, separate FI Reports and a report that summarizes the findings from all phases of the FI must be submitted to DTSC. DTSC will review the FI Report(s) and notify Respondent

in writing of DTSC's approval or disapproval.

5.4. Concurrent with the submission of a FI Workplan, Respondent shall submit to DTSC a Health and Safety Plan in accordance with Attachment E. If Workplans for both an IM and FI are required by this Consent Agreement, Respondent may submit a single Health and Safety Plan that addresses the combined IM and FI activities.

5.5. Concurrent with the submission of a FI Workplan, Respondent shall submit to DTSC for approval a Community Profile in accordance with Attachment F.

CORRECTIVE MEASURES PROPOSAL (CMP)

6. Within 45 days of DTSC's approval of the FI Report, and the Risk Assessment Report, Respondent shall submit to DTSC for review and approval a Corrective Measures Proposal (CMP), if determined by DTSC to be necessary based on the FI Report, which describes in detail the corrective measures proposed to protect human health and the environment from the Constituents of Concern. The CMP must include (1) a description of corrective measures to be implemented at the Facility; (2) an explanation of how the proposed corrective measures are consistent with the FI Report, the Risk Assessment Report, the IM Report (if required) and any Supplemental IM Report (if required), applicable state and federal laws, their implementing regulations, and applicable DTSC and United States Environmental Protection Agency guidance documents; (3) proposed cleanup standards and points of compliance; (4) a detailed description and schedule to construct and implement the corrective measures; and (5) an analysis of at least two other alternative corrective measures considered before proposing these corrective measure. The CMP shall also provide the basis and justification for these proposals.

REMEDY SELECTION

7.1. If Respondent is required to prepare a CMP Report, DTSC will provide the public with an opportunity to review and comment on the final draft of the CMP Report, DTSC's proposed corrective measures for the Facility, and DTSC's justification for

selection of such corrective measures. Depending on the level of community concern, DTSC may conduct a public hearing to obtain comments.

7.2. Following the public comment period, DTSC may select final corrective measures or require Respondent to revise the CMP Report and/or perform additional corrective measures studies.

7.3. If final corrective measures are determined by DTSC to be necessary, DTSC will notify Respondent of the final corrective measures selected by DTSC in the Final Decision and Response to Comments. The notification will include DTSC's reasons for selecting the corrective measures.

CORRECTIVE MEASURES IMPLEMENTATION (CMI)

8.1. If final corrective measures are determined by DTSC to be necessary, within 30 days of Respondent's receipt of notification of DTSC's selection of the corrective measures, Respondent shall submit to DTSC a Corrective Measures Implementation (CMI) Workplan. The CMI Workplan is subject to approval by DTSC and shall be developed in a manner consistent with the Scope of Work for Corrective Measures Implementation contained in Attachment G.

8.2. Concurrent with the submission of a CMI Workplan, Respondent shall submit to DTSC a Health and Safety Plan in accordance with Attachment E.

8.3. Based on the information provided in the Community Profile and any Supplement to the Community Profile, if DTSC determines that there is a high level of community concern about the Facility, DTSC may require Respondent to prepare a Public Participation Plan.

8.4. The CMI program shall be designed to facilitate the design, construction, operation, maintenance, and monitoring of corrective measures at the Facility. In accordance with the schedule contained in the approved CMI Workplan, Respondent shall submit to DTSC the documents listed below, to the extent applicable. These documents shall be developed in a manner consistent with the Scope of Work for

Corrective Measures Implementation contained in Attachment G.

- o Operation and Maintenance Plan
- o Construction Workplan
- o Construction Completion Report
- o Corrective Measures Completion Report

8.5. DTSC will review all required CMI documents and notify Respondent in writing of DTSC's approval or disapproval.

8.6. As directed by DTSC, within 90 days of DTSC's approval of all required CMI documents, Respondent shall establish a financial assurance mechanism for Corrective Measures Implementation. The financial assurance mechanisms may include a performance or surety bond, liability insurance, an escrow performance guarantee account, a trust fund, financial test, or corporate guarantee as described in California Code of Regulations, title 22, section 66265.143 or any other mechanism acceptable to DTSC. The mechanism shall be established to allow DTSC access to the funds to undertake Corrective Measures Implementation tasks if Respondent is unable or unwilling to undertake the required actions.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

9. DTSC must comply with the California Environmental Quality Act (CEQA) insofar as activities required by this Consent Agreement are projects subject to CEQA. Respondent shall provide all information necessary to facilitate any CEQA analysis. DTSC will make an initial determination regarding the applicability of CEQA. If the activities are not exempt from CEQA, DTSC will conduct an Initial Study. Based on the results of the Initial Study, DTSC will determine if a Negative Declaration or an Environmental Impact Report (EIR) should be prepared. DTSC will prepare and process any such Negative Declaration. However, should DTSC determine that an EIR is necessary, such an EIR would be prepared under a separate agreement between DTSC and Respondent.

DTSC APPROVAL

10.1. Respondent shall revise any workplan, report, specification, or schedule in accordance with DTSC's written comments. Respondent shall submit to DTSC any revised documents by the due date specified by DTSC. Revised submittals are subject to DTSC's approval or disapproval.

10.2. Upon receipt of DTSC's written approval, Respondent shall commence work and implement any approved workplan in accordance with the schedule and provisions contained therein.

10.3. Any DTSC-approved workplan, report, specification, or schedule required under this Consent Agreement shall be deemed incorporated into this Consent Agreement.

10.4. Verbal advice, suggestions, or comments given by DTSC representatives will not constitute an official approval or decision.

SUBMITTALS

11.1. Beginning with the first full month following the effective date of this Consent Agreement, Respondent shall provide the Department with monthly progress reports of corrective action activities conducted pursuant to paragraphs 8.1 through 8.6 of this Consent Agreement, if required. Progress reports are due on the tenth day of the first month following the close of each reporting period. In the event that Respondent has submitted another report required under this Consent Agreement [per the requirements of paragraphs 5.1 or 5.3 of this Agreement] in the thirty (30) calendar days preceding the due date of a monthly progress report otherwise required under this paragraph 11.1, Respondent shall be relieved from the obligation to provide the Department with a monthly progress report for said month. The progress reports shall conform to the Scope of Work for Progress Reports contained in Attachment H. The Department may adjust the frequency of progress reporting to be consistent with site-specific activities.

11.2. Any report or other document submitted by Respondent pursuant to this Consent Agreement shall be signed and certified by the project coordinator, a responsible corporate officer, or a duly authorized representative.

11.3. The certification required by paragraph 11.2 above, shall be in the following form:

I certify that the information contained in or accompanying this submittal is true, accurate, and complete. As to those portions of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared at my direction in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted.

Signature: _____
Name: _____
Title: _____
Date: _____

11.4. Respondent shall provide two typed or printed copies and one electronic copy (in Word or WordPerfect format) of all documents, including but not limited to, workplans, reports, and correspondence. Submittals specifically exempted from this copy requirement are all progress reports and correspondence of less than 15 pages, of which one electronic copy is required.

11.5. Unless otherwise specified, all reports, correspondence, approvals, disapprovals, notices, or other submissions relating to this Consent Agreement shall be in writing and shall be sent to the current Project Coordinators.

PROPOSED CONTRACTOR/CONSULTANT

12. All work performed pursuant to this Consent Agreement shall be under the direction and supervision of a professional engineer or registered geologist, registered in California, with expertise in hazardous waste site cleanup. Respondent's contractor or consultant shall have the technical expertise sufficient to fulfill his or her responsibilities. Within 14 days of the effective date of this Consent Agreement,

Respondent shall notify DTSC Project Coordinator in writing of the name, title, and qualifications of the professional engineer or registered geologist and of any contractors or consultants and their personnel to be used in carrying out the terms of this Consent Agreement.

ADDITIONAL WORK

13. DTSC may determine or Respondent may propose that certain tasks, including investigatory work, engineering evaluation, or procedure/methodology modifications are necessary in addition to, or in lieu of, the tasks and deliverables included in any part of DTSC-approved workplans. DTSC shall request in writing that Respondent perform the additional work and shall specify the basis and reasons for DTSC's determination that the additional work is necessary. Within 14 days after the receipt of such determination, Respondent may confer with DTSC to discuss the additional work DTSC has requested. If required by DTSC, Respondent shall submit to DTSC a workplan for the additional work. Such workplan shall be submitted to DTSC within 30 days of receipt of DTSC's determination or according to an alternate schedule established by DTSC. Upon approval of a workplan, Respondent shall implement it in accordance with the provisions and schedule contained therein. The need for, and disputes concerning, additional work are subject to the dispute resolution procedures specified in this Consent Agreement.

QUALITY ASSURANCE

14.1. All sampling and analyses performed by Respondent under this Consent Agreement shall follow applicable DTSC and USEPA guidance for sampling and analysis. Workplans shall contain quality assurance/quality control and chain of custody procedures for all sampling, monitoring, and analytical activities. Any deviations from the approved workplans must be approved by DTSC prior to implementation, must be documented, including reasons for the deviations, and must be reported in the

applicable report.

14.2. The names, addresses, and telephone numbers of the California State certified analytical laboratories Respondent proposes to use must be specified in the applicable workplans.

SAMPLING AND DATA/DOCUMENT AVAILABILITY

15.1. Respondent shall submit to DTSC upon request the results of all sampling and/or tests or other data generated by its employees, agents, consultants, or contractors pursuant to this Consent Agreement.

15.2. Respondent shall notify DTSC in writing at least seven days prior to beginning each separate phase of field work approved under any workplan required by this Consent Agreement. If Respondent believes it must commence emergency field activities without delay, Respondent may seek emergency telephone authorization from DTSC Project Coordinator or, if the Project Coordinator is unavailable, his/her Branch Chief, to commence such activities immediately.

15.3. At the request of DTSC, Respondent shall provide or allow DTSC or its authorized representative to take split or duplicate samples of all samples collected by Respondent pursuant to this Consent Agreement. Similarly, at the request of Respondent, DTSC shall allow Respondent or its authorized representative to take split or duplicate samples of all samples collected by DTSC under this Consent Agreement.

ACCESS

16. Subject to the Facility's security and safety procedures, Respondent agrees to provide DTSC and its representatives access at all reasonable times to the Facility and any off-site property to which access is required for implementation of this Consent Agreement and shall permit such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to this Consent Agreement and that are within the

possession or under the control of Respondent or its contractors or consultants.

