

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

CLEANUP AND ABATEMENT ORDER NO. R9-2003-0080
OTAY MESA VENTURES II, L.L.C.
FOR THE
FORMER OMAR RENDERING FACILITY
SAN DIEGO COUNTY

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

1. The Omar Rendering Company was owned and operated by Darling International, Incorporated (formerly Darling Delaware Inc.). Darling International Inc. operated an animal rendering facility and Class I disposal operation on a 40-acre site located at 4826 Otay Valley Road, Chula Vista from 1947 to 1982.
2. Waste disposal records maintained by Omar Rendering indicated that a variety of hazardous waste liquids and waste sludge was accepted for disposal. The liquid wastes primarily consisted of acids and acid sludge (hydrochloric, hydrofluoric, sulfuric, chromic, and nitric) and alkaline fluids. Lesser amounts of chlorinated solvents, chlorinated pesticides, petroleum wastes, PCBs, and organic wastes were also discharged to the surface impoundments.
3. To comply with California Water Code Section 13273.1, a Solid Waste Assessment Test (SWAT) was conducted during 1988-1989 for the waste management unit. The results from that investigation are included in a report entitled "*Report Site Investigation Former Omar Rendering Company Site, Chula Vista, California*", prepared by Dames and Moore and dated June 15, 1989. Dames and Moore reported detectable levels in groundwater of the following volatile organic compounds (VOCs): Methylene Chloride, Chloroform, 1,1,1-Trichloroethane, Carbon Tetrachloride, Trichloroethene, Tetrachloroethene and 1,1-Dichloroethene as well as infrequent detections of freons, benzene, toluene, ethylbenzene and xylenes.

Further, the Dames and Moore Report reported results from a soil boring (B-14) "*... completed through a former pond, located immediately west of the former Class I impoundments.*" The soil sample collected from a depth of 40 feet in boring B-14 contained the following VOCs: 1,1-Dichloroethene, 1,1-Dichloroethane, *trans*-1, 2-Dichloroethene, 1,1,1-Trichloroethane, Trichloroethene, 1,1,2-Trichloroethane, Toluene, Ethylbenzene and total Xylenes. The concentration of these VOCs in that soil sample ranged from 0.75 to 120 mg/kg. Dames and Moore concluded that results from their soil-sampling program were "*... suggesting that the remedial excavation was not complete*" (page 42).

4. On November 26, 1990, the RWQCB received a technical report of results entitled "*Report of Additional Groundwater Sampling Analyses Otay Valley Industrial Park, Chula Vista, California,*" prepared by Woodward Clyde Consultants and dated November 15, 1990. The Otay Valley Industrial Park (OVIP) is located east of the former Omar Rendering facility. The results of ground water sampling on the OVIP property indicate that the following maximum concentrations of groundwater pollutants were measured in ground water samples collected from wells located on the OVIP property:

Constituent	OVIP Well	Maximum Concentration	State MCL ¹
1,1-Dichloroethene	MW-1	21	6
1,1-Dichloroethane	MW-1	12	5
Trichloroethene	MW-1	890	5
Tetrachloroethene	MW-1	10	5
1,1,1-Tetrachloroethane	MW-4	2	200
1,1,2,2-Tetrachloroethane	MW-4	2	1
1,2-Dichloroethane	MW-6	2	0.5

¹ = Primary maximum contaminant levels (MCLs) from RWQCB Basin Plan (p. 3-10, incorporated by reference from California Code of Regulations, Title 22, § 64444).

The highest concentrations reported by Woodward Clyde Consultants were observed from wells located adjacent to the eastern boundary of the former Omar Rendering site.

5. Groundwater monitoring wells continue (in 2002) to detect volatile organic constituents (VOCs) in addition to concentrations of inorganic and metal constituents elevated above water quality objectives established for the Otay Valley Hydrologic Area (910.20). The maximum concentrations of pollutants and the corresponding maximum contaminant level (MCL) for groundwater pollutants are as follows:

Organic Constituents	Maximum Observed Concentration (µg/L)	California MCL ¹ (µg/L)
1,1,2 Trichloroethane	14	5
1,1-Dichloroethane	790	5
1,2-Dichloroethane	2.6	0.5
1,1-Dichloroethene	38	6
Benzene	53	1
cis-1,2-Dichloroethene	3400	6
Tetrachloroethene	220	5
Trichloroethene	1400	5

¹ = Primary maximum contaminant levels (MCLs) from RWQCB Basin Plan (p. 3-10, incorporated by reference from California Code of Regulations, Title 22, § 64444).

