CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

CLEANUP and ABATEMENT ORDER NO. 99-42
FOR THE COUNTY OF SAN DIEGO
JAMACHA SANITARY LANDFILL
SAN DIEGO COUNTY

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

1. The County of San Diego discharged municipal solid waste (MSW) at the Jamacha Sanitary Landfill (Jamacha Landfill) from 1960 until October 1978. The discharge of solid waste at the Jamacha Landfill is regulated by Order No. 94-164 “Waste Discharge Requirements for Post-Closure Maintenance County of San Diego Jamacha Sanitary Landfill.” The Jamacha Landfill is subject to the requirements of California Code of Regulations Title 27, Division 2, Subdivision 1 (27 CCR).

2. The Jamacha Landfill is located at 11900 Singer Lane in Rancho San Diego, California within Section 35, Township 16 South, Range 1 West of the San Bernardino Baseline and Meridian. The landfill is approximately 750 feet west of State Route Highway 94 (Campo Road) at the Steele Canyon Bridge (Figure 1).

3. The Jamacha Landfill is adjacent to the Sweetwater River, three miles upstream of the Sweetwater Reservoir. The facility is located within the Jamacha Hydrologic Subarea (909.21) of the Middle Sweetwater Hydrologic Area (909.20) of the Sweetwater Hydrologic Unit (909.00). The Basin Plan designates Municipal and Domestic Supply as the beneficial uses for the surface and ground water within the Middle Sweetwater Hydrologic Area as.

Water Quality Assessment

4. In May 1994, a solid waste water quality assessment test (SWAT) identified eighteen volatile organic compounds and elevated concentrations of inorganic constituents in groundwater monitoring wells downgradient of the landfill. In July 1994, Regional Board staff determined that migration of waste from the landfill was occurring.

5. The “1998 Annual Report- Detection Monitoring Program- Jamacha Landfill,” indicates that volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), and elevated concentrations of inorganic constituents are being detected in downgradient groundwater monitoring. Listed below are some of the organic compounds detected during past monitoring events and their related concentrations that are in excess of maximum concentration limits (MCL), and
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inorganic constituents detected in excess of water quality objectives listed in the Basin Plan:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Concentration</th>
<th>MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4-Dichlorobenzene</td>
<td>30 ug/l</td>
<td>5 ug/l</td>
</tr>
<tr>
<td>cis-1,2-Dichloroethene</td>
<td>115 ug/l</td>
<td>6 ug/l</td>
</tr>
<tr>
<td>Methylene chloride</td>
<td>65 ug/l</td>
<td>5 ug/l</td>
</tr>
<tr>
<td>Tetrachloroethene</td>
<td>115 ug/l</td>
<td>5 ug/l</td>
</tr>
<tr>
<td>Trichloroethene</td>
<td>140 ug/l</td>
<td>5 ug/l</td>
</tr>
<tr>
<td>Vinyl chloride</td>
<td>65 ug/l</td>
<td>0.5 ug/l</td>
</tr>
</tbody>
</table>

Chloride                  | 1220 mg/l     | 250 mg/l|
Total Dissolved Solids    | 4150 mg/l     | 1000 mg/l|

Note: ug/l = micrograms per liter
       mg/l = milligram per liter

The detected concentrations listed above are believed to be from both landfill gas and landfill leachate migration to groundwater.

6. The discharge of VOC, SVOC, and inorganic constituents from the landfill to groundwater has created a condition of pollution and threatens to discharge to surface waters creating a condition of nuisance or pollution.

7. The California Water Code (CWC) Section 13304 requires that any person who has discharged or discharges waste into waters of the State in violation of any waste discharge requirement or other Order or prohibition issued by a Regional Board or the State Board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the State and creates, or threatens to create, a condition of pollution or nuisance may be required to clean up the discharge and abate the effects thereof. CWC Section 13304 authorizes Regional Boards to require complete cleanup of all waste discharged and restoration of affected water to background conditions (i.e., the water quality that existed before the discharge).

