



California Regional Water Quality Control Board

San Diego Region



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Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

In reply refer to:

SL209304205: Iberlad

February 1, 2010

Mr. Raymond and Mrs. Valerie
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Escondido, CA 92026
Certified Mail—Return Receipt Requested
7009 1410 0002 2347 6958

Mr. Joseph and Mrs. Hope
Hebdon
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Valley Center, CA 92082
Certified Mail—Return Receipt Requested
7008 1140 0002 4060 7019

Mr. John Niccoli
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Mr. John Billings
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San Diego, CA 92109
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7008 1140 0002 4060 7057

Mr. Kevin Bove
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Boerne, TX 78006-2953
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Ms. Victoria Hebdon
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Certified Mail—Return Receipt Requested
7008 1140 0002 4060 4022

Consolidated Electrical
Distributors, Inc.¹
c/o Mr. David T. Bradford, Esq.
31356 Via Colinas, Suite #106
Westlake Village, CA 91362
Certified Mail—Return Receipt Requested
7008 1140 0002 4060 7002

Northbrook Properties, Inc.
c/o CT Corporation System
818 West Seventh Street
Los Angeles, CA 90017
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7008 1140 0002 4060 7026

American Salvage, Inc.
c/o Mr. William Van Dusen, Esq.
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Certified Mail—Return Receipt Requested
7008 1140 0002 4060 7040

Mr. Kenneth G. McCord
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Orange, CA 92869-6566
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7008 1140 0002 4060 7064

Mr. James Robert Dennis
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San Diego, CA 92130-2067
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¹ No known address exists for Consolidated Electrical Distributors, Inc.

Dear Responsible Parties for the Former Hebdon Electronics Site:

**SUBJECT: CLEANUP AND ABATEMENT ORDER NO. R9-2010-0007 FOR THE
FORMER HEBDON ELECTRONICS SITE, ESCONDIDO, CALIFORNIA**

Enclosed is Cleanup and Abatement Order No. R9-2010-0007 which supercedes all previous Cleanup and Abatement Orders (CAO's) for this site, including CAO No. 98-58 and Addenda No. 1, 2, and 3. The purpose of issuing a new Order for the Former Hebdon Electronics Facility is to: 1) summarize the extensive regulatory history of this case; 2) clarify the Site definition; 3) revise the list of parties responsible for cleanup and abatement actions under this Order; 4) update the list of contaminants of potential concern (COPCs) to include 1,4-dioxane and metals; and 5) provide updated directives that must be followed in the path to closure.

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) recognizes the tasks that have been accomplished to date by the Responsible Parties in response to directives in CAO No. 98-58 and addenda, including soil excavation in the source zone; groundwater extraction and treatment; groundwater monitoring data collection; and a pilot study for in-situ chemical oxidation. However, these efforts are insufficient to bring this site to closure as significant VOC, SVOC, and metal groundwater contamination persists as explained in Findings 7 and 8 of Order No. R9-2010-0007.

An updated feasibility study and human health risk assessment must be submitted to address the current status of the site with a revised COPC list that includes 1,4-dioxane as one of the contaminants of concern. The previous *Feasibility Study and Screening Human Health Risk Assessment* (dated April 27, 2001) met Directive 4 in CAO No. 98-58 at the time but was based upon the assumption that "no further remedial actions (would) occur" at the site. This assumption has been invalidated by site activities as summarized in the attachment to the Order.

The responsible parties also began monitoring for the contaminant of emerging concern 1,4-dioxane in groundwater in 2002 because this chemical, a probable human carcinogen associated with 1,1,1-TCA, must be included in the site investigation to be in full compliance with Water Code section 13304. CAO No. R9-2010-0007 formalizes this requirement for 1,4-dioxane analysis as CAO No. 98-58 was never amended to reflect this change.

A list of all deliverables required by the new Order and the timetable for completion is provided in the table in Directive 9.

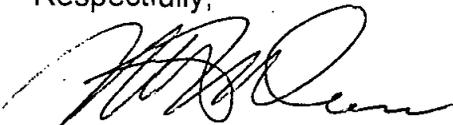
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February 1, 2010

Please be advised that this cleanup is regulated under Water Code section 13304 and State Board Resolution No. 92-49. As discussed in past meetings, the San Diego Water Board cannot modify what is required under the law based upon an assertion of limited financial resources on the part of the discharger. Trustees for the Meyers-Opper Trust have notified the San Diego Water Board that Trust funds are dwindling, however, additional responsible parties are being named as allowed under the law and their assets may be recovered for cleanup costs. Also note that indemnification agreements between parties protect private rights but do not exempt property owners from potential liability under Water Code section 13304.

If you have any questions, or require additional assistance, please contact Ms. Lynn Berlad of my staff at (858) 268-5363 or lberlad@waterboards.ca.gov.

Respectfully,



Michael P. McCann
Assistant Executive Officer

MPM:jac:clc:lgb

Attachments:

Cleanup and Abatement Order No. R9-2010-0007 with Attachment 1,
Regional Board Enforcement History for the Former Hebdon Electronics Facility

cc via email with attachments:

Mr. S. Foulkes, Trustee, Meyers/Opper Trust
Mr. Cristian M. Carrigan, Esq. State Water Board Office of Enforcement (OE)
Ms. Ann K.B. Carroll, Esq. State Water Board OE
Mr. Kelly E. Richardson, Esq. Latham & Watkins, LLP
Ms. S. Sibel Tekce, Camp, Dresser & McKee Inc.