Inorganic Constituents	Maximum Observed Concentration (mg/L)	California MCL² (mg/L)
Chromium	0.62	0.05 ²
Nickel	6.7	0.1 ²
Selenium	0.11	0.05 ²
Thallium	0.01	0.002 ²
Chloride	15,000	500 ³
Sulfate	1,800	500 ³
TDS	27,000	1500 ³

2 = Primary maximum contaminant levels (MCLs) from RWQCB Basin Plan (p. 3-8, incorporated by reference from California Code of Regulations, Title 22, § 64431).

3 = Water Quality Objective RWQCB Basin Plan (Table 3-3: page 3-31)

6. On June 11, 1997, the RWQCB adopted Order No. 97-40, Waste Discharge Requirements for Closure and Post-Closure Maintenance, Class I Waste Management Containment Cell, Former Omar Rendering Facility, Darling International. Order 97-40 revised the monitoring and reporting program in order to address current State and RWQCB policies, regulations, and the current status of the project.
7. Otay Mesa Ventures I, LLC/Landbank, a subsidiary of the IT Group/Corporation, assumed title to the 40 acre former Omar Rendering Facility parcel in December 1999. On January 16, 2002, the IT Group, Inc. announced that it had signed a letter of intent with The Shaw Group Inc. as the result of the IT Groups' bankruptcy. Subsidiaries and affiliates of The Shaw Group acquired certain IT Group assets formerly held by the IT subsidiary known as "Landbank, Incorporated," including those held by the Otay Mesa Ventures I, LLC (the "Site"). On May 3, 2002, Otay Mesa Ventures I, LLC transferred ownership of the site to Otay Mesa Ventures II, L.L.C., a Shaw subsidiary.
8. The current property owner, Otay Mesa Ventures II, L.L.C., has assumed responsibility for the cleanup and abatement of conditions of pollution or nuisance caused by past discharges of wastes at the former Omar Rendering facility. Accordingly, Otay Mesa Ventures II, L.L.C. is named as the discharger responsible for compliance with this cleanup and abatement Order.
9. The Water Quality Control Plan for the San Diego Basin (9) (Basin Plan) was adopted by the RWQCB on September 8, 1994 and subsequently approved by the State Water Resources Control Board (SWRCB) on December 13, 1994. The Basin Plan designates beneficial uses of water resources, water quality objectives, and an implementation plan; which are applicable to the cleanup of wastes as required by this Order.

10. The former Omar Rendering Site is located in an area where ground water has been designated as suitable for uses including municipal and domestic public water supplies. The former Omar Rendering site is located in proximity to surface waters (*i.e.*, the Otay River) that support beneficial uses including REC1, REC2, WARM, WILD, and RARE. Past discharges of waste at the site are creating a condition of pollution in that the discharges are causing groundwater to exceed applicable water quality objectives and threatening to cause water quality objectives in the Otay River to be exceeded.
11. Pursuant to State Water Resources Control Board (SWRCB) Resolution No. 92-49, the RWQCB shall require the discharger to conduct investigation and cleanup and abatement in a progressive sequence comprised of the following steps: a.) preliminary site assessment, b.) soil and water investigation, c) proposal and selection of cleanup and abatement action (to evaluate feasible and effective cleanup and abatement actions); d.) implementation of cleanup and abatement action; and e.) monitoring to confirm the short-and long-term effectiveness of cleanup and abatement.
12. Under the terms of Resolution No. 92-49, the RWQCB is obligated to have a presumptive cleanup goal to require cleanup to attain background water quality conditions. The RWQCB will establish a cleanup level above background water quality conditions, only if the RWQCB determines that it is technologically or economically infeasible to achieve background water quality conditions. If the RWQCB makes such a determination, the Board will then select a cleanup level that is based on the lowest levels which are technologically or economically achievable and that will not unreasonably affect present and anticipated beneficial uses of waters of the Region. This approach provides for determining and establishing a level of water quality protection, which is reasonable without allowing or causing an unreasonable effect on water quality.
13. State Water Resources Control Board (SWRCB) regulations governing waste discharges to land (CCR, 23, Division 3, Chapter 15 – Discharges of Hazardous Waste to Land) require that cleanup and abatement actions intended to contain waste at the place of release shall implement the applicable provisions of that division, to the extent feasible (CCR, Title 23, Division 3, § 2510 *et seq.*). Further, the requirements of CCR Title 23, Chapter 15 are used in establishing cleanup levels (§ 2550.4) and undertaking corrective actions where discharges of waste are subject to California Water Code Section 13304.
14. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resources Code § 21000 *et seq.*) in accordance with § 15321, Chapter 3, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, Otay Mesa Ventures II L.L.C. (hereinafter the “*discharger*”) shall comply with the following Directives:

A. PROHIBITIONS

1. Odors, vectors, and other nuisances of waste origin beyond the limits of the landfill property boundary are prohibited.
2. RWQCB Basin Plan waste discharge prohibitions shall not be violated.
3. The discharge of any wastes or waste constituents to land or waters of the State are prohibited, unless the discharge is permitted under the National Pollutant Discharge Elimination System (NPDES) or by issuance of Waste Discharge Requirements by the RWQCB under Section 13260 of the California Water Code.
4. The management and discharge of contaminated soils and ground water shall not violate applicable federal, state and local regulations or requirements.

B. COMPREHENSIVE SITE INVESTIGATION REPORT

The discharger shall submit to the RWQCB a complete site investigation report by **August 30, 2003**. The final technical report shall contain all site-specific data collected during the investigation, including the following information:

1. **Characterization of wastes in source area:** Characterization of the source area(s) of the pollutants of concern [as listed in Section B.2] including:
 - a) Location and delineation of soils or ground water which are polluted with mobile or immobile concentrations of nonaqueous phase liquids (*i.e.*, NAPLs),
 - b) Location and delineation of soils which are polluted with leachable concentrations of soluble pollutants, and
 - c) An estimate, including the technical basis, of the volume(s) of residual soils identified and delineated pursuant to Directives B.1(a) and B.1(b) above.
2. **Complete delineation of impacts to water quality:** The nature and extent of the pollution of water resources caused by the release of waste constituents and “*degradation products*” that may result from the natural degradation of waste constituents discharged at the site.

Initially, the site investigation should focus on the delineation of the following waste constituents (pollutants of concern):

Pollutants of Concern
1,1,1-Tetrachloroethane
1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2 Trichloroethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
Benzene
Toluene
Ethylbenzene
Total Xylenes
<i>cis</i> -1,2-Dichloroethene
<i>trans</i> -1,2-Dichloroethene
Tetrachloroethene
Trichloroethene
Chromium
Nickel
Selenium
Thallium
Chloride
Sulfate
TDS

The RWQCB may amend this list to include new waste constituents, or associated degradation products, detected during the site investigation or remediation of the site.

Delineation shall continue until the maximum extent of ground water pollution from waste constituents (*i.e.*, to non-detectable concentrations) has been determined in the horizontal and vertical directions. The assessment shall include a determination of the spatial distribution and concentration of each constituent of concern throughout the zone affected by the release. Delineation of groundwater pollution must include on and off-property areas of the site.

- 3. Site Conceptual Model:** The discharger shall provide the RWQCB with a Site Conceptual Model (SCM). The SCM is a written or pictorial representation of the release scenario, the likely distribution of wastes at the site, as well as potential pollutant migration pathways and receptors. The SCM shall identify and describe the types of wastes present including their distribution in space and time, and how the wastes are changing in space and time.

The SCM shall also identify the potential, current and future receptors in the area; link potential sources to potential receptors through transport of wastes in the air, soil

and water; and identify the fate and transport characteristics of the site. The SCM shall describe or show the physical characteristics and properties of the subsurface and identify the environmental issues that need to be investigated (as well as those issues that do not need to be addressed). The initial SCM shall include a discussion of the level of uncertainty of conclusions, outline data gaps remaining in the conceptual model, and describe the additional work needed to fill identified data gaps. To the extent possible, the dischargers shall confirm their site conceptual model using a combination of existing site-specific data and additional data developed during the site investigation process.