8. Pursuant to CWC Section 13304, the Regional Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Regional 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.
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9. Where the discharge of waste has resulted in discharges subject to CWC Section 13304, the following regulations and policies shall be considered when establishing cleanup levels:

(a) California Code of Regulations Title 27, Division 2, Subdivision 1, Solid Waste Requirements, applies to this discharge and requires that cleanup and abatement actions intended to contain wastes at the place of release are to implement the applicable provisions of that chapter, to the extent feasible (27 CCR Section 20090(d)). 27 CCR Chapter 3, Subchapter 3, Article 1 prescribes a methodology for establishing cleanup standards and undertaking corrective actions where discharges to a waste management unit have resulted in discharges subject to CWC Section 13304.

(b) State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California, applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Non-background cleanup levels must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives.

(c) State Board Resolution No. 92-49 (as amended), Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304, applies to this discharge. This order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

10. This action is an Order to enforce the laws and regulations administered by the Regional Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.

11. The Regional Board has notified the County of San Diego and all interested agencies and persons of its intent under CWC Section 13304 to issue a Cleanup and Abatement Order for the discharge, and has provided them with an opportunity to submit their written comments.

12. The Regional Board, at a public meeting, heard and considered all comments pertaining to this discharge.
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IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, the County of San Diego or its agents, successors, or assigns, (hereinafter referred to as discharger) shall take remedial action to cleanup and abate the effects of the discharge, as described in the above findings:

A. DIRECTIVES

1. The discharger shall institute an evaluation monitoring program pursuant to 27 CCR Section 20425 whenever there is “measurably significant” evidence of a release pursuant to Sections 20415(e)(7).

2. In conjunction with an evaluation monitoring program and/or a corrective action program, the discharger shall continue to conduct a detection monitoring program pursuant to 27 CCR Section 20420 as necessary to provide the best assurance of the detection of subsequent releases from the waste management unit.

3. Pursuant to 27 CCR Section 20425(a)(2) the evaluation monitoring program shall be used to assess the nature and extent of the release from the waste management unit and to design a corrective action program meeting the requirements of 27 CCR Section 20430.

4. The discharger shall collect and analyze all data necessary to assess the nature and extent of the release from the waste management unit. This assessment shall include a determination of the spatial distribution and concentration of each constituent of concern throughout the zone(s) affected by the release. The discharger shall complete and submit this assessment within 90 days of establishing an evaluation monitoring program.

5. Based on the data collected pursuant to 27 CCR Sections 20425(b) and (e), the discharger shall update the engineering feasibility study for corrective action required pursuant to 27 CCR Section 20420(k)(6). The discharger shall submit this engineering feasibility study to the Regional Board within 90 days of establishing an evaluation monitoring program.

6. Based on the data collected pursuant to Directive No. 4 and on the engineering feasibility study submitted pursuant to Directive No. 5 of this section, the discharger shall submit an amended report of waste discharge to establish a corrective action program meeting the requirements of 27 CCR Section 20430. The discharger shall submit this report to the Regional Board within 90 days of establishing an evaluation monitoring program. This report shall at a minimum include the following information:

(a) Delineation of Release- a detailed assessment of the nature and extent of the release from the waste management unit;
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(b) Water Standard- a proposed water quality protection standard, including any proposed concentration limits greater than background under 27 CCR Section 20400, and all data necessary to justify each such limit;

c) Corrective Action Measures- a detailed description of proposed corrective action measures that will be taken to achieve compliance with the water quality protection standard proposed for a corrective action program; and

d) Monitoring Plan- a plan for a water quality monitoring program that will demonstrate the effectiveness of the proposed corrective action.

7. In conjunction with the assessment conducted pursuant to Directive No. 4, the discharger shall monitor groundwater, surface water, and the unsaturated zone to evaluate changes in water quality resulting from the release from the waste management unit. In conducting this monitoring, the discharger shall comply with the following requirements:

(a) the discharger shall install water quality monitoring systems that are appropriate for evaluation monitoring and that comply with the provisions of 27 CCR Section 20415. These water quality monitoring systems may include all or part of existing monitoring systems;

(b) the discharger shall propose for approval by the Regional Board a list of monitoring parameters for each medium (groundwater, surface water, and the unsaturated zone) to be monitored pursuant to 27 CCR Section 20415. The list for each medium shall include all hazardous constituents that have been detected in that medium and those physical parameters, waste constituents, and reaction products that provide a reliable indication of changes in water quality resulting from any release from the waste management unit to that medium.