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

CLEANUP AND ABATEMENT ORDER NO. R9-2010-0007

AN ORDER DIRECTING RAYMOND GRIMSINGER, VALERIE GRIMSINGER,
JOSEPH HEBDON, VICTORIA HEBDON, JOHN NICCOLI, THOMAS MYERS,
HOPE HEBDON, JOHN BILLINGS, KEVIN BOVE, KENNETH MCCORD,
JAMES DENNIS, CONSOLIDATED ELECTRICAL DISTRIBUTORS,
INC., NORTHBROOK PROPERTIES, INC. AND AMERICAN
SALVAGE, INC. TO CLEANUP AND ABATE THE EFFECTS
OF WASTE AND SUBMIT TECHNICAL REPORTS
PERTAINING TO CORRECTIVE ACTIONS

AT THE

FORMER HEBDON ELECTRONICS FACILITY
2250 MEYERS AVENUE, 655 OPPER STREET, 665 OPPER STREET
ESCONDIDO, CALIFORNIA 92069

The California Regional Water Quality Control Board, San Diego Region
(hereinafter San Diego Water Board) finds that:

- 1. Legal and Regulatory Authority.** This Order implements policies and requirements of the Porter-Cologne Water Quality Control Act (Division 7, commencing with Water Code section 13000) including (1) sections 13267 and 13304; (2) all applicable provisions of the Statewide Water Quality Control Plans adopted by the State Water Resources Control Board (State Board) and the *Water Quality Control Plan for the San Diego Basin (Basin Plan)* including beneficial uses, water quality objectives, and implementation plans; (3) State Board policies and Regulations, including Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*), and Resolution No. 92-49 (*Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under California Water Code Section 13304*); California Code of Regulations (CCR) Title 23, section 3890 et. seq.; (4) applicable State and federal regulations, standards, and advisories.
- 2. Cleanup and Abatement Order No. R9-2010-0007.** The findings and directives in this Cleanup and Abatement Order (CAO) supersede the directives in CAO No. 98-58 and Addenda 1, 2, and 3 for the Former Hebdon Electronics Facility. **CAO No. 98-58** is superseded by this Order as of the date of this Order—February 1, 2010.

BY: _____

3. **Definition of Site.** Three contiguous properties where printed circuit board manufacturing and plating activities (including wastewater treatment and/or chemical storage) from 1971 to 1992 caused or permitted discharges of industrial wastes to waters of the state, comprise the Former Hebdon Electronics Facility (Facility) for purposes of this Order. These three properties are located at 2250 Meyers Street, 655 Opper Street, and 665 Opper Street, Escondido. The corresponding Assessor's Parcel Numbers (listed south to north) are: 228-420-3000; 228-420-1900; and 228-420-2900. The "Site" includes the Facility and the full lateral and vertical extent of the groundwater plume(s) of contamination beyond Facility property boundaries.¹
4. **Regulatory Background.** Attachment One outlines the San Diego Water Board enforcement history for this Site from CAO No. 97-46 (rescinded) through CAO No. 98-58 and addenda, and compliance responses by the Responsible Party leading up to the issuance of CAO No. R9-2010-0007. Preliminary site investigations and source removals initiated between 1992-1995 at one or all of the Facility properties, during the period when the San Diego County Hazardous Materials Management Division (HMMD) was the lead regulatory agency, are not included in this Attachment. The administrative record for this Facility is a matter of public record and may be reviewed for more information upon request to the San Diego Water Board.
5. **Beneficial Uses of Ground Water.** The Site is located in the Escondido Creek Hydrologic Subarea (HSA 904.62) of the Carlsbad Hydrologic Unit (HU 904.00). The Basin Plan designates beneficial uses for waters of the state, and has designated groundwater in the Escondido Creek HSA with beneficial uses for municipal and domestic supply (including current and potential future uses as drinking water), agricultural, and industrial service supply (Basin Plan, Table 2-5).
6. **Water Quality Objectives.** The Basin Plan contains numeric water quality objectives (WQOs) needed to support beneficial uses and establishes implementation policies to achieve those WQOs. The WQOs are derived from primary Maximum Contaminant Levels (MCLs) established by the California Department of Public Health (CDPH) in Title 22 of the California Code of Regulations for the protection of public drinking water supplies.
7. **Unauthorized Discharges of Waste.** Historically, unauthorized discharges of wastes from industrial activities by owners and/or operators at the Facility caused a condition of pollution in the groundwater aquifer that resulted in the San Diego Water Board enforcement action described in CAO No. 98-58. Volatile organic compounds (VOCs), inorganic compounds, and petroleum hydrocarbon contamination were reported in groundwater above their respective MCLs in violation of Water Code section 13304. Remedial efforts to date (see Attachment One) are insufficient, however, to bring the cleanup

¹ In the Matter of Zoecon Corporation, Order No. 86-2 (State Board 1986).

at this Site to closure. According to the most recent groundwater monitoring report² two metals and seven VOC's were detected above their individual MCLs in wells within Facility boundaries: total chromium; nickel; 1,1-DCA; 1-2-DCA; 1,1-DCE; cis-1,2-DCE; 1,1,1-TCA; and vinyl chloride. Hexavalent chromium was also detected in one well above the practical quantitation limit (PQL) of 0.025 mg/L; this most toxic form of chromium does not have an MCL. The contaminant 1,4-dioxane also does not have an MCL but was detected in every Facility well sampled, above its California Department of Public Health (CDPH) Notification Level of 3.0 µg/L. These Facility wastes (summarized in the following table) impair the beneficial uses of groundwater as designated in the Basin Plan and continue to create a condition of pollution in violation of Water Code section 13304.

Detected Contaminant	MCL (µg/L) (unless otherwise stated)	Maximum Concentration at the Site (µg/L)
1,1-DCA	5.0	520
1,2-DCA	0.5	39
1,1-DCE	6.0	930
cis-1,2-DCE	6.0	280
1,1,1-TCA	200	240
1,4-Dioxane	3	2400
Vinyl Chloride	0.5	1.6
TCE	5.0	120
Nickel	.10	0.210
Total Chromium	.05	.15

² Second Quarter Groundwater Monitoring and Remediation Progress Report for the Meyers-Opper Site Escondido California; October 17, 2007, Camp, Dresser, McKee (CDM).



