

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

**ORDER NO. 94-164  
WASTE DISCHARGE REQUIREMENTS  
FOR POST-CLOSURE MAINTENANCE  
FOR  
COUNTY OF SAN DIEGO  
JAMACHA SANITARY LANDFILL**

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

**Background**

1. On April 18, 1960, C. S. Goode, Assistant Director of Public Works, County of San Diego submitted a Report of Waste Discharge (RWD) proposing the establishment of a refuse disposal site. The RWD proposed landfilling on approximately 75 acres.
2. On September 1, 1960, the State of California San Diego Regional Water Pollution Control Board adopted Resolution 60-R25, "**A Resolution Prescribing Requirements Regulating the Discharge of Waste from a Sanitary Landfill to be Operated in and by the County of San Diego.**" Refuse materials permitted for disposal included residential and commercial municipal trash. Disposal of industrial, chemical or liquid waste was prohibited.
3. The County of San Diego began landfill operations in 1960. The disposal site was known as Jamacha Junction Sanitary Landfill during its operating life. The County terminated landfill operations on October 1, 1978. However, subsequent to cessation of landfill disposal operations, the San Diego County Department of Sanitation and Flood Control continued to use the remaining capacity of the landfill for emergency purposes. The landfill is now referred to as the Jamacha Sanitary Landfill.
4. During landfill operations a total of 3.5 million cubic yards of refuse was disposed of onto approximately 46 acres of the 75 acres.
5. The Jamacha Sanitary Landfill site is currently used as non-irrigated open space. The County of San Diego has not identified any plans to change this land use in the future.
6. On May 13, 1993, the County of San Diego submitted a Final Closure and Post-Closure Maintenance Plan (FCPCMP) for the Jamacha Sanitary Landfill. By letter dated October 7, 1994, the County officially withdrew the FCPCMP.

7. As part of the FY 1994/95 **Waste Discharge Order Update Program**, Resolution No. 60-R25 has been reviewed by Regional Water Control Board (RWQCB) staff as required by Section 13263 of the California Water Code. This order updates the findings and requirements of Resolution No. 60-R25 and includes a monitoring and reporting program in order to address current State and Regional Board policies and regulations and the current status of the project. Information reviewed and incorporated in this update include technical information contained in the FCPCMP, ground water monitoring reports, and the Solid Waste Assessment Test Report.

#### **Closure Regulations**

8. Pursuant to California Code of Regulations Title 23, Division 3, Chapter 15 (Chapter 15), Section 2510 (g), landfills which are closed, abandoned, or inactive on the effective date of these regulations (November 1984) are not specifically required to be closed in accordance with Article 8 requirements. Since Jamacha Sanitary Landfill ceased operations in 1978, it is not required to be closed in accordance with Chapter 15.
9. Pursuant to Chapter 15, Section 2510 (g), persons responsible for discharges at waste management units which are closed, abandoned, or inactive may be required to develop and implement a monitoring program. If water quality impairment is found, such persons may be required to develop and implement a corrective action program based on the provisions of Chapter 15.

#### **Water Quality and Site Investigations**

10. The Jamacha Sanitary Landfill is subject to the requirements of Water Code Section 13273, which requires the operator to perform a solid waste water quality assessment test (SWAT) to determine if the site is leaking waste to surface or ground water. The County of San Diego submitted a SWAT report in May 1994.
11. On July 18, 1994 RWQCB staff made the preliminary determination that migration of waste constituents from the landfill is occurring and that local ground water in the landfill vicinity has been adversely impacted. The SWAT report identified eighteen volatile organic compounds which were detected in ground water from the site during the test period (maximum concentrations ranged up to 91  $\mu\text{g/l}$ ). The SWAT report also noted elevated concentrations of inorganic constituents were detected in monitoring wells downgradient of the Jamacha Sanitary Landfill.
12. An air solid waste assessment test (Air SWAT) was conducted for the Jamacha Sanitary Landfill and submitted to the San Diego County Air Pollution Control District (APCD) on November 18, 1988. After review the APCD indicated that landfill gas migration was occurring at the site.