(c) the discharger shall monitor for the monitoring parameters listed in the waste discharge requirements pursuant to Directive No. 7(b). The discharger shall use data analysis methods and frequencies for collecting samples and for conducting data analysis that comply with 27 CCR Section 20415(e)(7)

(d) in addition to monitoring for the monitoring parameters specified pursuant to Directive No. 7(b) of this section, the discharger shall periodically, at least every five years, monitor for all constituents of concern specified in the waste discharge requirements and evaluate changes in water quality, pursuant to 27 CCR Section 20415(e)(7), due to the release from the waste management unit.
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(e) the discharger shall conduct water quality monitoring for each monitoring parameter and each constituent of concern in accordance with 27 CCR Section 20415(e)(12). The discharger shall maintain a record of water quality analytical data as measured and in a form necessary for the evaluation of changes in water quality due to a release from the waste management unit;

(f) while awaiting final approval of an amended report of waste discharge to establish a corrective action program, the discharger shall evaluate all water quality data obtained pursuant to Directive No. 7, with respect to the design criteria for the corrective action program. If the evaluation indicates that the plan for corrective action is insufficient, the discharger shall:

(A) notify the Regional Board by certified mail within 7 days of such determination; and

(B) within 90 days of such determination, submit for approval by the Regional Board any appropriate changes to the amended report of waste discharge.

8. Pursuant to 27 CCR Section 20425(f) the discharger may make an optional demonstration to the satisfaction of the Regional Board that a source other than the waste management unit is the cause of the release.

9. Pursuant to 27 CCR Section 20425(h) if the discharger determines that the evaluation monitoring program does not satisfy the requirements of Section 20425, within 90 days the discharger shall submit an amended report of waste discharge to make any appropriate changes to the program.

10. The discharger shall institute a corrective action program under 27 CCR Section 20430, when the Regional Board determines that the assessment of the nature and extent of the release and the design of a Corrective Action Program have been satisfactorily completed and the Regional Board approves the application for an amended report of waste discharge for corrective action submitted by the discharger during an evaluation monitoring program pursuant to 27 CCR Section 20425(d).

11. The discharger shall establish a corrective action program for the waste management unit, and at a minimum, comply with the requirements of 27 CCR Section 20430 "Corrective Action Program" for that unit.

12. The discharger shall take corrective action to achieve the following goals:

(a) to remediate releases from the unit;
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(b) to ensure that the discharger achieves compliance with the Water Standard adopted under 27 CCR 20390 for that unit.

13. The discharger shall implement corrective action measures that ensure that constituents of concern achieve their respective concentration limits at all monitoring points and throughout the zone affected by the release, including any portions thereof that extend beyond the facility boundary, by removing the waste constituents or treating them in place.

14. In conjunction with the corrective action measures, the discharger shall establish and implement a water quality monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for an evaluation monitoring program as prescribed under Directive No. 1. and shall be effective in determining compliance with the water standard under 27 CCR Section 20390, and in determining the success of the corrective action measures pursuant to Directive No. 13.

B. PROVISIONS

1. NO NUISANCE: The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in CWC Section 13050(m).

2. Good Operation and Maintenance (O&M): The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.

3. Cost Recovery pursuant to California Water Code Section 13304: The discharger shall be liable for all reasonable costs actually incurred by the Regional Board to investigate unauthorized dischargers of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. Disputes raised by the discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.

4. If the Jamacha Landfill site is enrolled in a State Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program.

5. Access to Site and Records: In accordance with CWC Section 13267(c), the discharger shall permit the Regional Board or its authorized representative;

(a) Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
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(b) Access to copy any records required to be kept under the requirements of this Order.

(c) Inspection of any monitoring or remediation facilities installed in response to this Order.

(d) Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.

6. Contractor/Consultant Qualifications: All hydrogeologic documents (plans, specifications, and reports) shall be signed by and stamped with the seal of a California Registered Geologist, a Specialist Geologist, California Certified Engineering Geologist, or a California Registered Civil Engineer with appropriate hydrologic experience.