The SCM shall be refined and updated as site characterization data become available. Updates to the SCM shall be included as an appendix to the semi-annual monitoring reports submitted to the RWQCB. The initial SCM shall be submitted to the RWQCB by **May 30, 2003**.

C. EVALUATION OF REMEDIAL OPTIONS AND FEASIBILITY STUDY (FS)

1. Consideration of Remedial Technologies

At a minimum, the discharger shall consider the following cleanup and abatement methods or combination thereof, to the extent that they may be applicable to the discharge or threat thereof:

- a) Source removal and/or isolation;
- b) In-place treatment of water or soil:
 1. Bioremediation
 2. Aeration
 3. Fixation
- c) Excavation or extraction of soil, waste, or gas for on-site or off-site treatment by the following techniques:
 1. Bioremediation
 2. Thermal destruction
 3. Aeration
 4. Sorption
 5. Precipitation, flocculation, and sedimentation
 6. Filtration
 7. Fixation
 8. Evaporation
- d) Excavation or extraction of soil, water, or gas for appropriate recycling, re-use, or disposal.

2. Comprehensive Feasibility Study (FS)

The discharger shall submit to the RWQCB a complete comprehensive FS by **December 30, 2003**. The discharger shall submit a Comprehensive Feasibility Study (FS) Report containing an evaluation of at least 5 potential remedies or "corrective measures." A corrective measure may be comprised of a single remediation technology or a combination of remedial technologies to achieve the most effective treatment of site specific groundwater pollutants.

The comprehensive FS shall include the following minimum components:

- a) **Assessment of Corrective Measures (ACM)** for each potential remedy shall include an assessment of the following minimum criteria:
 1. The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual pollution;
 2. The time required to begin and complete the proposed remedy [including the proposed suite of corrective action measures (**CAM**)];
 3. The costs of implementing the proposed remedy;
 4. State and/or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy.
 5. The discharger shall assess each corrective measure for attainment of the following ground water protection standards as specified in CCR 23, Chapter 15, § 2550.4:
 - i. A concentration limit for each pollutant of concern not to exceed the background value of constituents [per CCR Title 23, Chapter 15, § 2550.4(a)(1)]. Background concentrations for naturally occurring constituents must be established pursuant to CCR Title 23, Chapter 15, § 2550.7(e)(11)(A). There should be no "background concentrations" for organic waste constituents (*e.g.*, volatile organic constituents (VOCs) and chlorinated VOCs). Therefore, the water quality protection standard or "*concentration limit*" for organic waste constituents is the practical quantitation limit (PQL) for organic waste constituents using the appropriate analytical method selected per **Directive D.1 (a)** of this Order. And,
 - ii. For a corrective action program, the discharger may propose and the RWQCB may consider establishing a concentration limit greater than background (CLGB) for each pollutant of concern. The discharger must demonstrate to the RWQCB that the proposed CLGB is the lowest concentration, not exceeding the

water quality objective designated in the Basin Plan, applicable statutes or regulations with a factor of safety, that is technologically and economically achievable [CCR 23, Chapter 15, § 2550.4(e)]. The applicable numerical water quality protection standards are identified in **Directive C.2 (a)(6)** of this Order.

6. Maximum numerical water quality protection standards. The numerical water quality protection standards for the maximum concentrations of the constituents of concern are as follows:

Organic Constituents	California MCL ¹ (µg/L)
1,1,1-Tetrachloroethane	200
1,1,2-Tetrachloroethane	1
1,1,1-Trichlorethane	5
1,1,2 Trichloroethane	5
1,1-Dichloroethane	5
1,2-Dichloroethane	0.5
1,1-Dichloroethene	6
Benzene	1
Toluene	150
Ethylbenzene	700
Total Xylenes	1,750
<i>cis</i> -1,2-Dichloroethene	6
<i>trans</i> -1,2-Dichloroethene	10
Tetrachloroethene	5
Trichloroethene	5
Chromium	50 ²
Nickel	100 ²
Selenium	50 ²
Thallium	2 ²
Chloride	500 ³
Sulfate	500 ³
TDS	1500 ³

1 = Primary maximum contaminant levels (MCLs) from RWQCB Basin Plan (p. 3-10, incorporated by reference from California Code of Regulations, Title 22, § 64444). Concentration units for organic constituents are indicated in µg/L.