Detected Contaminant	MCL (µg/L) (unless otherwise stated)	Maximum Concentration at the Site (µg/L)
Hexavalent Chromium	0.025	0.032

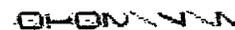
1. Notification Levels are health-based advisory levels for drinking water ingestion established by CDPH for those chemicals that do not have an MCL.
2. No MCL exists for 1,4-dioxane. The number in the table is the CDPH notification level.
3. No MCL exists for hexavalent chromium. The number in the table is the practical quantitation limit (PQL) from lab analysis. Hexavalent chromium is a known human carcinogen.

8. Migration of Waste Discharges. The leading edge of the shallow groundwater plume of 1,4-dioxane is approximately 350 feet from the northern property boundary of 665 Opper Street, according to data collected in 2009.³ 1,4-dioxane was reported in downgradient groundwater samples at a maximum level of 290 µg/L. The sub-surface migration of 1,4-dioxane from the Facility continues to create a condition of pollution in the groundwater aquifer and has the potential to spread further if unabated, due to the high mobility of this contaminant. Levels of trichloroethene (TCE) and tetrachloroethene (PCE) in 2009 were found in downgradient wells at 200 µg/L and 230 µg/L, respectively, which are both above their MCLs of 5.0 µg/L for TCE and 5.0 µg/L for PCE. These VOCs migrating from the Facility exceed WQOs, further degrade groundwater quality, and continue to create a condition of pollution in violation of Water Code section 13304.

9. History of Ownership and Operations by Property:

Owners of 2250 MEYERS STREET:	Time Period
CHARLES H. MEYERS CONSTRUCTION	unknown-1970
RCK PROPERTIES INC.	1971-1987
NORTHBROOK PROPERTIES INC.	1987-2001
CORDITA LLC OF ILLINOIS	2001-2003
AMERICAN SALVAGE, INC.	2003-present

³ Down-gradient Plume Characterization Activities-Former Hebdon/Meyers Opper Site in Escondido, CA; March 3, 2009, CDM.



Tenants/Businesses at 2250 MEYERS STREET:

CONSOLIDATED ELECTRICAL DISTRIBUTORS	1971-1987
AEROLITE GLASS MANUFACTURE	1982-1985
HEBDON ELECTRONICS, INC.	1988-1995
USL, INC.	Oct. 1991-Dec 1992

Owners of 655 OPPER STREET:

Time Period

MR. RAYMOND AND MRS. VALERIE GRIMSINGER	1972-2003
KIMMEL FAMILY FOUNDATION	2003-2005
AMERICAN SALVAGE INC.	2005-present

Tenants/Businesses at 655 OPPER STREET:

RAYMOND AND VALERIE GRIMSINGER: RG CIRCUITS	1972-1981
JOSEPH HEBDON, JOHN NICCOLI: RG CIRCUITS	1981-1982
JOSEPH HEBDON, JOHN NICCOLI, VICTORIA HEBDON, THOMAS MYERS: HEBDON ELECTRONICS INC. (HEI)	1982-1991
JOHN BILLINGS, KEVIN BOVE, KENNETH McCORD, JAMES DENNIS: USL, INC. (dba TRUST PRINTED CIRCUITS)	1991-1992

Owners of 665 OPPER STREET:

SAM I. LEWIS AND MARJORIE H. LEWIS	1975-1985
BARON GOLF INC.	1985-1988

HEBDON VLN

JOSEPH HEBDON, HOPE L. HEBDON	April 1988-August 1988
JOSEPH HEBDON, JOHN NICCOLI	August 1988-Dec. 1990
JOSEPH HEBDON, JOHN NICCOLI TRUST	Dec. 1990-1992
OMNI RESOURCES LTD: A Nevada partnership comprised of TEKE INC. (JOHN NICCOLI) and OHANA ENTERPRISES, INC. (JOSEPH L. HEBDON and HOPE L. HEBDON)	1992-1999
AMERICAN SALVAGE INC.	1999-present

Tenants/Businesses at 665 OPPER STREET:

PALOMAR ELECTRONICS	1978-1990
PACIFIC RADIO COMMUNICATIONS	1982-1985
RANGE MASTER	1986-1989
HEBDON ELECTRONICS, INC.	1988-1991
USL/Trust Printed Circuits	1991-1992
U.S. FILTERS	1999-2003

Note: HEI and USL operated across all three Facility properties.

- 10. Parties Responsible for the Discharge of Wastes.** Pursuant to the California Water Code, the California Health and Safety Code, and applicable law, the following persons were properly named as dischargers in Cleanup and Abatement Order No. 98-58: Raymond and Valerie Grimsinger; Joseph Hebdon; John Niccoli; Thomas Myers; Victoria Hebdon and John Billings; Kevin Bove; Kenneth McCord; and James Dennis. **In addition to the forenamed, this CAO expands the list of Responsible Parties to include the following persons and entities: Hope L. Hebdon; Consolidated Electrical Distributors (CED); Northbrook Properties, Inc. (NPI); and**

American Salvage, Inc. CED and NPI are former owners of the 2250 Meyers Street parcel who sub-leased that property to Joseph Hebdon. Mr. Hebdon installed a wastewater (liquid ion exchange) treatment system on 2250 Meyers that caused an unauthorized release of chemical wastes into the waters of the State during the period of CED/NPI successive ownership. Therefore CED and NPI are properly named as additional Responsible Parties in this Order.

Hope L. Hebdon was a co-owner of 665 Opper Street from April 1988-August 1988 as co-principle in the company Omni Resources, Ltd. Omni Resources Ltd. owned 665 Opper Street from 1992-1999. The San Diego Water Board has discretion to hold landowners accountable for discharges which occur or have occurred on the landowner's property based on possession of the land. Therefore Hope L. Hebdon is properly named as an additional Responsible Party.