RECORD PRESERVATION

17.1. Respondent shall retain, during the pendency of this Consent Agreement and for a minimum of six years after its termination, all data, records, and documents that relate in any way to the performance of this Consent Agreement or to hazardous waste management and/or disposal at the Facility. Respondent shall notify DTSC in writing 90 days prior to the destruction of any such records, and shall provide DTSC with the opportunity to take possession of any such records. Such written notification shall reference the effective date, caption, and docket number of this Consent Agreement and shall be addressed to:

Stephen W. Lavinger, Branch Chief
Tiered Permitting Corrective Action Branch
Hazardous Waste Management Program
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630

17.2. If Respondent retains or employs any agent, consultant, or contractor for the purpose of carrying out the terms of this Consent Agreement, Respondent will require any such agents, consultants, or contractors to provide Respondent a copy of all documents produced pursuant to this Consent Agreement.

17.3. All documents pertaining to this Consent Agreement shall be stored in a central location at the Facility, or at a location otherwise agreed to by the parties, to afford easy access by DTSC and its representatives.

DISPUTE RESOLUTION

18.1. The parties agree to use their best efforts to resolve all disputes informally. The parties agree that the procedures contained in this section are the sole administrative procedures for resolving disputes arising under this Consent Agreement.

If Respondent fails to follow the procedures contained in this section, it shall have waived its right to further consideration of the disputed issue.

18.2. If Respondent disagrees with any written decision by DTSC pursuant to this Consent Agreement, Respondent's Project Coordinator shall orally notify DTSC's Project Coordinator of the dispute. The Project Coordinators shall attempt to resolve the dispute informally.

18.3. If the Project Coordinators cannot resolve the dispute informally, Respondent may pursue the matter formally by placing its objection in writing. Respondent's written objection must be forwarded to Steven Lavinger, Branch Chief, Hazardous Waste Management Program, Department of Toxic Substances Control, with a copy to DTSC's Project Coordinator. The written objection must be mailed to the Branch Chief within 14 days of Respondent's receipt of DTSC's written decision. Respondent's written objection must set forth the specific points of the dispute and the basis for Respondent's position.

18.4. DTSC and Respondent shall have 14 days from DTSC's receipt of Respondent's written objection to resolve the dispute through formal discussions. This period may be extended by DTSC for good cause. During such period, Respondent may meet or confer with DTSC to discuss the dispute.

18.5. After the formal discussion period, DTSC will provide Respondent with its written decision on the dispute. DTSC's written decision will reflect any agreements reached during the formal discussion period and be signed by the Branch Chief or his/her designee.

18.6. During the pendency of all dispute resolution procedures set forth above, the time periods for completion of work required under this Consent Agreement that are affected by such dispute shall be extended for a period of time not to exceed the actual time taken to resolve the dispute. The existence of a dispute shall not excuse, toll, or suspend any other compliance obligation or deadline required pursuant to this Consent Agreement.

RESERVATION OF RIGHTS

19.1. The Department reserves all of its statutory and regulatory powers, authorities, rights, and remedies, which may pertain to Respondent's failure to comply with any of the requirements of this Consent Agreement. Respondent reserves all of its statutory and regulatory rights, defenses and remedies, as they may arise under this Consent Agreement. This Consent Agreement shall not be construed as a covenant not to sue, release, waiver, or limitation on any powers, authorities, rights, or remedies, civil or criminal, that the Department or Respondent may have under any laws, regulations or common law.

19.2. The Department reserves the right to disapprove of work performed by Respondent pursuant to this Consent Agreement and to request that Respondent perform additional tasks.

19.3. The Department reserves the right to perform any portion of the work consented to herein or any additional site characterization, feasibility study, and/or remedial actions it deems necessary to protect human health and/or the environment. The Department may exercise its authority under any applicable state or federal law or regulation to undertake response actions at any time. The Department reserves its right to seek reimbursement from Respondent for costs incurred by the State of California with respect to such actions. The Department will notify Respondent in writing as soon as practicable regarding the decision to perform any work described in this section.

19.4. If the Department determines that activities in compliance or noncompliance with this Consent Agreement have caused or may cause a release of hazardous waste and/or hazardous waste constituents, or a threat to human health and/or the environment, or that Respondent is not capable of undertaking any of the work required, the Department may order Respondent to stop further implementation of this Consent Agreement for such period of time as the Department determines may be needed to abate any such release or threat and/or to undertake any action which the Department determines is necessary to abate such release or threat. The deadlines for

any actions required of Respondent under this Consent Agreement affected by the order to stop work shall be extended to take into account the Department's actions.

19.5. This Consent Agreement is not intended to be nor shall it be construed to be a permit. This Consent Agreement is not a substitute for, and does not preclude the Department from requiring, any hazardous waste facility permit, post closure permit, closure plan or post closure plan. The parties acknowledge and agree that the Department's approval of any workplan, plan, and/or specification does not constitute a warranty or representation that the workplans, plans, and/or specifications will achieve the required cleanup or performance standards. Compliance by Respondent with the terms of this Consent Agreement shall not relieve Respondent of its obligations to comply with the Health and Safety Code or any other applicable local, state, or federal law or regulation.

OTHER CLAIMS

20. Except as provided in this Consent Agreement, nothing in this Consent Agreement shall constitute or be construed as a release by DTSC or Respondent from any claim, cause of action, or demand in law or equity against any person, firm, partnership, or corporation 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 constituents, hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken or migrating from the Facility. Without limitation, this paragraph expressly applies to Reggie Mason, individually and dba Lodi Chrome.

COMPLIANCE WITH WASTE DISCHARGE REQUIREMENTS

21. Respondent shall comply with all applicable waste discharge requirements issued by the State Water Resources Control Board or a California regional water quality control board.

OTHER APPLICABLE LAWS

22. All actions required by this Consent Agreement shall be conducted in accordance with the requirements of all local, state, and federal laws and regulations. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations.

REIMBURSEMENT OF DTSC'S COSTS

23.1. Respondent shall pay DTSC's costs incurred in the implementation of this Consent Agreement.

23.2. An estimate of DTSC's costs is attached as Exhibit A showing the amount of \$31,750. It is understood by the parties that this amount is only a cost estimate for the activities shown on Exhibit A and it may differ from the actual costs incurred by DTSC in overseeing these activities or in implementing this Consent Agreement. DTSC will provide additional cost estimates to Respondent as the work progresses under the Consent Agreement.

23.3. Respondent shall make an advance payments to DTSC as follows:

Amount	Date Due, Effective Date of this Order plus
\$5,875	30 days
\$5,000	60 days
\$5,000	90 days

If the advance payment exceeds DTSC's costs, DTSC will refund the balance within 120 days after the execution of the Acknowledgment of Satisfaction pursuant to Section 25 of this Consent Agreement.

23.4. DTSC will provide Respondent with a billing statement at least quarterly, which will include the name(s) of the employee(s), identification of the activities, the amount of time spent on each activity, and the hourly rate charged. If Respondent does not pay an invoice within 60 days of the date of the billing statement, the amount is subject to interest as provided by Health and Safety Code section 25360.1.

23.5. DTSC will retain all costs records associated with the work performed under this Consent Agreement as required by state law. DTSC will make all documents that support the DTSC's cost determination available for inspection upon request, as provided by the Public Records Act.

23.6. Any dispute concerning DTSC's costs incurred pursuant to this Consent Agreement is subject to the Dispute Resolution provision of this Consent Agreement and the dispute resolution procedures as established pursuant to Health and Safety Code section 25269.2. DTSC reserves its right to recover unpaid costs under applicable state and federal laws.

23.7. All payments shall be made within 30 days of the date of the billing statement by check payable to the Department of Toxic Substances Control and shall be sent to:

Accounting Unit
Department of Toxic Substances Control
P. O. Box 806
Sacramento, California 95812-0806

All checks shall reference the name of the Facility, the Respondent's name and address, and the docket number of this Consent Agreement. Copies of all checks and letters transmitting such checks shall be sent simultaneously to DTSC's Project Coordinator.

MODIFICATION

24.1. This Consent Agreement may be modified by mutual agreement of the parties. Any agreed modification shall be in writing, shall be signed by both parties,

shall have as its effective date the date on which it is signed by all the parties, and shall be deemed incorporated into this Consent Agreement.

24.2. Any requests for revision of an approved workplan requirement must be in writing. Such requests must be timely and provide justification for any proposed workplan revision. DTSC has no obligation to approve such requests, but if it does so, such approval will be in writing and signed by the Stephen Lavinger, Branch Chief, Hazardous Waste Management Program, Department of Toxic Substances Control, or his or her designee. Any approved workplan revision shall be incorporated by reference into this Consent Agreement.

TERMINATION AND SATISFACTION

25. The provisions of this Consent Agreement shall be deemed satisfied upon the execution by both parties of an Acknowledgment of Satisfaction (Acknowledgment). DTSC will prepare the Acknowledgment for Respondent's signature. The Acknowledgment will specify that Respondent has demonstrated to the satisfaction of DTSC that the terms of this Consent Agreement including payment of DTSC's costs have been satisfactorily completed. The Acknowledgment will affirm Respondent's continuing obligation to preserve all records after the rest of the Consent Agreement is satisfactorily completed.

EFFECTIVE DATE

26. The effective date of this Consent Agreement shall be the date on which this Consent Agreement is signed by all the parties. Except as otherwise specified, "days" means calendar days.

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SIGNATORIES

27. Each undersigned representative certifies that he or she is fully authorized to enter into this Consent Agreement.

Date: Original signed on 12/05/07

Respondents

Original signed by:
Douglas Larsson, Trustee of the
Larsson Family Trust,
dated May 23, 1996

Original signed by:
Susan Larsson, Trustee of the
Larsson Family Trust,
dated May 23, 1996

Date: Original signed on 12/13/07

Department of Toxic Substances Control

Original signed by:
BY: Steven Lavinger
Branch Chief

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ATTACHMENTS

- A..... Enforcement Order (Docket HWCA No. 20040427)
- B.....Stipulation and Order (Docket HWCA No. 20040427)
- C..... Site Stabilization Work and Activities
from May 4 - October 2007
- D Scope of Work for a Facility Investigation
- E..... Scope of Work for a Health and Safety Plan
- F.....Community Profile Outline
- G Scope of Work for Corrective Measures Implementation
- H.....Scope of Work for Progress Reports

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ATTACHMENT A

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:

Reggie Mason
dba Lodi Chrome
316 North Main Street
Lodi, California 95240-0604

ID No: CAR 000 143 776

Respondent.