2 = Primary maximum contaminant levels (MCLs) from RWQCB Basin Plan (p. 3-8, incorporated by reference from California Code of Regulations, Title 22, § 64431). Concentration units for organic constituents are indicated in µg/L.

3 = Water Quality Objective RWQCB Basin Plan (Table 3-3: page 3-31).
Concentration units for chloride, sulfate and TDS are indicated in
mg/L.

b) **Selection of Remedy (SOR)** shall address the following minimum criteria:

1. The selected remedy must meet the following minimum requirements:

- i. **Protection of human health.** The selected remedy must result in a cumulative carcinogenic risk level of no greater than 1×10^{-6} , including all exposure pathways for residual waste constituents. The non-carcinogenic effects from exposure to waste constituents shall be quantified as the hazard index (HI), derived from summation of hazard quotients (HQ) for individual residual waste constituent, shall be less than 1 ($HI < 1$). These methods for quantifying carcinogenic risk and non-carcinogenic hazards may be found in USEPA Risk Assessment Guidance for Superfund (1989, Chapter 8 also see <http://www.epa.gov/superfund/programs/risk/toolthh.htm>).
- ii. **Attainment of the ground water protection standards in CCR 23, Chapter 15, § 2550.4(a).** The selected remedy should be able to achieve background concentrations of constituents of concern per **Directive C.2 (a)(5)(i)** of this Order. If the selected remedy includes a proposal to establish a groundwater cleanup level greater than background [**per Directive C.2 (a)(5)(ii)** of this Order]; then the SOR shall also include a technical evaluation of all the potential adverse effects on groundwater and surface water quality listed in CCR Title 23, Chapter 15 [§ 2550.4(d)(1) and (d)(2)].
- iii. **Source Control/Removal.** The selected remedy must result in effective removal and/or control of the source(s) of soluble ground water pollutants [see description in **Directive B.1** of this Order] so as to reduce or eliminate further releases of ground water pollutants from the source area(s);
- iv. **Waste management.** The selected remedy must comply with all waste management requirements as specified in applicable State and federal regulations.
- v. **Compliance with water quality objectives.** The selected remedy must not result in water quality less than that prescribed in: 1) the Basin Plan and Policies adopted by the State and Regional Boards, including beneficial uses, water quality

objectives and implementation plans; 2) State and Regional Water Board policies including State Water Board Resolutions No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) and No. 88-63 (Sources of Drinking Water); and 3) relevant standards, criteria, and advisories adopted by other state and federal agencies.

- c) The discharger shall support the technical and economic evaluation of various remedial technologies by providing the RWQCB with acceptable documentation of field performance of remedial technology from other sites with similar characteristics, evaluations of site-specific data, and/or on-site pilot testing of potential remedial technologies.
- d) The discharger must provide the RWQCB with a proposed schedule for initiating and completing the selected remedy for cleanup and abatement of groundwater pollution from the site.
- e) The discharger shall propose a selected remedy to ensure that the groundwater protection standards assigned by the RWQCB are attained at all monitoring points and throughout the zone affected by the release, including any portions thereof that extend beyond the facility boundary [pursuant to § 2550.10(c)].
- f) If, the discharger determines that the release has crossed the facility boundary; the discharger shall, within **30 days** of such determination, provide the RWQCB with a list of the names and addresses of all “affected parties” [all persons who currently own or reside upon land that overlies the release]. The RWQCB may invite these affected parties to a Regional Board meeting at which the potential corrective measures are discussed and either chosen or revised.
- g) The discharger shall install any additional ground water, soil pore liquid, soil pore gas, or surface water monitoring devices necessary to comply with this Order.

D. WATER QUALITY MONITORING

1. Monitoring Provisions

- a) Unless otherwise permitted by the RWQCB Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. Specific methods of analysis must be identified. If the discharger proposes to use methods 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), the exact methodology must be submitted for review and must be approved by the RWQCB Executive Officer prior to use. 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 of such work submitted to the RWQCB.