13. Landfill gas migration monitoring probes approved by the San Diego County Air Pollution Control District (APCD) are to be installed at the site. The system is to consist of thirteen monitoring probes. The County of San Diego has indicated that the system will begin operation in May 1995.
14. On January 31, 1994, the County of San Diego, as a first step toward corrective action of the ground water and gas problems identified in the SWAT and Air SWAT reports at the Jamacha Sanitary landfill, submitted a workplan which contained a schedule for improved site maintenance, a ground water monitoring program, and a landfill gas extraction system.

### Site Description

15. The FCPCMP indicated that existing cover on the landfill consists of fine to coarse silty-sand in excess of two feet thick.
16. The FCPCMP indicated that the existing deck area of the Jamacha Sanitary Landfill is less than 3 percent and the existing slopes are at a maximum 2.5:1 (horizontal to vertical).
17. The FCPCMP indicated that ground water beneath the site occurs within fractured granitic rocks at elevations ranging from 425 to 301 feet above mean sea level (MSL) and flows in a southeast direction.
18. The geology in the area of the Jamacha Sanitary Landfill consists primarily of intrusive metavolcanic rocks associated with the Santiago Peak Volcanics Formation and moderately to highly fractured granitic rocks associated with the Southern California batholith. Alluvium occurs as thin and discontinuous layers in drainage courses and canyon bottoms.
19. There are no known faults in the vicinity of the landfill. The nearest fault to the Jamacha Sanitary Landfill is the Elsinore fault approximately 40 miles northeast.
20. Surface runoff is directed away from the landfill by drainage channels and drain pipes which lead either directly to the adjacent Sweetwater River or to a small canyon east of the site that is tributary to Sweetwater River northeast of the site.

### Water Quality Control Plan

21. The **Comprehensive Water Quality Control Plan Report**, San Diego Basin (9) (Basin Plan), adopted by this Regional Board on March 17, 1975: and subsequently approved by the State Board on March 20, 1975. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board.

22. The Jamacha Sanitary Landfill is located in Rancho San Diego, approximately one-half mile south of the intersection of State Highway 94 and Jamacha Road, which lies within the Middle Sweetwater Hydrologic Area (9.20) of the Sweetwater Hydrologic Unit. The landfill is in the vicinity of Sweetwater River Valley Section 35, Township 16S, Range 1W, San Bernardino Base and Meridian (SBB&M) co-ordinate system. The location of the Jamacha Sanitary Landfill is shown on Attachment No. 1 to Order No. 94-164.

23. The Basin Plan establishes the following beneficial uses for the waters of the Middle Sweetwater Hydrologic Area (9.20) of the Sweetwater Hydrologic Unit:

a. Inland Surface Waters

1. Municipal and domestic supply
2. Agricultural supply
3. Industrial service supply
4. Industrial process supply
5. Water contact recreation
6. Non contact water recreation
7. Warm fresh-water habitat
8. Wildlife habitat

b. Ground Water

1. Municipal and domestic supply
2. Agricultural supply
3. Industrial service supply

24. The Basin Plan contains the following prohibitions which are applicable to the site:

- a. "The dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste directly into inland waters or watercourses or adjacent to watercourses in any manner which may permit its being washed into the watercourse is prohibited."
- b. "Dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste into natural or excavated sites below historic water levels or deposition of soluble industrial wastes at any site is prohibited, unless such site has been specifically approved by the Regional Board for that purpose."
- c. "Land grading and similar operations causing soil disturbance which do not contain provisions to minimize soil erosion and limit suspended matter in are runoff are prohibited."

25. The Basin Plan established the following water quality objectives for water of the Middle Sweetwater Hydrologic Area (9.20):

Constituent	Surface Water	Ground Water
Total Dissolved Solids	500 mg/l	1000 mg/l
Chloride	250 mg/l	400 mg/l
Percent Sodium	60%	60%
Sulfate	250 mg/l	500 mg/l
Nitrate (as NO <sub>3</sub> )	---	10 mg/l
Nitrogen & Phosphorus	--- <sup>1</sup>	---
Iron	0.3 mg/l	0.3 mg/l
Manganese	0.05 mg/l	0.05 mg/l
Methylene Blue Active Substances	0.5 mg/l	0.5 mg/l
Boron	0.5 mg/l	0.5 mg/l
Odor	none	none
Turbidity	20 NTU	5 NTU
Color	20 Units	15 Units
Fluoride	1.0 mg/l	1.0 mg/l

The above concentrations not to be exceeded more than 10% of the time.