Docket HWCA 20040427

ENFORCEMENT ORDER

Health and Safety Code
Section 25187

INTRODUCTION

1.1. Parties. The California Department of Toxic Substances Control (Department) issues this Enforcement Order (Order) to Reggie Mason dba Lodi Chrome (Respondent).

1.2. Site. Respondent generates, handles, treats, stores, and/or disposes of hazardous waste at the following site: 316 North Main Street, Lodi, California (Site).

1.3. Inspection. The Department inspected the Site on December 22, 2003.

1.4. Authorization Status. The Respondent generates the following hazardous waste: spent corrosive nickel-stripping solution, spent rinse waters containing nickel, copper, and hexavalent chromium, spent corrosive rinse waters, spent plating solutions and rinse waters containing cyanide, spilled electroplating process solutions containing various dissolved metals, sludge waste from tanks used to clean metal parts prior to electroplating, and fine powder from chrome polishing operations.

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LODI CHROME

HWCA 20040427
ENFORCEMENT ORDER

1.5. Jurisdiction. Health and Safety Code, section 25187, subdivision (a), authorizes the Department to order action necessary to correct violations and to assess a penalty when the Department determines that any person has violated specified provisions of the Health and Safety Code or any permit, rule, regulation, standard, or requirement issued or adopted pursuant thereto.

DETERMINATION OF VIOLATIONS

2.1. The Department has determined that:

2.1.1. On or about December 22, 2003, Respondent violated California Code of Regulations, title 22, section 66262.11, in that Respondent failed to make a waste determination for polishing dust generated in chrome polishing operations. Respondent had been disposing of waste polishing dust by placing it in a trash bin along with regular facility garbage destined for disposal at the County landfill. Subsequent waste analysis by a certified laboratory revealed that the polishing dust is hazardous due to the concentration of chrome, nickel, lead, copper, and zinc particulate matter in the waste.

2.1.2. On or about December 22, 2003, Respondent violated Health and Safety Code section 25189.2, subdivision (c), in that Respondent caused the transfer of a hazardous polishing dust waste to a county landfill that does not hold a valid hazardous waste disposal permit.

2.1.3. On or about December 22, 2003, Respondent violated Health and Safety Code section 25160, subdivision (b)(1), in that Respondent failed to complete a hazardous waste manifest for hazardous waste polishing dust sent to the county landfill.

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LODI CHROME

HWCA 20040427
ENFORCEMENT ORDER

2.1.4. On or about December 22, 2003, Respondent violated California Code of Regulations, title 22, section 66265.31, in that Respondent failed to remove significant quantities of spilled hazardous waste fine powder from chrome polishing from the floor of the facility.

2.1.5. On or about December 22, 2003, Respondent violated California Code of Regulations, title 22, section 66265.31, in that Respondent failed to remove significant quantities of spilled hazardous waste plating bath chemicals from the floor of the facility. The concrete floor of the facility is not coated with an impermeable barrier to prevent migration of the spilled chemicals into the underlying soil, and the floor had visible signs of corrosion and chemical staining.

SCHEDULE FOR COMPLIANCE

3. Based on the foregoing Determination of Violations, IT IS HEREBY ORDERED THAT:

3.1. On February 16, 2004 Respondent submitted documentation to the Department showing that the violations described above have been adequately corrected or addressed. Therefore, no further actions are required on the part of the Respondent with respect to these violations.

3.2. Liability. Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current, or future operations of Respondent. Notwithstanding compliance with the terms of this Order, Respondent may be required to take such further actions as are necessary to protect public health or welfare or the environment.

OTHER PROVISIONS

4.1. Additional Enforcement Actions. By issuance of this Order, the Department does not waive any right to take further enforcement actions within its jurisdiction involving either Respondent(s) or the Site.

4.2. Penalties for Noncompliance. Failure to comply with the terms of this Order may subject Respondent to costs, penalties, and/or damages as provided by Health and Safety Code, section 25188, and other applicable provisions of law.

4.3. Parties Bound. This Order shall apply to and be binding upon Respondent, and its officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors, and assignees, including but not limited to individuals, partners, and subsidiary and parent corporations.

4.4. Privileges. Nothing in this Consent Agreement shall be construed to require any party to waive any privilege, including without limitation, attorney-client and attorney work-product. However, the assertion of any privilege shall not relieve any party of its obligations under this Consent Order.

4.5. Time Periods. "Days" for the purpose of this Order means calendar days.

4.6. Compliance with Waste Discharge Requirements. Respondent shall comply with all applicable waste discharge requirements issued by the State Water Resources Control Board or a California regional water quality control board.

PENALTY

5. Based on the foregoing DETERMINATION OF VIOLATIONS, the Department sets the amount of Respondent's penalty at \$123,000.

5.2. Payment is due within 30 days from the effective date of the Order.

5.3. Respondent's check shall be made payable to the Department of Toxic Substances Control, and shall identify the Respondent and Docket Number, as shown in the heading of this case. Respondent shall deliver the penalty payment to:

Department of Toxic Substances Control
Accounting Office
1001 I Street, 21st floor
P. O. Box 806
Sacramento, California 95812-0806

A photocopy of the check shall be sent to:

Mr. Charles A. McLaughlin, Chief
State Oversight and Enforcement Branch
Statewide Compliance Division
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

Mr. James J. Grace
Staff Counsel
Office of Legal Counsel and Investigations
Department of Toxic Substances Control
1001 I Street, 23rd Floor
Sacramento, California 95812-0806

RIGHT TO A HEARING

6. Respondent may request a hearing to challenge the Order. Appeal procedures are described in the attached Statement to Respondent.

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EFFECTIVE DATE

7. This Order is final and effective twenty days from the date of mailing, which is the date of the cover letter transmitting the Order to Respondent, unless Respondent requests a hearing within the twenty-day period.

Date of Issuance: 7 Sep 05

Department of Toxic Substances Control


Original signed by Charles A. McLaughlin

Charles A. McLaughlin, Chief
State Oversight and Enforcement Branch

ATTACHMENT B

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:

REGGIE MASON
DBA LODI CHROME
316 North Main Street
Lodi, California 95240-0604

ID No: CAR 000 143 776

Respondent.

Docket HWCA 2004-0427

STIPULATION AND ORDER

Health and Safety Code
Section 25187

1. INTRODUCTION

1.1. Parties. The California Department of Toxic Substances Control (Department) and Reggie Mason dba Lodi Chrome (Respondent) enter into this Stipulation and Order (Order) and agree as follows:

1.2. Site. Respondent generates, handles, treats, stores, and/or disposes of hazardous waste at the following site: 316 North Main Street, Lodi, California (Site).

1.3. Inspection. The Department inspected the Site on December 22, 2003.

1.4. Authorization Status. Respondent generates the following hazardous waste: spent nickel stripping sludge; spent metal-bearing and corrosive nickel-stripping solution; spent rinse waters containing nickel, copper, and hexavalent chromium; spent corrosive rinse waters, spent plating solutions and rinse waters containing cyanide; spilled

REGGIE MASON DBA LODI CHROME

STIPULATION AND ORDER
DOCKET HWCA 2004-0427

electroplating process solutions containing various dissolved metals; sludge waste from tanks used to clean metal parts prior to electroplating; degreasing sludge; spent corrosive and metal-bearing cleaning solutions; and, hazardous fine powder from chrome polishing operations.

1.5. Jurisdiction. Health and Safety Code, section 25187, authorizes the Department to order action necessary to correct violations and assess a penalty when the Department determines that any person has violated specified provisions of the Health and Safety Code, or any permit, rule, regulation, standard, or requirement issued or adopted pursuant thereto.

1.6. Hearing. Respondent waives any right to a hearing in this matter.

1.7. Full Settlement. By their respective signatures below, the Parties , and each of them, agree that this Order, and all of the terms contained herein, are fair, reasonable, and in the public interest. This Order shall constitute full settlement of the violations alleged below. By agreeing to this Order, the Department does not waive any right to take further enforcement actions within its jurisdiction and involving either the Respondent(s) or the Site, except to the extent provided in this Order.

2. VIOLATIONS

2.1. Enforcement Order. On September 7, 2005, the Department issued an Enforcement Order to Respondent, a true and correct copy of said Enforcement Order is attached hereto as Exhibit A, and is incorporated herein by this reference.

2.2. Admissions. Respondent admits the violations set forth in the Enforcement Order.

3. SCHEDULE FOR COMPLIANCE

3.1. No further actions are required on the part of the Respondent with respect to the violations.

3.2. Respondent shall make all payments at the times and in accord with any other conditions set forth in Section 5 (Penalty) below.

3.3. Liability. Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current, or future operations of Respondent, except as provided in this Order. Notwithstanding compliance with the terms of this Order, Respondent may be required to take such further actions as are necessary to protect public health or welfare or the environment.

3.4. Communications. All approvals and decisions of the Department made regarding such submittals and notifications will be communicated to Respondent in writing by the Branch Chief, Department of Toxic Substances Control, or his/her designee. No informal advice, guidance, suggestions, or comments by the Department regarding reports, plans, specifications, schedules, or any other writings by Respondent shall be construed to relieve Respondent of the obligation to obtain such formal approvals as may be required.

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REGGIE MASON DBA LODI CHROME

STIPULATION AND ORDER
DOCKET HWCA 2004-0427

3.5. Department Review and Approval. If the Department determines that any report, plan, schedule, or other document submitted for approval pursuant to this Order fails to comply with this Order or fails to protect public health or safety or the environment, the Department may:

a. Modify the document as deemed necessary and approve the document as modified, or

b. Return the document to Respondent with recommended changes and a date by which Respondent must submit to the Department a revised document incorporating the recommended changes.

4. OTHER PROVISIONS

4.1. Penalties for Noncompliance. Failure to comply with the terms of this Order may subject Respondent to costs, penalties and/or damages for any costs incurred by the Department or other government agencies as a result of such failure, as provided by Health and Safety Code, section 25188, and other applicable provisions of law.

4.2. Parties Bound. This Order shall apply to and be binding upon Respondent and its officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors, and assignees, including but not limited to individuals, partners, and subsidiary and parent corporations.