- b) If the discharger monitors any pollutants more frequently than required by this Order, using the most recent version of "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846*", the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.
 - c) The discharger shall report all instances of noncompliance not reported under **Reports Filed with the RWQCB, Directive F.5** of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in **Reports Filed with the RWQCB, Directive F.5** of this Order.
 - d) All monitoring instruments and equipment used by the discharger to fulfill the prescribed monitoring program shall be properly calibrated and maintained as necessary to ensure their continued accuracy.
2. Records of monitoring information shall include:
- a) The date, identity of sample, Monitoring Point from which it was collected, and time of sampling or measurement;
 - b) The individual(s) who performed the sampling or measurements;
 - c) Date and time that analyses were started and completed, and the name of the personnel performing each analysis;
 - d) The analytical techniques or method used, including method of preserving the sample and the identity and volumes of reagents used;
 - e) Calculation of results; and
 - f) Results of analyses, and the Method Detection Limit for each parameter.
 - g) Laboratory quality assurance results (*e.g.*, percent recovery, response factor)
3. Ground Water Quality Monitoring

The following shall constitute the ground water monitoring program for the former Omar Rendering site:

a) Ground Water Flow Rate/Direction

For each monitored ground water body, the discharger shall measure the water level in each well and determine ground water flow rate and direction at least semi-annually, including the times of expected highest and lowest elevations of the water level for the respective ground water body. Ground water elevations for all background and downgradient wells for a given ground water body shall be measured within a period of time short enough to avoid temporal variations in ground water flow which could preclude accurate determination of ground water flow rate and direction.

b) Well Purging

- i. Prior to sampling monitoring wells, the presence of an immiscible layer in all wells (floating and/or at bottom of well screen) shall be determined at the beginning of each sampling event. This shall be done prior to any other activity that may disturb the surface of the water in a well, *e.g.* water level measurements. If an immiscible layer is found, the RWQCB shall be notified **within 24 hours**.
- ii. Prior to purging each monitoring well, the static water level shall be measured.
- iii. Field logs used during well purging shall be included in the monitoring reports. The information contained in field logs shall include: the method(s) of monitoring field parameters, calibration data for the field equipment, method of purging (if a pump is used, include pump placement and pumping rate), date each well was purged, well recovery time, method of disposal of the purged water, an estimate of volume of water purged from each well, the results of all field analyses, well number, depth to ground water, method of measuring the water level and field personnel signatures.

c) Ground Water Sampling and Analysis

- i. At a minimum, the ground water monitoring network shall consist of the following monitoring wells – MW-01R, MW-04, BGW-02, SVGW-10, MW-09, MW-10 MW-14, MW-15A, and MW-15B.
- ii. The discharger shall collect semiannual samples from all ground water monitoring wells listed in **Directive D.3(c)(i)** and analyze those samples for the following constituents:

CONSTITUENT	UNITS	SAMPLING AND REPORTING FREQUENCY
pH	pH	Semi-Annually
Specific Conductance	umhos/cm	Semi-Annually
Total Dissolved Solids	mg/l	Semi-Annually
Calcium	mg/l	Semi-Annually
Iron	mg/l	Semi-Annually
Magnesium	mg/l	Semi-Annually
Sodium	mg/l	Semi-Annually
Potassium	mg/l	Semi-Annually
Carbonate	mg/l	Semi-Annually
Bicarbonate	mg/l	Semi-Annually
Chloride	mg/l	Semi-Annually
Sulfate	mg/l	Semi-Annually
Nitrate as Nitrogen	mg/l	Semi-Annually
Total Phosphate	mg/l	Semi-Annually
Alkalinity (CaCO ₃)	mg/l	Semi-Annually
Volatile Organics (VOCs)	µg/l	Semi-Annually
Semi-volatile Organics (SVOC)	µg/l	Every 5 years
Arsenic	mg/l	Annually to biannually ¹
Barium	mg/l	Annually to biannually ¹
Cadmium	mg/l	Annually to biannually ¹
Calcium	mg/l	Annually to biannually ¹
Chromium	mg/l	Annually to biannually ¹
Copper	mg/l	Annually to biannually ¹
Iron	mg/l	Annually to biannually ¹
Lead	mg/l	Annually to biannually ¹
Magnesium	mg/l	Annually to biannually ¹
Manganese	mg/l	Annually to biannually ¹
Mercury	mg/l	Annually to biannually ¹
Molybdenum	mg/l	Annually to biannually ¹
Nickel	mg/l	Annually to biannually ¹
Potassium	mg/l	Annually to biannually ¹
Selenium	mg/l	Annually to biannually ¹
Silver	mg/l	Annually to biannually ¹
Sodium	mg/l	Annually to biannually ¹
Thallium	mg/l	Annually to biannually ¹
Vanadium	mg/l	Annually to biannually ¹
Zinc	mg/l	Annually to biannually ¹

1 = Analyze groundwater samples for metals annually for the first 3 years following well installation, then every 2 years thereafter.