American Salvage, Inc. (ASI) is the *current* owner of all three Site properties. An Environmental Restriction and Covenant (Covenant) for 2250 Meyers, 655 Opper Street, and 665 Opper Street, Escondido, was recorded on November 25, 2003 between ASI and the previous landowners. This Covenant describes ASI's knowledge of soil and groundwater contamination on the three Site properties at the time of purchase. Yet indemnification agreements among private parties are non-binding on the San Diego Water Board and cannot be used in this case to shield ASI from liability under the Water Code. ASI is therefore properly named as an additional Responsible Party in this Order.

Raymond Grimsinger, Valerie Grimsinger, Joseph Hebdon, Victoria Hebdon, John Niccoli, Hope Hebdon, Thomas Myers, John Billings, Kevin Bove, Kenneth McCord, James Dennis, CED, NPI, and ASI comprise the list of Responsible Parties for the Site as of the date of this Order.

11. **Basis for Cleanup and Abatement Order.** Water Code section 13304 empowers the San Diego Water Board with the authority to enforce cleanup and abatement of waste discharge(s). Specifically, section 13304 requires a person or entity to cleanup waste and/or abate the effects of waste discharge if so ordered by the San Diego Water Board in the event there has been a discharge in violation of waste discharge requirements, or if a person or entity has caused or permitted waste to be discharged or deposited into the waters of the State, thereby creating or threatening to create a condition of pollution. In the case of the Facility, the San Diego Water Board is authorized to order the Responsible Parties (as described in Findings 7 and 8) to cleanup and abate the effects of waste discharge for all contaminants of concern. This includes wastes that were discovered after CAO No. 98-58 was written based

upon new information pertaining to the Site, such as the emerging contaminant and probable human carcinogen 1,4-dioxane.

12. **Basis for Requiring Reports.** Water Code section 13267 provides that the San Diego Water Board may require responsible parties to furnish technical and/or monitoring reports as the San Diego Water Board requires. The burden (costs) of these reports must bear a reasonable relationship to both the need for the information in the reports and also the benefits to be obtained from the reports. In requiring the reports, the San Diego Water Board is obliged to provide a written explanation explaining the need for the reports, and identify evidence that supports requiring the responsible party to provide the reports.
13. **Need for Technical and Monitoring Reports.** Technical reports and Monitoring reports are needed to provide information to the Regional Board regarding (a) the nature and extent of the discharge, (b) the nature and extent of pollution conditions in State waters created by the discharge, (c) the threat to public health posed by the discharge, and (d) appropriate cleanup and abatement measures. The reports will enable the Regional Board to determine the vertical and lateral extent of the discharge, ascertain if the condition of pollution poses a threat to human health in the vicinity of the Site, and provide technical information to determine what cleanup and abatement measures are necessary to bring the Site into compliance with applicable water quality standards. Based on the nature and possible consequences of the discharges (as described in Findings No. 7 and 8, above) the Regional Board's request and Responsible Parties' burden of providing the required reports bears a reasonable relationship to the need for the reports, the costs, and the benefits to be obtained from the reports.
14. **Cost Recovery.** Pursuant to Water Code section 13304, the San Diego Water Board is entitled to, and will seek reimbursement for, all reasonable costs incurred by the San Diego Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.
15. **Failure to Comply.** If the Responsible Parties fail to comply with this Order, the Executive Officer may request of the Attorney General to petition the California Superior Court for the issuance of an injunction.
16. **Order Violation.** If the Responsible Parties violate this Order, they may be liable civilly for a monetary amount identified in the Water Code.
17. **State Water Board Policies.** The State Water Board adopted Resolution No. 92-49 the *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Water Code Section 13304*. This Resolution requires that cleanup levels be consistent with State Board Resolution No.68-

16, the *Statement of Policy with Respect to Maintaining High Quality of Waters in California*.

18. **Cleanup Levels.** Resolution No. 92-49 requires that waste be cleaned up to background (zero), or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with Title 23, CCR section 2550.4. Any alternative cleanup level greater than background must (1) be consistent with the maximum benefit for the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board.
19. **California Environmental Quality Act (CEQA) Exemption.** The issuance of this Order is an enforcement action taken by a regulatory agency and is categorically exempt from the provisions of CEQA pursuant to section 15321(a) (2), Chapter 3, Title 14 of the California Code of Regulations. The Order requires submittal of a corrective action plan (CAP) that proposes cleanup activities. The proposed activities under the CAP are not yet known, but implementation of the CAP may result in significant physical impacts to the environment that must be evaluated under CEQA. The appropriate lead agency will address the CEQA requirements prior to implementing any CAP that may have a significant impact on the environment.
20. **Qualified Professionals.** The Responsible Parties' reliance on qualified professionals supports long-term cost effectiveness and proper planning and implementation of cleanup and abatement activities at this site. California Business and Professions Code Sections 6735, 7835 and 7835.1 require that engineering and geologic evaluations be performed by or under the direction of licensed professionals.

IT IS HEREBY ORDERED, pursuant to sections 13267 and 13304 of the Water Code, that the Responsible Parties must comply with the following directives:

1. **Implement the Interim Remedial Action for Persulfate Injection with Additional Monitoring Requirement for Metals.** Implementation of the *Proposed In-Situ Chemical Oxidation (ISCO)-Phase 2 Treatment Program, Former Hebdon/Meyers Oppor Site in Escondido* workplan submitted by the Responsible Parties on May 22, 2009, must begin by **March 1, 2010** according to the conditions described in the San Diego Water Board reply letter of October 13, 2009. Enrollment in the general Waste Discharge Requirement (WDR) No. R9-2008-0081 is required. Since this Phase 2 ISCO treatment has the potential to mobilize metals in groundwater due to displacement from fluid injection and creation of an anaerobic subsurface environment, post-injection groundwater monitoring must also analyze for

metals by the following methods: EPA Method 6010 to analyze for arsenic, lead, copper, chromium, nickel, and thallium based upon site history; bromine analysis to screen for bromate (the most carcinogenic form of bromine) using EPA 321.8 or an acceptable alternative test method. *All analytes from all test methods must be reported.*

2. **Submit a Corrective Action Plan (CAP) within 60 days of completion of the final round of post-injection groundwater monitoring.** The CAP must present and interpret the soil and groundwater results from the Interim Remedial Action in Directive One and discuss the current impacts based on these results. The CAP must include a Feasibility Study to evaluate site remediation and mitigation alternatives. The Feasibility Study must
 - a. evaluate the effectiveness and cost of a minimum of two remedial action alternatives that may be implemented to cleanup the VOC, SVOC, and metals wastes released by the Facility to cleanup levels consistent with Directive 3. One of these alternatives must include an analysis of the feasibility to cleanup all COPCs—including 1,4-dioxane—to background;
 - b. evaluate methods to control the continued off-site migration of Facility contamination;
 - c. propose a time schedule, including interim milestone dates, for completion of each recommended alternative within a reasonable time frame;
 - d. provide the rationale for the method of choice; and
 - e. update the human health risk assessment using current data.