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4.3. Integration. This Order constitutes the entire agreement between the parties and may not be amended, supplemented, or modified, except by a writing duly executed by the Department and specifically referencing this document by title and docket number, or as otherwise provided in this Order.

4.4. Privileges. Nothing in this Order shall be construed to require any party to waive any privilege, including without limitation, attorney-client and attorney work-product. However, the assertion of any privilege shall not relieve any party of its obligations under this Order.

5. PENALTY

5.1. Respondent shall pay the Department the total sum of \$55,000, which includes \$18,750 as reimbursement of the Department's costs incurred in connection with this matter.

5.2. Payment is due in the amounts and on the dates set forth below.

May 1, 2006	\$5,000
June 1, 2006	\$5,000
July 1, 2006	\$4,500
August 1, 2006	\$4,500
September 1, 2006	\$4,500
October 1, 2006	\$4,500
November 1, 2006	\$4,500
December 1, 2006	\$4,500
January 1, 2007	\$4,500
February 1, 2007	\$4,500
March 1, 2007	\$4,500
April 1, 2007	\$4,500

5.3. In the event that any payment is not received at the address set forth below on or before the tenth day of the month in which it is due, the entire remaining balance shall become due and payable immediately.

5.4. The penalty shall be reduced by \$5,000 if, and only if, Respondent sends at least one employee to the California Compliance School, Modules I - V, and submits to the Department, within 180 days of the effective date of this Consent Order, Certificates of Satisfactory Completion thereof. In the event that the above Certificates of Satisfactory Completion are not all received by the Department within 180 days of the effective date of this Consent Order, the entire remaining balance of \$5,000 shall then become due and payable.

5.5. Lodi Chrome may receive a further \$12,500 credit against the penalty by demonstrating that it has expended \$25,000 on DTSC approved pollution prevention measures.

(a) Lodi Chrome may choose to receive a lesser credit for pollution prevention measures at the same 1:2 rate of credit to expenditure.

(b) In order to receive credit for pollution prevention measures, Respondent shall complete the items (as listed in order of priority) described in the following list, giving the first item in the list the highest priority:

(i) A dust collection system as described in Respondent's letter to the Department of October 31, 2005.

(ii) An ion exchange system for waste water treatment as described in Respondent's letter to the Department of October 31, 2005.

(c) If Respondent chooses to claim the available pollution prevention credit, then, within 30 days of the effective date of this Order, Respondent shall submit a detailed work plan, along with a reasonable schedule for completion, to DTSC. Within 10 business days of receipt of the plan and schedule, DTSC will evaluate the plan and schedule as provided in paragraph 3.5 above.

(d) In the event that Respondent shall fail to complete the approved work in full, any credit to be given under this paragraph shall be in the discretion of the Department after review of the work actually completed.

5.6. Any credits to which Respondent may be entitled pursuant to paragraphs 5.4 or 5.5 above, shall be applied to the total penalty set forth at paragraph 5.1 only after all required cash payments have been made and received.

5.7. Respondent's checks shall be made payable to Department of Toxic Substances Control, shall identify the Respondent and Docket Number, as shown in the caption of this case, and shall be delivered together with the attached Payment Voucher to:

Department of Toxic Substances Control
Accounting Office
1001 I Street, 21st floor
P. O. Box 806
Sacramento, California 95812-0806

A photocopy of each check shall be sent to:

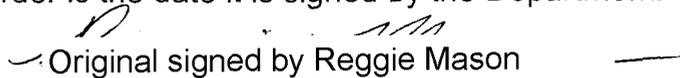
Mr. Charles A. McLaughlin, Chief
State Oversight and Enforcement Branch
Statewide Compliance Division
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

5.8. If Respondent fails to make payment as provided above, Respondent agrees to pay interest at the rate established pursuant to Health and Safety Code, section 25360.1, and to pay all costs incurred by the Department in pursuing collection, including attorney's fees.

6. EFFECTIVE DATE

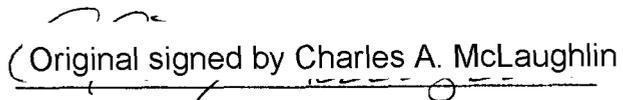
6.1. The effective date of this Order is the date it is signed by the Department.

Dated:


Original signed by Reggie Mason
Reggie Mason dba Lodi Chrome
Respondent

Dated:

26 APR 06


(Original signed by Charles A. McLaughlin
Charles A. McLaughlin, Chief
State Oversight and Enforcement Branch
Department of Toxic Substances Control

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REGGIE MASON DBA LODI CHROME

STIPULATION AND ORDER
DOCKET HWCA 2004-0427

ATTACHMENT C

**Lodi Chrome
316 North Main Street
Lodi, CA 95240**

Closure Activities

- April 2007** PSC prepared closure plan.
- April 3rd 2007** PSC removed cyanide tank contents and washed tank interior. All waste was removed for disposal.
- May 5th 2007** PSC removed remaining tank contents and bath residuals. PSC containerized the cyanide floor salts and zinc cyanide powder. All waste was removed for disposal.
- May 6th 2007** Removal of the wooden wet deck started. This material is staged on (1) pallet in side the shop for future disposal. The 8" x 8" x 16" concrete tank support blocks were palletized to (2) pallets for future disposal. The empty plating tanks where rinsed and all rinsate was collected for future disposal.
The tanks have been cut to disposal specifications and staged on site for future disposal. The floor salts and debris where containerized to DOT Super Sacks. In addition all visibly contaminated sheet rock has been removed from the shop walls and containerized to DOT Super sacks for future disposal.
- July 10th 2007** PSC removed five (5) DOT Super Sacks of shop floor solids, misc debris and salts.
- July 11th 2007** Area cleaned and prepped for pressure washing operations.

July 17th 2007

PSC submitted samples of tanks rinsate water and floor block & wet deck solids to McCampbell Analytical. Pending results on CAM 17 Metals, RCI and total cyanides.

July 20th 2007

PSC delivered one (1) 275-gallon liquid tote for decon water storage. All rafter and ceiling joists have been pressure washed. The floors and walls in the office area and buffing room have been pressure washed. The plating area has been pressure washed (3) times to date. The concrete containment berm has been removed and staged on a pallet for future disposal. All rinsate has been collected and is staged in the 275-gallon liquid tote for analysis and future disposal.

July 25th 2007

Contacted PSC for an additional liquid tote. After all the palletized debris has been removed for disposal the entire area will be pressure washed again. Upon inspection by PSC a final rinsate sample will be collected to verify the decon efforts.

ATTACHMENT D

ATTACHMENT D

SCOPE OF WORK FOR A FACILITY INVESTIGATION WORKPLAN

A. Facility Investigation Workplan (Workplan).

The Workplan shall define, where applicable the following procedures necessary to:

- o Gather all necessary data to determine where interim measures are needed and to support the use of interim measures to address immediate threats to human health and/or the environment, to prevent or minimize the spread of contaminants, to control sources of contamination and to accelerate the corrective action process (required for all releases);
- o Characterize the presence, magnitude, extent (horizontal and vertical), rate of movement and direction of any ground water contamination in and around the facility (only required for releases to ground water);
- o Characterize the geology and hydrogeology in and around the facility (only required for releases to ground water and possibly for releases to soil);
- o Characterize the presence, magnitude, extent (horizontal and vertical), rate of movement and direction of any soil contamination in and around the facility (only required for releases to soil);
- o Characterize the presence, magnitude, extent (horizontal and vertical), rate of movement and direction of any soil gas contamination in and around the facility (may be required for releases to ground water and/or soil depending on the circumstances);
- o Characterize the presence, magnitude, extent (horizontal and vertical), rate of movement and direction of any surface water contamination (includes surface water sediments) at the facility (only required for releases to surface water);
- o Characterize the presence, magnitude, extent (horizontal and vertical), rate of movement and direction of any air releases at the facility (only required for air releases);
- o Characterize any potential sources of contamination (required for all releases);

SCOPE OF WORK FOR A FACILITY INVESTIGATION WORKPLAN

- o Characterize the potential pathways of contaminant migration (required for all releases);
- o Identify any actual or potential receptors (required for all releases);
- o Gather all data to support a risk and/or ecological assessment (if required);
- o Gather all necessary data to support the Corrective Measures Study (required for all releases). This could include conducting treatability, pilot, laboratory and/or bench scale studies to assess the effectiveness of a treatment method.

The Workplan shall describe all aspects of the investigation, including project management, sampling and analysis, well drilling and installation and quality assurance and quality control. If the scope of the investigation is such that more than one phase is necessary, the Workplan must include a summary description of each phase. For example, the first phase of a facility investigation could be used to gather information necessary to focus the second phase into key areas of the facility that need further investigation.

The required format for a Workplan is described below:

1. Introduction

Briefly introduce the Workplan. Discuss the Order or Permit requiring the facility investigation and how the Workplan is organized.

2. Investigation Objectives

2.1 Project Objectives

Describe the overall objectives and critical elements of the facility investigation. State the general information needed from the site (e.g., soil chemistry, hydraulic conductivity of aquifer, stratigraphy, ground water flow direction, identification of potential receptors, etc.). The general information should be consistent with the objectives of the facility investigation and the data needs identified in the Current Conditions Report.

SCOPE OF WORK FOR A FACILITY INVESTIGATION WORKPLAN

2.2 Data Quality Objectives

Provide data quality objectives that identify what data are needed and the intended use of the data.

3. Project Management

Describe how the investigation will be managed, including the following information:

- o Organization chart showing key personnel, levels of authority and lines of communication;
- o Project Schedule; and
- o Estimated Project Budget.

Identify the individuals or positions who are responsible for: project management, field activities, laboratory analysis, database management, overall quality assurance, data validation, etc. Include a description of qualifications for personnel performing or directing the facility investigation, including contractor personnel.

4. Facility Background

Summarize existing contamination (e.g., contaminants, concentrations, etc.), local hydrogeologic setting and any other areas of concern at the facility. Include a map showing the general geographic location of the facility and a more detailed facility map showing the areas of contamination. Provide a reference to the Current Conditions Report and/or other applicable documents as a source of additional information.