Note: mg/l = milligrams/liter and µg/l = micrograms/liter

- d) Any groundwater monitoring wells installed, as a result of subsequent investigation, shall follow the same ground water sampling requirements listed in **Directives D.3 (a) and D.3.(b)** of this Order. For all additional groundwater wells, the discharger shall report analytical results for all constituents listed in **Directive D.3(c)(ii)** for the first round. Unless otherwise directed by the RWQCB, all subsequent groundwater samples from additional investigation wells [other than those specified in **Directive D.3(c)(i)** of this Order] shall be collected semi-annually and may be analyzed only for VOCs.
 - e) Groundwater samples from additional ground water monitoring wells shall be analyzed for general minerals analyses (major ions) annually. Reported results from general minerals analyses shall be accompanied by an evaluation of the results from a cation-anion balance calculation in addition to other laboratory quality assurance and quality control (QA/QC) data.
 - f) All additional groundwater-monitoring wells shall be properly developed after construction and prior to collecting samples for the purpose of complying with the water quality monitoring requirements in this Order. The discharger shall provide a description of the “development method(s)” employed at each new monitoring well in an appendix to the next available semi-annual report.
4. All monitoring reports shall be signed by an authorized person(s) as required by **Report Declaration, Directive G** of this Order.

E. SITE MAINTENANCE

- 1. The discharger shall perform inspections of the site as defined in this Order and report the results **semi-annually**. The report shall contain information on the conditions observed at the site and a discussion of any significant findings with regard to:
 - a) General site condition;
 - b) Surface cover and slope;
 - c) Drainage facilities;
 - d) Groundwater monitoring networks;
 - e) Observation of seepage from the site; and
 - f) Maintenance activities at the site.

F. REPORTS TO BE FILED WITH THE RWQCB

All reports shall be submitted no later than one month following the end of the respective Reporting Period. The reports shall be comprised of at least the following in addition to the specific contents listed for each respective report type:

1. Transmittal Letter

A letter summarizing the essential points shall be submitted with each report. The transmittal letter shall include:

- a) A discussion of any violations of this Cleanup and Abatement Order found since the last such report was submitted and shall describe actions taken or planned for correcting the violations. If the discharger has previously submitted a detailed time schedule for correcting the violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter;
- b) In order to assist the RWQCB in processing of correspondence and reports submitted in compliance with this cleanup and abatement order, the discharger shall include the following code number in the header or subject line portion of all correspondence or reports submitted to the RWQCB: LAND 06-0215.05.

2. Semi-Annual Summary Report

The discharger shall submit a semi-annual report to the RWQCB covering the previous six months. The semi-annual Reporting Periods end on **September 30** and **March 30**, respectively. The semi-annual report shall contain, but not be limited to the following:

- a) Site maintenance - A summary of quarterly inspections and a discussion of any significant findings as described in **Site Maintenance, Directive E** of this Order.
- b) Flowrate/direction - For each monitored groundwater body, a description and graphical presentation (*e.g.*, arrow on a map) of the velocity and direction of ground water flow under/around the site, based upon water level elevations observed during the collection of the water quality data submitted in compliance with this Order.
- c) Well Information - For each monitoring well the discharger shall provide: a description of the method and time of water level measurement; a description of the method of purging used both before sampling to remove stagnant water

in the well, and a description of purging method used to collect groundwater samples from the well.

- d) Sampling Information - For each Monitoring Point and Background Monitoring Point addressed by the report, a description of the type of pump - or other device - used and its vertical placement for sampling, and a detailed description of the information contained in **Records of Monitoring Information, Directive D.2** of this Order.
- e) Map - A map (or copy of an aerial photograph) showing the locations of observation stations all Monitoring Points, and all Background Monitoring Points.