3. **Determination of Cleanup Levels.** The CAP shall evaluate applicable cleanup levels consistent with the following requirements:
 - a. **Groundwater Cleanup Levels.** The Responsible Parties shall cleanup and abate the effects of the discharge in a manner that promotes the attainment of either background water quality or the best water quality that is reasonably attainable if background levels of water quality cannot be restored, considering all the demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible. Any alternative cleanup level(s) less stringent than background water quality shall:
 - i. Be consistent with maximum benefit to the people of the state;
 - ii. Not unreasonably affect present and anticipated beneficial use of such water;
 - iii. Not result in water quality less than that prescribed in the Water Quality Control Plans and Policies adopted by the State Water Board and San Diego Water Board.Alternative cleanup levels less stringent than background water quality that are proposed by the Responsible Parties, are subject to San Diego Water Board review and approval.

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- b. **Soil Cleanup Levels.** The Responsible Parties shall propose a range of site-specific soil cleanup levels based upon a technical evaluation of risks from residual soil contaminants and analytic results from contaminant leachability tests performed on an adequate number of significantly contaminated soil samples collected from the Facility. In addition, if no completed exposure pathway exists but contaminated soils remain in place, an estimate of the volume and distribution of those soils must be made from recent sampling data and an accurate site map and cross-sections to scale must be provided.

Soil cleanup levels shall not result in water quality less than the approved groundwater cleanup level, and shall not pose an unreasonable risk to human health and the environment. Soil cleanup levels proposed by the Responsible Parties are subject to San Diego Water Board review and approval.

4. **Implement a Public Participation Plan prior to Implementing the CAP.** This directive is to comply with Water Code section 13307.5 (Notifications). An updated Fact Sheet must be created and distributed to any location affected by a Site release. A public hearing may be necessary based upon public interest.
5. **Implement the Corrective Action Plan (CAP).** The Responsible Parties shall implement the CAP in accordance with the action schedule approved by the San Diego Water Board. The CAP implementation shall begin no later than **September 30, 2010**.
6. **Completion of Soil and Groundwater Cleanup.** Soil and groundwater cleanup goals shall be achieved no later than **October 1, 2015**.
7. **Implement Corrective Action Evaluation Monitoring.** The Responsible Parties shall conduct verification monitoring of all available wells to evaluate corrective action effectiveness in both shallow and deep aquifers and make adjustments to the implementation of the CAP as necessary. This verification monitoring must start by **October 1, 2015** and be performed on a quarterly basis for a minimum of one year. Reduced "key well" plans for groundwater analyses are not acceptable for this purpose. Of the 30 existing monitoring wells, only 8 were used for the second quarter groundwater monitoring round in 2007; new wells may need to be installed with appropriate screen intervals to fill data gaps as indicated. Soil data must also be collected. The approach must provide sufficient data to demonstrate plume stability and/or mass destruction. Computer modelling may also be employed to support plume trends, provided site-specific input parameters are used. A technical report must be submitted to the San Diego Water Board no later than **December 15, 2016** presenting the results of soil and groundwater confirmation sampling

and certifying that cleanup levels have been achieved. A petition to the San Diego Water Board for site closure is contingent upon this certification.

8. **Recording of a Deed Restriction.** The Responsible Parties shall cause a deed restriction to be recorded within the County of San Diego on the properties located at 2250 Meyers Avenue, 655 Opper Street, and 665 Opper Street, Escondido if verification monitoring shows that pollutant releases to groundwater on any or all of the above-named properties continue to exceed applicable WQO's post-remediation. A copy of the deed, reflecting this restriction, shall be provided to the San Diego Water Board Executive Officer within 60 days of its recording. The purpose of this deed restriction is to limit subsurface activities to prevent any inadvertent future exposures to workers or occupants unaware that contaminated soils and/or groundwater at the Facility may present a potential hazardous exposure risk. Present or future owners of these properties may request that the Executive Officer authorize removal of the deed restriction at such time as they are able to demonstrate, with adequate and verifiable data from the groundwater monitoring program or other means, that the pollutant levels in groundwater have stabilized either below WQO's and/or to background conditions.
9. **Compliance Schedule.** The following is a summary of the due dates for activities described in the preceding directives:

DIRECTIVE	ACTION REQUIRED	DUE DATE
1	Begin Implementation of the Interim Remedial Action (IRA) For Persulfate Injection	March 1, 2010
2	Submit a Corrective Action Plan (CAP)	60 days post-IRA
3	Begin Implementation of Public Participation Plan	Must be completed prior to CAP Implementation
4	Begin Implementation of CAP	September 30, 2010
5	Complete Soil and Groundwater Cleanup	No later than October 1, 2015

6	Begin Implementation of Quarterly Corrective Action Evaluation Monitoring	Begin monitoring No later than October 1, 2015
7	Submit Results of Soil and Groundwater Evaluation and Certification of Achievement Of Cleanup Goals	December 15, 2016
8	Record Deed Restriction	If groundwater data post-remediation continue to exceed WQO's