5. Field Investigation

5.1 Task Description

Provide a qualitative description of each investigation task. Example tasks may include, but are not limited to the following:

- Task 1: Surface Soil Sampling
- Task 2: Surface Geophysics, Subsurface Soil Boring, and Borehole Geophysics

- Task 3: Data Gathering to Support Interim Corrective Measures
- Task 4: Monitoring Well Installation
- Task 5: Aquifer Testing
- Task 6: Ground Water Sampling
- Task 7: Potential Receptor Identification
- Task 8: Treatability Studies

5.2 Rationale for Sampling

Describe where all samples will be collected (location and depth), types of media that will be sampled and the analytical parameters. Explain the rationale for each sampling point, the total number of sampling points, and any statistical approach used to select these points. The conceptual model of contaminant migration developed in the Current Conditions Report should be considered when selecting sampling locations and depths. If some possible sampling points are excluded, explain why. Describe any field screening techniques that will be used to identify samples for laboratory analysis. Include the rationale for use of field screening techniques and criteria for sample selection.

5.2.1 Background Samples

Background samples should be analyzed for the complete set of parameters for each medium; treat sediments, surface soils and subsurface soils as separate media. Background samples are collected, numbered, packaged, and sealed in the same manner as other samples. For long term and/or especially large projects, it is recommended that 10% of samples collected be from background locations.

5.3 Sample Analysis

List and discuss all analyses proposed for the project. Include a table that summarizes the following information for each analysis to be performed:

- o Analytical Parameters
- o Analytical Method Reference Number (from USEPA SW 846)
- o Sample Preparation and/or Extraction Method Reference Number (from USEPA SW 846)
- o Detection and Practical Quantitation Limits (Data above the detection limit but below the practical quantitation limit must be reported with the estimated concentration.)

Discuss the rationale for selection of the analytical parameters. The rationale must relate to site history and the facility investigation objectives. The achievable detection limits or quantitation limits stated in the selected methods must be adequate for valid comparisons of analytical results against any action levels or standards. For example, the objective may be to collect ground water data for comparison with Maximum Contaminant Levels (MCL's). If this were the case, it would be important to ensure that any ground water test methods had detection limits below the MCL's. Give an explanation if all samples from the same medium will not be analyzed for the same parameters.

Provide the name(s) of the laboratory(s) that will be doing the analytical work. Indicate any special certifications or ratings of the laboratory. Describe the steps that will be taken to select and pre-qualify analytical laboratories to be used including any previous audits and/or other criteria. If a definite laboratory has not yet been selected, list at least 3 laboratories that are being considered for the analytical work.

5.4 Sample Collection Procedures

Describe how sampling points will be selected in the field, and how these locations will be documented and marked for future reference. If a sampling grid will be used, describe the dimensions and lay out planned for the grid.

Outline sequentially or step-by-step the procedure for collecting a sample for each medium and each different sampling technique. Include a description of sampling equipment (including materials of construction), field measurements, sample preservation, housekeeping/ cleanliness techniques and well purging procedures. The procedure described must ensure that a representative sample is collected, and that sample handling does not result in cross contamination or unnecessary loss of contaminants. Special care in sample handling for volatile organic samples must be addressed.

Describe how and when duplicates, blanks, laboratory quality control samples and background samples will be collected. If samples will be filtered, describe filtration equipment and procedures.

The Owner/Operator or Respondent must include sufficient maps and tables to fully describe the sampling effort. This shall include, at a minimum, a map showing all proposed sampling locations and tables that contain the following information:

Sample Collection Table:

Sampling Location/Interval
Analytical Parameters (e.g., volatile organic compounds)
Analytical Method Number
Medium
Preservation Method
Holding Times (as specified in USEPA SW 846)
Containers (quantity, size, type plus footnotes that discuss source and grade of containers)

Sample Summary Table:

Sample Description/Area (include QC samples)
Analytical Parameters
Analytical Method Number
Preparation or Extraction Method Number
Medium
Number of Sample Sites
Number of Analyses

5.4.1 Equipment Decontamination

Describe the decontamination procedure for all drilling, sampling equipment (including metal sleeves), and field-parameter testing equipment.

The following is a recommended generic procedure for decontamination of sampling equipment:

- o Wash with non-phosphate detergent
- o Tap water rinse
- o 0.1M nitric acid rinse (when cross contamination from metals is a concern)
- o Deionized/distilled water rinse
- o Pesticide grade solvent rinse (when semivolatiles and non-volatile organic contamination may be present)
- o Deionized/distilled water rinse (twice)
- o Organic free water rinse (HPLC grade)

The above procedure is not appropriate for every field condition. Clearly document the decontamination procedures.

5.4.2 Equipment Calibration and Maintenance

Logbooks or pre-formatted calibration worksheets should be maintained for major field instruments, to document servicing, maintenance and instrument modification. The calibration, maintenance and operating procedures for all instruments, equipment and sampling tools must be based upon manufacturer's instructions. List all field equipment to be used, specify the maintenance/calibration frequency for each instrument and the calibration procedures (referenced in text and included in appendices).

5.4.3 Sample Packaging and Shipment

Describe how samples will be packaged and shipped. All applicable Department of Transportation regulations must be followed.

5.4.4 Sample Documentation

Discuss the use of all paperwork including field notebooks, record logs, photographs, sample paperwork, and Chain of Custody forms (include a blank copy in Workplan Appendices) and seals.

Describe how sample containers will be labeled and provide an example label if available. At a minimum, each sample container label should include: project ID, sample location, analytical parameters, date sampled and any preservative added to the sample.

A bound field log book must be maintained by the sampling team to provide a daily record of events. Field log books shall provide the means of recording all data regarding sample collection. All documentation in field books must be made in permanent ink. If an error is made, corrections must be made by crossing a line through the error and entering the correct information. Changes must be initialed, no entries shall be obliterated or rendered unreadable. Entries in the log book must include, at a minimum, the following for each day's sampling:

- Date
- Starting Time
- Meteorological Conditions
- Field Personnel Present
- Level of Personal Protection
- Site Identification
- Field Observations/Parameters

Sample Identification Numbers

Location and Description of Sampling Points

Number of Samples Collected

Time of Sample Collection

Signature of Person Making the Entry

Observation of Sample Characteristics

Photo Log

Deviations

5.4.5 Disposal of Contaminated Materials

Describe the storage and disposal methods for all contaminated cuttings, well development and purge water, disposable equipment, decontamination water, and any other contaminated materials. The waste material must be disposed of in a manner consistent with local, state and federal regulations.

5.4.6 Standard Operating Procedures

If Standard Operating Procedures (SOPs) are referenced, the relevant procedure must be summarized in the Workplan. The SOP must be specific to the type of tasks proposed and be clearly referenced in the Workplan. The SOP must also be directly applicable, as written, to the Workplan; otherwise, modifications to the SOP must be discussed. Include the full SOP description in the Workplan appendix.

5.5 Well Construction and Aquifer Testing

When new monitoring wells (or piezometers) are proposed, describe the drilling method, well design and construction details (e.g., depth of well, screen length, slot size, filter pack material, etc.) and well development procedures. Describe the rationale for proposed well locations and selection of all well design and construction criteria (i.e., provide rationale for selection of slot size and screen length).

When aquifer testing is proposed, describe the testing procedures, flow rates, which wells are involved, test periods, how water levels will be measured, and any other pertinent information.

6. Quality Assurance and Quality Control

Quality control checks of field and laboratory sampling and analysis serve two purposes: to document the data quality, and to identify areas of weakness within the measurement process which need correction.

Include a summary table of data quality assurance objectives that, at a minimum, lists:

- o Analysis Group (e.g., volatile organic compounds)
- o Medium
- o Practical Quantitation Limits (PQL)
- o Spike Recovery Control Limits (%R)
- o Duplicate Control Limits +/- (RPD)
- o QA Sample Frequency
- o Data Validation

A reference may note the specific pages from USEPA's SW 846 Guidance Document that list the test method objectives for precision and accuracy. If the field and laboratory numerical data quality objectives for precision are the same and presented on a single table, then a statement should be made to this effect and added as a footnote to the table (e.g., "These limits apply to both field and laboratory duplicates"). Include a copy of the analytical laboratory quality assurance/quality control plan in the appendices of the Workplan and provide the equations for calculating precision and accuracy.

6.1 Field Quality Control Samples

6.1.1 Field Duplicates

Duplicates are additional samples that must be collected to check for sampling and analytical precision. Duplicate samples for all parameters and media must be collected at a frequency of at least one sample per week or 10 percent of all field samples, whichever is greater.

Duplicates should be collected from points which are known or suspected to be contaminated. For large projects, duplicates should be spread out over the entire site and collected at regular intervals.

Duplicates must be collected, numbered, packaged, and sealed in the same manner as other samples; duplicate samples are assigned separate sample numbers and submitted blind to the laboratory.

6.1.2 Blank Samples

Blanks are samples that must be collected to check for possible cross-contamination during sample collection and shipment and in the laboratory. Blank samples should be analyzed for all parameters being evaluated. At least one blank sample per day must be done for all water and air sampling. Additionally, field blanks are required for soil sampling if non-dedicated field equipment is being used for sample collection.

Blank samples must be prepared using analytically-certified, organic-free (HPLC-grade) water for organic parameters and metal-free (deionized-distilled) water for inorganic parameters. Blanks must be collected, numbered, packaged, and sealed in the same manner as other samples; blank samples are assigned separate sample numbers and submitted blind to the laboratory. The following types of blank samples may be required:

Equipment Blank: An equipment blank must be collected when sampling equipment (e.g., bladder pump) or a sample collection vessel (e.g., a bailer or beaker) is decontaminated and reused in the field. Use the appropriate "blank" water to rinse the sampling equipment after the equipment has been decontaminated and then collect this water in the proper sample containers.

Field Bottle Blank: This type of blank must be collected when sampling equipment decontamination is not necessary. The field bottle blank is obtained by pouring the appropriate "blank" water into a container at a sampling point.

6.2 Laboratory Quality Control Samples

Laboratories routinely perform medium spike and laboratory duplicate analysis on field samples as a quality control check. A minimum of one field sample per week or 1 per 20 samples (including field blanks and duplicates), whichever is greater, must be designated as the "Lab QC Sample" for the medium and laboratory duplicate analysis.

Laboratory quality control samples should be selected from sampling points which are suspected to be moderately contaminated. Label the bottles and all copies of the paperwork as "Lab QC Sample"; the laboratory must know that this sample is for their QC analyses. The first laboratory QC sample of the sampling effort should be part of the first or second day's shipment. Subsequent laboratory QC samples should be spread out over the entire sampling effort.