3. Annual Summary Report

The discharger shall submit an annual report to the RWQCB covering the previous monitoring year. The annual Reporting Period ends **March 30**. This report may be combined with the Winter/Spring semiannual report. The annual report shall include, but not be limited to the following:

- a) Graphical Presentation of Analytical Data - For each monitoring point, submit in graphical format the laboratory analytical data for all samples collected within at least the previous five calendar years. Each graph shall plot the concentration of the constituent over time for a given monitoring point, at a scale appropriate to show trends or variations in water quality.
- b) Compliance Record Discussion - A comprehensive discussion of the compliance record, result of any corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
- c) Summary of Changes - A written summary of the monitoring results and monitoring system(s), indicating any changes made or observed since the previous annual report.
- d) Map - A topographic map at appropriate scale, showing the direction of ground water flow at the landfill site.

4. Schedule for Monitoring Reports

Monitoring reports shall be submitted to the RWQCB in accordance with the following schedule:

Report Frequency	Report Period	Report Due
Semi-annually	April to September	October 30
	October to March	April 30
Annual	April to March	April 30

5. Notification of Emergency Conditions

The discharger shall notify the RWQCB by telephone or facsimile **within 24-hours** of any conditions that is created by the discharge of wastes to land or water resources resulting from corrective actions taken at this site. The initial notification must be followed by a detailed written description of the discharge, an explanation of the conditions which lead to the discharge of wastes and the emergency remedial actions taken to mitigate the effects of the discharge. The written notification shall be sent to the RWQCB by registered mail.

G. REPORT DECLARATION

All applications, reports, or information submitted to the RWQCB shall be signed and certified as follows:

1. Use of Registered Professionals.

The discharger shall provide documentation that plans and reports required under this Order are prepared under the direction of appropriately qualified professionals. California Business and Professions Code Sections 6735, 7835 and 7835.1 require that engineering and geologic evaluations and judgements be performed by or under the direction of registered professionals. A statement of qualifications and registration numbers of the responsible lead professionals shall be included in all plans and reports submitted by the discharger. The lead professional shall sign and affix their registration stamp to the report, plan or document.

2. Required Signatures and Certification Statement

All written reports submitted to the RWQCB in compliance with this Order shall be signed by the discharger and contain the following certification statement:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of civil liabilities imposed administratively by the RWQCB or imposed by the Superior Court.”

H. REPORTING TO THE RWQCB

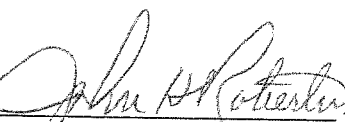
All monitoring and technical reports shall be submitted to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340
Attn: Supervisor Land Discharge Unit

I. NOTIFICATIONS

1. The California Water Code Section 13350 provides that any person who intentionally or negligently violates any cleanup and abatement order issued, reissued, or amended by this RWQCB is subject to administrative civil liability of up to five thousand (5,000) dollars per day of violation. The Superior Court may impose civil liability of up to fifteen thousand (15,000) dollars per day of violation.
2. The California Water Code Section 13268 provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor and may be liable civilly in accordance with this section.
3. Pursuant to CWC § 13304(c), the RWQCB is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the RWQCB 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.

Ordered By



JOHN H. ROBERTUS

Executive Officer

March 27, 2003

TABLE 1:

SUMMARY OF COMPLIANCE DATES
OTAY MESA VENTURES II, L.L.C.
FORMER OMAR RENDERING FACILITY
SUMMARY OF COMPLIANCE DATES FOR ORDER NO. 2003-0080

DIRECTIVE NO.	SUBMITTAL TO RWQCB	DUE DATE
B.3	Initial Site Conceptual Model	May 30, 2003
B.4	Comprehensive Site Investigation Report	August 29, 2003
C.2(f)	Identification of affected Property Owners and Occupants	Within 30-days after determination of offsite migration of pollutants
C.2(h)	Comprehensive Feasibility Study Report	December 30, 2003
F.1, F.2; F4; and H	Semiannual Monitoring Reports	October 30 April 30
F.1, F.3; F4; and H	Annual Monitoring Reports	April 30