PROVISIONS

- A. **NO POLLUTION, CONTAMINATION, OR NUISANCE:** The storage, handling, treatment, or disposal of soil containing VOC waste or polluted groundwater must not create conditions of pollution, contamination, or nuisance as defined in Water Code section 13050(m). The Responsible Parties must properly manage, treat and dispose of wastes and polluted groundwater in accordance with applicable federal, state, and local regulations.
- B. **PERMITS FOR WASTE DISCHARGE:** The discharge of any low-volume, non-hazardous waste or waste constituents which are generated as the result of any cleanup and abatement action or interim remedial actions at this site is prohibited, unless the discharge is permitted under the National Pollution Discharge Elimination System (NPDES) or by issuance of Waste Discharge Requirements (WDRs) by the San Diego Water Board under section 13260 of the Water Code.
- C. **OPERATION AND MAINTENANCE:** The Responsible Parties shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with this Order.
- D. **CONTRACTOR/CONSULTANT QUALIFICATIONS:** All reports, plans and documents required under this Order shall be prepared under the direction of appropriately qualified professionals. A statement of qualifications and license numbers, if applicable, of the responsible lead professional and all

professionals making significant and/or substantive contributions shall be included in the report submitted by the Responsible Parties. The lead professional performing engineering and geologic evaluations and judgments shall sign and affix their professional geologist or civil engineering registration stamp to all technical reports, plans or documents submitted to the Regional Board.

E. LABORATORY QUALIFICATIONS: Unless otherwise permitted by the San Diego Water Board, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services. The Responsible Parties must use a laboratory capable of producing and providing quality assurance/quality control (QA/QC) records for San Diego Water Board review. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports submitted to the San Diego Water Board.

F. LABORATORY ANALYTICAL REPORTS: Any report presenting new analytical data is required to include the complete Laboratory Analytical Report(s). The Laboratory Analytical Report(s) must be signed by the laboratory director and contain:

- iv. Complete sample analytical report;
- v. Complete laboratory quality assurance/quality control (QA/QC) report;
- vi. Discussion of the sample and QA/QC data; and
- vii. A transmittal letter that shall indicate whether or not all the analytical work was supervised by the director of the laboratory, and contain the following statement, "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services in accordance with current USEPA procedures."

G. ANALYTICAL METHODS: Specific methods of analysis must be identified in monitoring program reports. If the Responsible Parties propose to use methods or test procedures other than those included in the most current version of *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846* (U.S. Environmental Protection Agency) or 40 CFR 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants; Procedures for Detection and Quantification*, the exact methodology must be submitted for review and must be approved by the San Diego Water Board prior to use.

H. ELECTRONIC REPORTING REQUIREMENTS - The Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & and Division 3 of Title 23 CCR) require electronic submission of any report or data required by a

regulatory agency from a cleanup site after July 1, 2005. All information submitted to the San Diego Water Board in compliance with this Order is required to be submitted electronically via the Internet into the Geotracker database <http://geotracker.waterboards.ca.gov/> (The Geotracker Site ID is **SL209304205**). The electronic data shall be uploaded on or prior to the regulatory due dates set forth in the Order or addenda thereto. To comply with these requirements, the Responsible Parties shall upload to the Geotracker database the following minimum information.

- i. Laboratory Analytical Data - Analytical data (including geochemical data) for all soil, vapor, and water samples in Electronic Data File (EDF) format. Water, soil, and vapor data include analytical results of samples collected from: monitoring wells, boreholes, gas and vapor wells or other collection devices, surface water, groundwater, piezometers, stockpiles, and drinking water wells.
- ii. Locational Data - The latitude and longitude of any permanent monitoring well for which data is reported in EDF format, accurate to within 1 meter and referenced to a minimum of two reference points from the California Spatial Reference System (CSRS-H), if available.
- iii. Monitoring Well Elevation Data - Elevation measurements to the top of groundwater well casings for all groundwater monitoring wells. Drinking water wells included in the report, do not need to have the elevation reported unless they are identified as permanent sampling points.⁴
- iv. Depth-to-Water Data - Monitoring wells need to have the depth-to-water information reported whenever water data is collected, even if water samples are not actually collected during the sampling event. Drinking water wells do not need to have the depth-to-water reported unless the wells are surveyed as permanent sampling points and the measurements can be feasibly made in the well.
- v. Site Map – Site map or maps which display discharge locations⁵ streets bordering the Facility property, and sampling locations for all soil, water and vapor samples. The Site map is a stand-alone document that may be submitted in various electronic formats.⁶

⁴ A permanent sampling point is defined as a point that is sampled for more than a 30-day period.

⁵ Former tank(s), product and vapor piping, dispenser or sump locations, and unauthorized discharge or spill areas.

⁶ Formats include .gif, .jpeg, .jpg, .tiff, .tif, .pdf

- vi. Monitoring Well Screen Intervals - The depth to the top of the screened interval and the length of the screened interval for any permanent monitoring well.
- vii. Boring Logs - Boring logs (in searchable PDF format) prepared by an appropriately licensed professional.
- viii. Electronic Report Submittal Requirements - A complete copy (in searchable PDF format) of all assessment, cleanup, and monitoring reports including the signed transmittal letters, professional certifications, and all data presented in the reports.

The GeoTracker website address is <http://geotracker.waterboards.ca.gov>. Deadlines for electronic submittals coincide with deadlines for paper copy submittals. The GeoTracker Global ID for the Former Hebdon Electronics Facility is: **SL209304205**.

- I. REPORTING OF CHANGED OWNER OR OPERATOR:** The Responsible Parties must notify the San Diego Water Board of any changes in Site occupancy or ownership associated with the properties described in this Order.
- J. PENALTY OF PERJURY STATEMENT:** All reports must be signed by the Responsible Parties' principal executive officer or their duly authorized representative, and must include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.
- K. REGULATIONS:** All corrective actions must be in accordance with the provisions of the California Code of Regulations (CCR) Title 23, Chapter 16; the Cleanup and Abatement Policy in the *Water Quality Control Plan for the San Diego Basin (9)*; and State Board Resolution No. 92-49.