For water media, 2-3 times the normal sample volume must be collected for the laboratory QC sample. Additional volume is usually not necessary for soil samples.

6.3 Performance System Audits by the Owner/Operator or Respondent

This section should describe any internal performance and/or system audit which the Owner/Operator or Respondent will conduct to monitor the capability and performance of the project. The extent of the audit program should reflect the data quality needs and intended data uses. Audits are used to quickly identify

and correct problems thus preventing and/or reducing costly errors. For example, a performance audit could include monitoring field activities to ensure consistency with the workplan. If the audit strategy has already been addressed in a QA program plan or standard operating procedure, cite the appropriate section which contains the information.

7. Data Management

Describe how investigation data and results will be evaluated, documented and managed, including development of an analytical database. State the criteria that will be used by the project team to review and determine the quality of data. To document any quality assurance anomalies, the Facility Investigation QC Summary Forms (see Appendix A of this attachment) must be completed by the analytical laboratory and submitted as part of the Facility Investigation Report. In addition, provide examples of any other forms or checklists to be used.

Identify and discuss personnel and data management responsibilities, all field, laboratory and other data to be recorded and maintained, and any statistical methods that may be used to manipulate the data.

8. References

- A. Provide a list of references cited in the Workplan.
- B. Facility Investigation Report (Report)

A Report must be prepared that describes the entire site investigation and presents the basic results. The Report must clearly present an evaluation of investigation results (e.g., all potential contaminant source areas must be identified, potential migration pathways must be described, and affected media shown, etc.).

The Report must also include an evaluation of the completeness of the investigation and indicate if additional work is needed. This work could include additional investigation activities and/or interim corrective measures to stabilize contaminant release areas and limit contaminant migration. If additional work is needed, the

Owner/Operator or Respondent must submit a Phase 2 Workplan and/or Interim Corrective Measures Workplan must be submitted to the Department along with the Report.

At a minimum, the Report must include:

- o A summary of investigation results (include tables that summarize analytical results).
- o A complete description of the investigation, including all data necessary to understand the project in its entirety including all investigative methods and procedures.
- o A discussion of key decision points encountered and resolved during the course of the investigation.
- o Graphical displays such as isopleths, potentiometric surface maps, cross-sections, plume contour maps (showing concentration levels, isoconcentration contours), facility maps (showing sample locations, etc.) and regional maps (showing receptor areas, water supply wells, etc.) that describe report results. Highlight important facts such as geologic features that may affect contaminant transport.
- o Tables that list all chemistry data for each medium investigated.
- o An analysis of current and existing ground water data to illustrate temporal changes for both water chemistry and piezometric data (use graphics whenever possible).
- o A description of potential or known impacts on human and environmental receptors from releases at the facility. Depending on the site specific circumstances, this analysis could be based on the results from contaminant dispersion models if field validation is performed.
- o A discussion of any upset conditions that occurred during any sampling events or laboratory analysis that may influence the results. The discussion must include any problems with the chain of custody procedures, sample holding times, sample preservation, handling and transport procedures, field equipment calibration and handling, field

SCOPE OF WORK FOR A FACILITY INVESTIGATION WORKPLAN

blank results that show potential sample contamination and any field duplicate results that indicate a potential problem. Summary tables must be provided that show the upset condition and the samples that could be impacted. The Facility Investigation QC Summary Forms (see Appendix A of this attachment) must be completed by the analytical laboratory and submitted as part of the Report.

- o Assessment of the entire QA/QC program effectiveness.
- o Data validation results should be documented in the Report.

In addition to the Report, the Department may require the Owner/Operator or Respondent to submit the analytical results (database) on a floppy disk (Department will specify the format). All raw laboratory and field data (e.g., analytical reports) must be kept at the facility and be made available or sent to the Department upon request.

ATTACHMENT E

ATTACHMENT E

SCOPE OF WORK FOR HEALTH AND SAFETY PLAN

The Department of Toxic Substances Control (Department) may require that the Owner/Operator or Respondent prepare a Health and Safety Plan for any corrective action field activity (e.g., soil or ground water sampling, drilling, construction, operation and maintenance of a treatment system, etc.). The Health and Safety Plan must, at a minimum, include the following elements:

1. Objectives

Describe the goals and objectives of the Health and Safety Plan (must apply to on-site personnel and visitors). The Health and Safety Plan must be consistent with the facility Contingency Plan, OSHA Regulations, NIOSH Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1985), all state and local regulations and other Department guidance as provided.

2. Hazard Assessment

List and describe the potentially hazardous substances that could be encountered by field personnel during field activities.

Discuss the following:

- Inhalation Hazards
- Dermal Exposure
- Ingestion Hazards
- Physical Hazards
- Overall Hazard Rating

Include a table that, at a minimum, lists: Known Contaminants, Highest Observed Concentration, Media, Symptoms/Effects of Acute Exposure.

3. Personal Protection/Monitoring Equipment

For each field task, describe personal protection levels and identify all monitoring equipment.

SCOPE OF WORK FOR HEALTH AND SAFETY PLAN

Describe any action levels and corresponding response actions (i.e., when will levels of safety be upgraded).

Describe decontamination procedures and areas.

4. Site Organization and Emergency Contacts

List and identify all contacts (include phone numbers). Identify the nearest hospital and provide a regional map showing the shortest route from the facility to the hospital. Describe site emergency procedures and any site safety organizations. Include evacuation procedures for neighbors (where applicable).

Include a facility Map showing emergency station locations (first aid, eye wash areas, etc.).

ATTACHMENT F

ATTACHMENT F
COMMUNITY PROFILE OUTLINE
FOR

The following items should be included in the Community Profile:

SITE DESCRIPTION

Description of proposed project.

Map.

Description of the site/facility location.

Description of the surrounding land uses and environmental resources (including proximity to residential housing, schools, churches, etc.).

Visibility of the site to neighbors.

Demographics of community in which the site is located (e.g., socioeconomic level, ethnic composition, specific language considerations, etc.). This information may be found in local libraries (e.g., census records).

LOCAL INTEREST

Contacts with community members - any inquiries from community members, groups, organizations, etc. (include names, phone numbers, and addresses on the key contact list).

Community interactions - any current meetings, events, presentations, etc.

Media coverage - any newspaper, magazine, television, etc., coverage.

Government contacts - city and county staff, state and local elected officials.

KEY CONTACT LIST

Names, addresses, and phone numbers of city manager, city/county planning department staff, local elected officials, and other community members with whom previous contact has been made.

PAST PUBLIC INVOLVEMENT ACTIVITIES

Any ad hoc committees, community meetings, workshops, letters, newsletters, etc., about the site or similar activity.

KEY ISSUES AND CONCERNS

Any specific concerns/issues raised by the community regarding the site/facility or any activities performed on the site/facility.

Any anticipated concerns/issues regarding the site/facility.

Any general environmental concerns/issues in the community.

PP Review _____ Date _____

ATTACHMENT G

ATTACHMENT G

SCOPE OF WORK FOR CORRECTIVE MEASURES IMPLEMENTATION

PURPOSE

The purpose of the Corrective Measures Implementation (CMI) program is to design, construct, operate, maintain and monitor the performance of the corrective measure or measures selected by the Department. Corrective measures are intended to protect human health and/or the environment from hazardous waste releases from the Facility. The Owner/Operator or Respondent will furnish all personnel, materials and services necessary to implement the corrective measures program.

SCOPE

The documents required for Corrective Measures Implementation are, unless the Department of Toxic Substances Control (Department) specifies otherwise, a Corrective Measures Implementation Workplan, Operation and Maintenance Plan, Draft Plans and Specifications, Final Plans and Specifications, Construction Workplan, Construction Completion Report and Corrective Measure Completion Report. The scope of work (SOW) for each document is specified below. The SOWs are intended to be flexible documents capable of addressing both simple and complex site situations. If the Owner/Operator or Respondent can justify, to the satisfaction of the Department, that a plan and/or report or portions thereof are not needed in the given site specific situation, then the Department may waive that requirement.

The scope and substance of the CMI should be focused to fit the complexity of the site-specific situation. Not all of the documents included in the CMI SOW may be needed for every facility.

The Department may require the Owner/Operator or Respondent to conduct additional studies beyond what is discussed in the SOWs in order to support the CMI program. The Owner/Operator or Respondent will furnish all personnel, materials and services necessary to conduct the additional tasks.

A. Corrective Measures Implementation Workplan

The Owner/Operator or Respondent shall prepare a CMI Workplan that clearly describes the size, shape, form, and content of the proposed corrective measure, the key components or elements that are needed, describes the designers vision of the corrective measure in the form of conceptual drawings and schematics, and includes procedures and schedules for implementing the corrective measure(s).

Note that more than one CMI Workplan may be needed in situations where there is a complex site with multiple technologies being employed at different locations. The CMI Workplan must be approved by the Department prior to implementation. The CMI Workplan must, at a minimum, include the following elements:

1. Introduction/Purpose

Describe the purpose of the document and provide a summary description of the project.

2. Media Cleanup Standards

Discuss the media cleanup standards for the facility.

3. Conceptual Model of Contaminant Migration

It is important to know where the contaminants are and to understand how they are moving before an adequate corrective measure can be developed. To address this critical question, the Owner/Operator or Respondent must present a conceptual model of the site and contaminant migration. The conceptual model consists of a working hypothesis of how the contaminants may move from the release source to the receptor population. The conceptual model is developed by looking at the applicable physical parameters (e.g., water solubility, density, Henry's Law Constant, etc.) for each contaminant and assessing how the contaminant may migrate given the existing site conditions (geologic features, depth to ground water, etc.). Describe the phase (water, soil, gas, non-aqueous) and location where contaminants are likely to be found. This analysis may have already been done as part of earlier work (e.g., Current Conditions Report). If this is the case, then provide a summary of the conceptual model with a reference to the earlier document. If not, then field validation of the conceptual model is required.

4. Description of Corrective Measures

Considering the conceptual model of contaminant migration, qualitatively describe what the corrective measure is supposed to do and how it will function at the Facility. Discuss the constructability of the corrective measure and its ability to meet the corrective measure objectives.