7. Lab Qualifications: All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Regional Board using approved US Environmental Protection Agency methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control (QA/QC) records for Regional Board review. This provision does not apply to analyses that can only reasonably be performed on-site (e.g. temperature).

8. Changed Owner or Operator: This Order is not transferable to any person except after notice to the Regional Board of any proposed transfer of the property and/or responsibility to a new discharger. The Regional Board may require modification, revocation, or reissuance of this Order to change the name of the discharger and to incorporate such other requirements as may be necessary under the California Water Code.

9. Reporting of Hazardous Substance Release: If any hazardous substance is discharged in, or on, any waters of the State, or discharged or deposited where it is, or likely will be, discharged in, or on, any waters of the State, the discharger shall report such discharge to the Regional Board by calling (858) 467-2952 during regular office hours (Monday through Friday, 0800 to 1700). A written report shall be filed with the Regional Board within five working days describing the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified. This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

10. If the discharger demonstrates that a source other than the waste management unit caused the presence of waste constituents in groundwater or that the waste
constituents are an artifact caused by an error in sampling, analysis, or statistical evaluation, or by natural variation in groundwater, surface water, or the unsaturated zone, the Regional Board shall rescind the Cleanup and Abatement Order and the discharger shall re-institute a detection monitoring program meeting the requirements of 27 CCR Article 1. In making a demonstration under this subsection, the discharger shall:

(a) notify the Regional Board by certified mail that the discharger intends to make a demonstration;

(b) submit a report to the Regional Board that demonstrates that a source other than the waste management unit caused the presence of waste constituents in groundwater/surface water or that the waste constituents resulted from error in sampling, analysis, or evaluation, or from natural variation in groundwater, surface water, the unsaturated zone, or other;

(c) submit to the Regional Board an amended report of waste discharge to re-institute a detection monitoring program for the unit. This report shall propose all appropriate changes to the monitoring program; and

11. Corrective action measures taken pursuant to Directive No. 10 may be terminated when the discharger demonstrates to the satisfaction of the Regional Board that the concentrations of all constituents of concern are reduced to levels below their respective concentration limits.

12. After suspending the corrective action measures, the waste management unit shall remain in the Corrective Action Program until an approved Detection Monitoring Program meeting the requirements of 27 CCR Section 20420 has been incorporated into waste discharge requirements and until the discharger demonstrates to the satisfaction of the Regional Board that the waste management unit is in compliance with the water standard. This demonstration shall be based on the following criteria and requirements:

(a) The concentration of each constituent of concern in each sample from each monitoring point in the Corrective Action Program for the waste management unit must have remained at or below its respective concentration limit during a proof period of at least one year, beginning immediately after the suspension of corrective action measures; and

(b) The individual sampling events for each monitoring point must have been evenly distributed throughout the proof period and have consisted of no less than eight sampling events per year per monitoring point.

13. The discharger shall report, in writing, to the Regional Board on the effectiveness of the corrective action program. The discharger shall submit these reports at
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least semi-annually. More frequent reporting shall be required by the Regional Board as necessary to ensure the protection of human health and the environment.

14. If the discharger determines that the corrective action program does not satisfy the provisions of this section, the discharger shall, within 90 days of making the determination, submit an amended report of waste discharge to make appropriate changes to the program.

15. Any time the Regional Board determines that the corrective action program does not satisfy the requirements of this section, the discharger shall, within 90 days of receiving written notification of such determination by the Regional Board, submit an amended report of waste discharge to make appropriate changes to the program.

16. Periodic Review: The Regional Board will review this Order periodically and may revise it when necessary. The discharger may request revisions and upon review the Executive Officer may recommend that the Regional Board revise these requirements.

17. Notifications/Reporting requirements: 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 CWC Sections 13267 and/or 13350, or referral to the attorney general for injunctive relief or civil or criminal liability.

Date: June 29, 1999

Ordered by: [Signature]
John H. Rebertus
Executive Officer

Attachments:
Site Map

JHR:MJA:dflj