NOTIFICATIONS

- A. COST RECOVERY:** Pursuant to Water Code section 13304(c), the San Diego Water Board is entitled to, and will seek reimbursement for, all reasonable costs actually incurred by the San Diego Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action required by the Order.
- B. ENFORCEMENT DISCRETION:** The San Diego Water Board reserves its right to take any enforcement action authorized by law for violations of the terms and conditions of this Order.

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- C. ENFORCEMENT NOTIFICATION:** Failure to comply with the requirements of this Order may subject the Responsible Parties to enforcement action, including but not limited to: imposition of administrative civil liability, pursuant to Water Code sections 13268 and 13350, in an amount not to exceed \$5000 for each day in which the Violation occurs under Water Code sections 13304 or 13350 or referral to the Attorney General for injunctive relief for civil or criminal liability.
- D. REQUESTING EVIDENTIARY HEARING BY THE SAN DIEGO WATER BOARD:** Any person affected by this action of the San Diego Water Board may request an evidentiary hearing before the San Diego Water Board. The San Diego Water Board's Executive Officer may elect to hold an informal hearing or "paper hearing" in lieu of scheduling a hearing before the San Diego Water Board. If you decide to request an evidentiary hearing, send your request to the San Diego Regional Board Executive Officer, Attn: Supervisor, Central San Diego Groundwater Unit, at the address provided on the Order transmittal letter. Please consider the following carefully:
- a. The San Diego Water Board must receive your request within 30 days of the date of this Order.
 - b. Your request must include all comments, technical analysis, documents, reports, and other evidence that you wish to submit for evidentiary hearing; however, please note that the administrative record will include all materials the San Diego Water Board has previously received regarding this Site. You are not required to submit documents that are already in the record.
 - c. The Executive Officer or San Diego Water Board may deny your request for a hearing after reviewing the evidence.
 - d. If you do not request an evidentiary hearing, the State Water Board may prevent you from submitting new evidence in support of a State Water Board petition.
 - e. Your request for an evidentiary hearing, if you submit one, does not stay the effective date of the Order, whether or not a hearing is scheduled.
 - f. A request for a hearing does not extend the 30-day period to file a petition with the State Water Board (see below): however, we suggest that you ask the State Water Board to hold the petition in abeyance while your request for a hearing is pending. (Refer to CCR Title 23 section 2050.5 (d). Additional information regarding the State Water Board petition process is provided below.

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E. REQUESTING ADMINISTRATIVE REVIEW BY THE STATE BOARD:

Any person affected by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with section 13320 of the Water Code and CCR Title 23 section 2050. The petition must be received by the State Water Board (Office of Chief Counsel, P.O. Box 100, California 95812-0100) within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

Ordered by:



Michael P. McCann
Assistant Executive Officer

Date: February 1, 2010

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FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY
SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO:
IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE
SECTIONS 13268 OR 13350 OR REFERRAL TO THE ATTORNEY GENERAL FOR
INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

ATTACHMENT TO CAO NO. R9-2010-0007

**SUMMARY OF REGIONAL BOARD ENFORCEMENT HISTORY FOR THE
FORMER HEBDON ELECTRONICS FACILITY
2250 MEYERS AVENUE, 655 OPPER STREET, 665 OPPER STREET
ESCONDIDO, CALIFORNIA 92069**

1. On June 12, 1997, this Regional Board issued CLEANUP AND ABATEMENT ORDER NO. 97-46 for FORMER HEBDON ELECTRONICS FACILITY, 655 OPPER STREET, ESCONDIDO, SANDIEGO COUNTY (hereinafter "CAO 97-46") based upon unauthorized discharges of wastes to groundwater from former circuit board manufacture, in violation of Water Code Section 13304. Wastes attributable to operations at the Former Hebdon Facility included: 1,1,1-TCA; TCE and its chemical breakdown products; Methyl Ethyl Ketone (MEK); Acetone; Methylene Chloride; Gasoline (TPH); Lead; Chromium; Chloride; Sulfate; and Total Dissolved Solids.
2. On June 27, 1997, Addendum No. 1 to CAO 97-46 was issued, correcting the address of the referenced property in Directive No. 1.
3. On April 20, 1998, Notice of Violation 98-59 (hereinafter NOV 98-59) was issued for failure to submit a technical report as directed in CAO 97-46.
4. On May 13, 1998, CAO 97-46 and Addendum No. 1 to CAO 97-46 were rescinded and CLEANUP AND ABATEMENT ORDER NO. 98-58 for FORMER HEBDON ELECTRONICS FACILITY, 655 OPPER STREET, ESCONDIDO, SAN DIEGO COUNTY (hereinafter CAO 98-58) was issued. The new CAO named additional parties and set a new compliance schedule, in response to concerns raised in a public hearing.
5. On September 10, 1998, Notice of Violation (NOV) 98-103 was issued for failure to submit a technical report as directed in CAO 98-58.
6. On November 25, 1998, Addendum No. 1 to CAO 98-58 was issued, extending the original compliance dates and rescinding NOV 98-103.
7. On January 15, 1999, the Dischargers submitted a *Groundwater Monitoring Program Workplan* in compliance with Directive No.5 of CAO 98-58.
8. On February 1, 1999, the Dischargers submitted a *Site Investigation Workplan* in compliance with Directive No. 1 of CAO 98-58.