5. Data Sufficiency

Review existing data needed to support the design effort and establish whether or not there are sufficient accurate data available for this purpose. The Owner/Operator or Respondent must summarize the assessment findings and specify any additional data needed to complete the corrective measure design. The Department may require or the Owner/Operator or Respondent may propose

that sampling and analysis plans and/or treatability study workplans be developed to obtain the additional data. Submittal times for any new sampling and analysis plans and/or treatability study workplans must be included in the project schedule.

6. Project Management

Describe the management approach including levels of authority and responsibility (include organization chart), lines of communication and the qualifications of key personnel who will direct the corrective measure design and implementation effort (including contractor personnel).

7. Project Schedule

The project schedule must specify all significant steps in the process and when all CMI deliverables (e.g., Operation and Maintenance Plan, Corrective Measure Construction Workplan, etc.) are to be submitted to the Department.

8. Design Criteria

Specify performance requirements for the overall corrective measure and for each major component. The Owner/Operator or Respondent must select equipment that meets the performance requirements.

9. Design Basis

Discuss the process and methods for designing all major components of the corrective measure. Discuss the significant assumptions made and possible sources of error. Provide justification for the assumptions;

10. Conceptual Process/Schematic Diagrams.

11. Site plan showing preliminary plant layout and/or treatment area.

12. Tables listing number and type of major components with approximate dimensions.

13. Tables giving preliminary mass balances.

14. Site safety and security provisions (e.g., fences, fire control, etc.).

15. Waste Management Practices

Describe the wastes generated by the construction of the corrective measure and how they will be managed. Also discuss drainage and indicate how rainwater runoff will be managed.

16. Required Permits

List and describe the permits needed to construct and operate the corrective measure. Indicate on the project schedule when the permit applications will be submitted to the applicable agencies and an estimate of the permit issuance date.

17. Long-Lead Procurement Considerations

The Owner/Operator or Respondent shall prepare a list of any elements or components of the corrective measure that will require custom fabrication or for some other reason must be considered as long-lead procurement items. The list must include the reason why the items are considered long-lead items, the length of time necessary for procurement, and recognized sources of such procurement;

18. Appendices including:

Design Data - Tabulations of significant data and assumptions used in the design effort;

Equations - List and describe the source of major equations used in the design process;

Sample Calculations - Present and explain one example calculation for significant or unique design calculations; and

Laboratory or Field Test Results.

B. Operation and Maintenance Plan

The Owner/Operator or Respondent shall prepare an Operation and Maintenance (O&M) Plan that includes a strategy and procedures for performing operations, long term maintenance, and monitoring of the corrective measure. A draft Operation and Maintenance Plan shall be submitted to the Department simultaneously with the draft Plans and Specifications. A final Operation and Maintenance Plan shall be submitted to the Department simultaneously with the final Plans and Specifications. The O&M plan shall, at a minimum, include the following elements:

1. Introduction/Purpose

Describe the purpose of the document and provide a summary description of the project.

2. Project Management

Describe the management approach including levels of authority and responsibility (include organization chart), lines of communication and the qualifications of key personnel who will operate and maintain the corrective measures (including contractor personnel);

3. System Description

Describe the corrective measure and identify significant equipment.

4. Personnel Training

Describe the training process for O&M personnel. The Owner/Operator or Respondent shall prepare, and include in the technical specifications governing treatment systems, contractor requirements for providing: appropriate service visits by experienced personnel to supervise the installation, adjustment, start up and operation of the treatment systems, and training covering appropriate operational procedures once the start-up has been successfully accomplished.

5. Start-Up Procedures

Describe system start-up procedures including and operational testing.

6. Operation and Maintenance Procedures

Describe normal operation and maintenance procedures including:

- a. Description of tasks for operation;
- b. Description of tasks for maintenance;
- c. Description of prescribed treatment or operation conditions; and
- d. Schedule showing frequency of each O&M task.

7. Replacement schedule for equipment and installed components.

8. Waste Management Practices

Describe the wastes generated by operation of the corrective measure and how they will be managed. Also discuss drainage and indicate how rainwater runoff will be managed.

9. Sampling and Monitoring

Sampling and monitoring activities may be needed for effective operation and maintenance of the corrective measure. If sampling activities are necessary, the O&M plan must include a complete sampling and analysis section which specifies at a minimum the following information:

- a. Description and purpose of monitoring tasks;
- b. Data quality objectives;
- c. Analytical test methods and detection limits;
- d. Name of analytical laboratory;
- e. Laboratory quality control (include laboratory QA/QC procedures in appendices)
- f. Sample collection procedures and equipment;
- g. Field quality control procedures:
 - o duplicates (10% of all field samples)
 - o blanks (field, equipment, etc.)
 - o equipment calibration and maintenance
 - o equipment decontamination
 - o sample containers
 - o sample preservation
 - o sample holding times (must be specified)
 - o sample packaging and shipment
 - o sample documentation (field notebooks, sample labeling, etc);
 - o chain of custody;
- h. Criteria for data acceptance and rejection; and
- i. Schedule of monitoring frequency.

The Owner/Operator or Respondent shall follow all Department and USEPA guidance for sampling and analysis. The Department may request that the sampling and analysis section be a separate document.

10. Corrective Measure Completion Criteria

Describe the process and criteria (e.g., ground water cleanup goal met at all compliance points for one year) for determining when corrective measures may cease. Also describe the process and criteria for determining when maintenance and monitoring may cease. Criteria for corrective measures such as a landfill cap must be carefully crafted to account for the fact that a landfill cap will never actually "cease" but will need to be maintained and monitored for a long period of

time. Satisfaction of the completion criteria will trigger preparation and submittal of the Corrective Measure Completion Report.

11. O&M Contingency Procedures:

- a. Procedures to address system breakdowns and operational problems including a list of redundant and emergency back-up equipment and procedures;
- b. Should the corrective measure suffer complete failure, specify alternate procedures to prevent release or threatened releases of hazardous substances, pollutants or contaminants which may endanger public health and/or the environment or exceed cleanup standards;
- c. The O&M Plan must specify that, in the event of a major breakdown and/or complete failure of the corrective measure (includes emergency situations), the Owner/Operator or Respondent will orally notify the Department within 24 hours of the event and will notify the Department in writing within 72 hours of the event. The written notification must, at a minimum, specify what happened, what response action is being taken and/or is planned, and any potential impacts on human health and/or the environment; and
- d. Procedures to be implemented in the event that the corrective measure is experiencing major operational problems, is not performing to design specifications and/or will not achieve the cleanup goals in the expected timeframe. For example, in certain circumstances both a primary and secondary corrective measure may be selected for the Facility. If the primary corrective measure were to fail, then the secondary would be implemented. This section would thus specify that if the primary corrective measure failed, then design plans would be developed for the secondary measure.

12. Data Management and Documentation Requirements

Describe how analytical data and results will be evaluated, documented and managed, including development of an analytical database. State the criteria that will be used by the project team to review and determine the quality of data.

The O&M Plan shall specify that the Owner/Operator or Respondent collect and maintain the following information:

- a. Progress Report Information

- o Work Accomplishments (e.g., performance levels achieved, hours of treatment operation, treated and/or excavated volumes, concentration of contaminants in treated and/or excavated volumes, nature and volume of wastes generated, etc.).
- o Record of significant activities (e.g., sampling events, inspections, problems encountered, action taken to rectify problems, etc.).
- b. Monitoring and laboratory data;
- c. Records of operating costs; and
- d. Personnel, maintenance and inspection records.

These data and information should be used to prepare Progress Reports and the Corrective Measure Completion Report.

C. Draft Plans and Specifications

The Owner/Operator or Respondent shall prepare draft Plans and Specifications that are based on the CMI Workplan but include additional design detail. A draft Operation and Maintenance Plan and Construction Workplan shall be submitted to the Department simultaneously with the draft Plans and Specifications. The draft design package must include drawings and specifications needed to construct the corrective measure. Depending on the nature of the corrective measure, many different types of drawings and specifications may be needed. Some of the elements that may be required are:

- o General Site Plans
- o Process Flow Diagrams
- o Mechanical Drawings
- o Electrical Drawings
- o Structural Drawings
- o Piping and Instrumentation Diagrams
- o Excavation and Earthwork Drawings
- o Equipment Lists
- o Site Preparation and Field Work Standards
- o Preliminary Specifications for Equipment and Material

General correlation between drawings and technical specifications is a basic requirement of any set of working construction plans and specifications. Before submitting the project specifications to the Department, the Owner/Operator or Respondent shall:

- a. Proofread the specifications for accuracy and consistency with the CMI Workplan; and
- b. Coordinate and cross-check the specifications and drawings.

D. Final Plans and Specifications

The Owner/Operator or Respondent shall prepare final Plans and Specifications that are sufficient to be included in a contract document and be advertised for bid. A final Operation and Maintenance Plan and Construction Workplan shall be submitted to the Department simultaneously with the final Plans and Specifications. The final design package must consist of the detailed drawings and specifications needed to construct the corrective measure. Depending on the nature of the corrective measure, many different types of drawings and specifications may be needed. Some of the elements that may be required are:

- o General Site Plans
- o Process Flow Diagrams
- o Mechanical Drawings
- o Electrical Drawings
- o Piping and Instrumentation Diagrams
- o Structural Drawings
- o Excavation and Earthwork Drawings
- o Site Preparation and Field Work Standards
- o Construction Drawings
- o Installation Drawings
- o Equipment Lists
- o Detailed Specifications for Equipment and Material

General correlation between drawings and technical specifications is a basic requirement of any set of working construction plans and specifications. Before submitting the final project specifications to the Department, the Owner/Operator or Respondent shall:

- a. Proofread the specifications for accuracy and consistency with the preliminary design; and
- b. Coordinate and cross-check the specifications and drawings.

E. Construction Workplan

The Owner/Operator or Respondent shall prepare a Construction Workplan which documents the overall management strategy, construction quality assurance procedures and schedule for constructing the corrective measure. A

draft Construction Workplan shall be submitted to the Department simultaneously with the draft Plans and Specifications and draft Operation and Maintenance Plan. A final Construction Workplan shall be submitted to the Department simultaneously with the final Plans and Specifications and final Operation and Maintenance Plan. Upon receipt of written approval from the Department, the Owner/Operator or Respondent shall commence the construction process and implement the Construction Workplan in accordance with the schedule and provisions contained therein. The Construction Workplan must be approved by the Department prior to the start of corrective measure construction. The Construction Workplan must, at a minimum, include the following elements:

1. Introduction/Purpose

Describe the purpose of the document and provide a summary description of the project.

2. Project Management

Describe the construction management approach including levels of authority and responsibility (include organization chart), lines of communication and the qualifications of key personnel who will direct the corrective measure construction effort and provide construction quality assurance/quality control (including contractor personnel);

3. Project Schedule

The project schedule must include timing for key elements of the bidding process, timing for initiation and completion of all major corrective measure construction tasks as specified in the Final Plans and Specifications, and specify when the Construction Completion Report is to be submitted to the Department;

4. Construction Quality Assurance/Quality Control Program

The purpose of construction quality assurance is to ensure, with a reasonable degree of certainty, that a completed corrective measure will meet or exceed all design criteria, plans and specifications. The Construction Workplan must include a complete construction quality assurance program to be implemented by the Owner/Operator or Respondent.

5. Waste Management Procedures

Describe the wastes generated by construction of the corrective measure and how they will be managed.

6. Sampling and Monitoring

Sampling and monitoring activities may be needed for construction quality assurance/quality control and/or other construction related purposes. If sampling activities are necessary, the Construction Workplan must include a complete sampling and analysis section which specifies at a minimum the following information:

- a. Description and purpose of monitoring tasks;
- b. Data quality objectives;
- c. Analytical test methods and detection limits;
- d. Name of analytical laboratory;
- e. Laboratory quality control (include laboratory QA/QC procedures in appendices)
- f. Sample collection procedures and equipment;
- g. Field quality control procedures:
 - o duplicates (10% of all field samples)
 - o blanks (field, equipment, etc.)
 - o equipment calibration and maintenance
 - o equipment decontamination
 - o sample containers
 - o sample preservation
 - o sample holding times (must be specified)
 - o sample packaging and shipment
 - o sample documentation (field notebooks, sample labeling, etc)
 - o chain of custody;
- h. Criteria for data acceptance and rejection; and
- i. Schedule of monitoring frequency.

The Owner/Operator or Respondent shall follow all Department and USEPA guidance for sampling and analysis. The Department may request that the sampling and analysis section be a separate document.

7. Construction Contingency Procedures

- a. Changes to the design and/or specifications may be needed during construction to address unforeseen problems encountered in the field. Procedures to address such circumstances, including notification of the Department, must be included in the Construction Workplan;

- b. The Construction Workplan must specify that, in the event of a construction emergency (e.g., fire, earthwork failure, etc.), the Owner/Operator or Respondent will orally notify the Department within 24 hours of the event and will notify the Department in writing within 72 hours of the event. The written notification must, at a minimum, specify what happened, what response action is being taken and/or is planned, and any potential impacts on public health and/or the environment; and
 - c. Procedures to be implemented if unforeseen events prevent corrective measure construction. For example, in certain circumstances both a primary and secondary corrective measure may be selected for the Facility. If the primary corrective measure could not be constructed, then the secondary would be implemented. This section would thus specify that if the primary corrective measure could not be constructed, then design plans would be developed for the secondary measure.
8. Construction safety procedures should be specified in a separate Health and Safety Plan.
9. Data Management and Documentation Requirements

Describe how analytical data and results will be evaluated, documented and managed, including development of an analytical database. State the criteria that will be used by the project team to review and determine the quality of data.

The Construction Workplan shall specify that the Owner/Operator or Respondent collect and maintain the following information:

- a. Progress Report Information
 - o Work Accomplishments (e.g., hours of operation, excavated volumes, nature and volume of wastes generated, area of cap completed, length of trench completed, etc.).
 - o Record of significant activities (e.g., sampling events, inspections, problems encountered, action taken to rectify problems, etc.).
- b. Monitoring and laboratory data;
- c. Records of construction costs; and
- d. Personnel, maintenance and inspection records.

This data and information should be used to prepare progress reports and the Construction Completion Report.

10. Cost Estimate/Financial Assurance

If financial assurance for corrective measure construction and operation is required by an enforcement order, facility permit, or through use of Department discretion, the Construction Workplan must include a cost estimate, specify which financial mechanism will be used and when the mechanism will be established. The cost estimate shall include both construction and operation and maintenance costs. An initial cost estimate shall be included in the draft Construction Workplan and a final cost estimate shall be included in the final Construction Workplan. The financial assurance mechanism may include a performance or surety bond, a trust fund, a letter of credit, financial test and corporate guarantee equivalent to that in the California Code of Regulations, Title 22, Section 66264.143, 66265.143 or any other mechanism acceptable to the Department.

Financial assurance mechanisms are used to assure the Department that the Owner/Operator or Respondent has adequate financial resources to construct and operate the corrective measure.

F. Construction Completion Report

The Owner/Operator or Respondent shall prepare a Construction Completion Report which documents how the completed project is consistent with the Final Plans and Specifications. A Construction Completion Report shall be submitted to the Department when the construction and any operational tests have been completed. The Construction Completion Report shall, at a minimum, include the following elements:

1. Purpose;
2. Synopsis of the corrective measure, design criteria, and certification that the corrective measure was constructed in accordance with the Final Plans and Specifications;
3. Explanation and description of any modifications to the Final Plans and Specifications and why these were necessary for the project;
4. Results of any operational testing and/or monitoring, indicating how initial operation of the corrective measure compares to the design criteria;

5. Summary of significant activities that occurred during construction. Include a discussion of problems encountered and how they were addressed;
6. Summary of any inspection findings (include copies of key inspection documents in appendices);
7. As built drawings; and
8. A schedule indicating when any treatment systems will begin full scale operations.

G. Corrective Measure Completion Report

The Owner/Operator or Respondent shall prepare a Corrective Measure Completion Report when the Owner/Operator or Respondent believes that the corrective measure completion criteria have been satisfied. The purpose of the Corrective Measure Completion Report is to fully document how the corrective measure completion criteria have been satisfied and to justify why the corrective measure and/or monitoring may cease. The Corrective Measure Completion Report shall, at a minimum, include the following elements:

1. Purpose;
2. Synopsis of the corrective measure;
3. Corrective Measure Completion Criteria

Describe the process and criteria for determining when corrective measures, maintenance and monitoring may cease. Corrective measure completion criteria were given in the final Operation and Maintenance (O&M) Plan;

4. Demonstration that the completion criteria have been met. Include results of testing and/or monitoring, indicating how operation of the corrective measure compares to the completion criteria;
5. Summary of work accomplishments (e.g., performance levels achieved, total hours of treatment operation, total treated and/or excavated volumes, nature and volume of wastes generated, etc.);
6. Summary of significant activities that occurred during operations. Include a discussion of problems encountered and how they were addressed;
7. Summary of inspection findings (include copies of key inspection documents in appendices); and

8. Summary of total operation and maintenance costs.

H. Submittal Summary

The following list provides a summary of when and how key documents should be submitted to the Department. The Department may adjust this list to meet site-specific circumstances.

1. The submittal schedule for the documents listed below should be included in an enforcement order, permit or otherwise specified by the Department.

- o CMI Workplan

2. The submittal schedule for the documents listed below must be specified in the CMI Workplan. The groupings reflect which documents should be submitted together.

- o Draft Plans and Specifications
- o Draft Operation and Maintenance Plan
- o Draft Construction Workplan

- o Final Plans and Specifications
- o Final Operation and Maintenance Plan
- o Final Construction Workplan

3. The submittal schedule for the document listed below must be specified in the Final Construction Workplan.

- o Construction Completion Report

4. The submittal schedule for the document listed below is based on when the Owner/Operator or Respondent believes the completion criteria have been satisfied.

- o Corrective Measure Completion Report

5. The submittal schedule for Progress Reports and a Health and Safety Plan shall be specified in the order or permit.

ATTACHMENT H

ATTACHMENT H

SCOPE OF WORK FOR PROGRESS REPORTS

Progress reports shall, at a minimum, include:

1. All actions taken during the reporting period to achieve compliance with the Order;
2. A summary of any findings made during the reporting period;
3. All problems or potential problems encountered during the reporting period (also discuss problem solutions);
4. All projected work for the next reporting period as well as anticipated problems and avoidance measures;
5. A discussion of any changes in personnel that occurred during the reporting period;
6. Summaries of all contacts with representatives of the press local community or public interest groups; and
7. If requested by the Department, the results of any sampling, tests or other data generated during the Facility Investigation.

EXHIBIT A

Exhibit A

COST ESTIMATE WORKSHEET CORRECTIVE ACTION CONSENT AGREEMENT

Project Name: Lodi Chrome

PROGRAMS	Class Code	Class Name	CACAA	Facility Investigation		Field Oversight	Risk Assessment	Community Profile	Health & Safety Plan	Total Hours	Rate (\$/hr)	Cost
				Workplan	Report							
TPCAB	3564	HSS	16	32	32	16	8		2	106	\$109	\$11,554
	3566	SHSSI	8	8	8					24	\$127	\$3,048
	3565	SHSSII								0	\$146	\$0
	1181	WPT	2	2	2			2		8	\$57	\$456
Public Participation	5373	PPS (DHS)						24		24	\$103	\$2,472
	5372	PPSupervisor (DHS)								0	\$118	\$0
Legal Counsel	5778	Staff	16							16	\$156	\$2,496
Toxicologist	7978	Staff (Specialist)					24			24	\$149	\$3,576
	7943	Senior								0	\$157	\$0
Hydro/Geologist	3756	HSEG		24	24					48	\$137	\$6,576
	3751	SEG								0	\$157	\$0
	3748	SEGII								0	\$172	\$0
Industrial Hygienist	3852	Senior							12	12	\$131	\$1,572
	3856	Associate								0	\$115	\$0
Total			18	66	66	16	32	26	14	262	TOTAL =	\$31,750

- + CACA: Corrective Action Consent Agreement
- + Risk Assessment: Review/comment of Human Health Screening and Ecological Screening data and report
- + Community Profile: Review/comment of Community Profile data and report
- + Hourly Rates are DTSC Contract Estimation Rates effective 7/01/06 - 6/30/07. (Hourly Rate + Indirect @ 164.15%)
- + Class Name: Listed are the most commonly used Class Names
- + TPCAB: Tiered Permitting Corrective Action Branch
- * Note: This worksheet does not include Cost Estimate for Interim Measures (IM), Corrective Measure Study (CMS), Corrective Measures Implementation (CMI), or any other additional work not calculated in the above table.