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9. On February 11, 1999, Addendum No. 2 to CAO 98-58 was issued, revising analytic requirements for groundwater samples.
10. On April 20, 1999, Notice of Violation 99-29 was issued for failure to submit a technical report as directed in Directive 15 of Addendum No. 1 to CAO 98-58.
11. On April 27, 1999, the Dischargers submitted a quarterly groundwater monitoring report, First Site Monitoring Report, Spring 1999, Meyers-Opper Site, Escondido, CA in response to NOV 99-29.
12. On August 30, 1999, the Dischargers submitted a combined report, *Site Investigation and Second (Quarterly GW) Site Monitoring Report* in compliance with Directive 3 (Soil and Groundwater Investigation Report) and Directive 15 of CAO 98-58.
13. On October 15, 1999, the Dischargers submitted an Interim Removal Action Plan (IRAP) for Clarifier/Solution Separating Sumps in compliance with Directive 16 of CAO 98-58.
14. On June 9, 2000, the Dischargers submitted a Logistics Plan for Interim Removal Action Plan for the Meyers/Opper Site for excavation and removal of contaminated soils in compliance with Directive 16 of CAO 98-58.
15. On September 18, 2000, Addendum No. 3 to CAO 98-58 was issued, setting deadlines for completion of the IRAP and revising the submission deadline for a Feasibility Study as required by Directive No. 4.
16. On March 1, 2001, the Dischargers submitted the Interim Removal Action Report, Former Hebdon Electronics Facility, Escondido, California, in response to Addendum No. 3.
17. On April 27, 2001, the Dischargers submitted a Focused Feasibility Study in compliance with Directive 4 of CAO 98-58 and the new deadline set in Addendum No. 3.
18. On April 8, 2002, the Regional Board (Peter Peuron) reviewed and commented on the December 2001 Groundwater Monitoring Report, Former Hebdon Electronics Facility. Based upon high levels of 1,1,1-TCA contamination reported in MW-1B and MW-28, the Regional Board added the contaminant 1,4-dioxane to the sampling plan, and requested that the Discharger propose corrective measures to address the high VOC levels in groundwater. The CAO was not amended at that time.
19. On August 28, 2002, the Dischargers submitted their Final: June 2002 Groundwater Monitoring Report for the Meyers/Opper Site, Escondido California. The maximum value for 1,4-dioxane was found in MW-10 at 5,600 ug/L while the

maximum for 1,1,1-TCA occurred in MW-28 at 30,000 ug/L . Natural attenuation parameters were analyzed but MNA was determined to be infeasible as a remedial alternative. A pilot study for Enhanced Anaerobic Biodegradation (EAB) was recommended. (Appendix D-1).

20. On June 30, 2003, the Dischargers submitted a Groundwater Remedial Action Plan for the Former Hebdon Electronics Facility to address groundwater impacts from VOCs including TCE, 1,1,1-TCA and 1,4-dioxane. The Regional Board concurred with this limited pump and treat system for four wells in the source zone in a staff letter dated July 9, 2003.
21. On January 18, 2006, the Dischargers submitted a Technical Memorandum to Evaluate Alternative Groundwater Remediation Technologies as the pump and treat system was found to have extracted only 0.22 lbs of total VOCs after operating for 18 months. A pilot study was proposed to test the effectiveness of chemical oxidation for mass destruction, using persulfate injected into downgradient well MW-9 and off-site well MW-25.
22. On April 27, 2006, Notice of Violation No. R9-2006-0060 was issued for failure to file reports electronically in accordance to section 13195, Chapter 3 of the Porter-Cologne Water Quality Control act. The Dischargers outlined steps taken to correct this omission in a response letter to the Regional Board dated June 19, 2006.
23. On February 2, 2007, the Dischargers submitted *Final: 3rd Q 2006 Groundwater Monitoring and Remedial Progress Report, Meyers-Opper Site, Escondido, CA*. This report presented results from the pilot test conducted August 16 and 18, 2006 and requested deletion of the first quarter 2007 GW monitoring program based on relative plume stability.
24. In 2007, the Dischargers submitted three quarterly groundwater (GW) monitoring reports. They further requested reducing the GW monitoring program from quarterly to semi-annually.
25. On November 8, 2007, the Dischargers submitted a letter entitled: *Proposal and Workplan for In-Situ Treatment—Phase 2 Program, Former Hebdon/Meyers Opper Site in Escondido, California*.
26. On March 10, 2008, the Dischargers submitted: *Workplan for In-Situ Groundwater Sampling to delineate the downgradient plume extent of 1,4-dioxane and VOCs the upper zone*. This included plans for new well installation off-site. The Regional Board concurred with this Workplan in a reply letter dated March 26, 2008.
27. On July 2, 2008, the Regional Board sent a letter to the property owner at 2250 Micro Place requesting access to the Mesa Power Systems property for the

purpose of off-site plume investigation. The owner gave his consent in a reply letter dated July 31, 2008.

28. Data from the Hebdon on-site GW monitoring program was not collected in 2008 pending implementation of the March 2008 downgradient workplan.
29. On March 3, 2009, the Dischargers submitted a report entitled *Downgradient Plume Characterization Activities, Former Hebdon/Meyers Opper site in Escondido*. The report described 1,4-dioxane detections in two shallow zone off-site wells above the CDPH health-based notification level of 3.0 ug/L. (No MCL exists for 1,4-dioxane.)
30. On May 22, 2009, the Dischargers submitted a report entitled *Proposed In-Situ Chemical Oxidation (ISCO) Phase 2 Treatment Program, Former Hebdon/Meyers Opper Site in Escondido, California*. They proposed revising the Phase 2 injection program by reducing the coverage to 6 wells from an earlier plan (2007) for 17 wells.
31. On July 16, 2009, the Regional Board sent a comment letter to the Dischargers requesting additional technical information and clarification of their March 3, 2009 downgradient characterization results. A response within 30 days was required.
32. On August 10, 2009, the Dischargers submitted a response entitled: *Subject: Regional Board July 16, 2009 Letter Regarding the Report of "Downgradient Plume Characterization Activities—Former Hebdon/Meyers Opper Site in Escondido*.
33. On October 13, 2009, the Regional Board responded to the May 22, 2009 Phase 2 proposal in a letter entitled: *Comments on Proposed In-Situ Chemical Oxidation (ISCO) Phase 2 Treatment Program*. This letter directed the Dischargers to implement the Phase 2 plan as an interim remedial action (IRA), and also required a Feasibility Study to be submitted after 60 days past completion of the verification monitoring for the IRA.