Note: mg/l = milligrams per liter      NTU = Nephelometric Turbidity Units

<sup>1</sup>Concentrations of nitrogen and phosphorus, by themselves or in combinations with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total Phosphorus (P) concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10 percent of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

**CEQA and Other Legal References**

26. This facility is an existing facility and as such is exempt from the provisions of the California Environmental Quality Act in accordance with Title 14, California Code of Regulations, Chapter 3, Article 19, Section 15301.
27. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to the following:
  - a. Past, present, and probable future beneficial uses of water.
  - b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
  - c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
  - d. Economic considerations.
  - e. The need for developing housing within the region.
  - f. Beneficial uses to be protected and water quality objectives reasonably required for that purpose.
  - g. Other waste discharges.
  - h. The need to prevent nuisance.
28. The Regional Board has considered all water resource related environmental factors associated with the Jamacha Sanitary Landfill.
29. The Regional Board has notified the County of San Diego and all known interested parties of the intent to update waste discharge requirements for the Jamacha Sanitary Landfill.
30. The Regional Board in a public meeting, heard and considered all comments pertaining to the Jamacha Sanitary Landfill.

**IT IS HEREBY ORDERED**, That the County of San Diego (hereinafter discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following at the Jamacha Sanitary Landfill:

**A. PROHIBITIONS**

1. Discharges of wastes to lands which have not been specifically described to the Regional Board and for which valid Waste Discharge Requirements are not in force are prohibited.
2. The discharge of waste shall not:
  - a. Cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin;
  - b. Cause the occurrence of objectionable tastes and odors in water pumped from the basin;
  - c. Cause waters pumped from the basin to foam;
  - d. Cause the presence of toxic materials in waters pumped from the basin;
  - e. Cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0;
  - f. Cause this Regional Board's objectives for the ground or surface waters of the Middle Sweetwater Hydrologic area, as established in the Basin Plan, to be exceeded; and
  - g. Cause pollution, contamination or nuisance or adversely affect beneficial uses of the ground or surface waters of the Middle Sweetwater Hydrologic Area as established in the Basin Plan.
3. Odors, vectors, and other nuisances of waste origin beyond the limits of the landfill site are prohibited.
4. The discharge of waste from the Jamacha Sanitary Landfill to surface drainage courses or to usable ground water is prohibited.
5. Disposal of liquid condensate generated by the extraction of landfill gas at the site is prohibited.
6. Basin Plan prohibitions shall not be violated.

**B. POST-CLOSURE MAINTENANCE SPECIFICATIONS**

1. Annually, prior to the anticipated rainy season but not later than **October 31**, any necessary erosion control measures shall be implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion, ponding, flooding, or to prevent surface drainage from contacting or percolating through wastes at the facility.

2. The landfilled areas shall be adequately protected from any washout, erosion of wastes or cover material. Adequate protection is defined as protection against a 100-year 24-hour storm event.
3. The structural integrity and effectiveness of all containment structures and the existing cover shall be maintained as necessary to correct the effects of settlement or other adverse factors.
4. The surface drainage system shall be designed to adequately handle the rainfall from a 100-year 24 hour storm event.
5. Vegetation used at the site shall be selected to require minimum irrigation and maintenance, and shall not impair the integrity of containment structures including the existing cover. Landscaping overlaying the landfill portion of the site shall be shallow rooted native grasses and shrubs suited for inland valleys of southern California.
6. The site shall be provided with at least two permanent monuments installed by a licensed land surveyor or a registered civil engineer, from which the location and elevation of wastes, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period.
7. The migration of landfill gas from the site shall be controlled as necessary to ensure that landfill gases and gas condensate are not discharged to surface waters, or ground waters. Condensate shall be collected and removed from the site.
8. Surface drainage from the landfill is subject to State Board Order No. 91-13-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, "Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.

### **C. PROVISIONS**

1. Neither the treatment nor the discharge of waste shall create a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code.
2. The discharger shall comply with applicable provisions of Chapter 15 and all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for: (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a Report of Waste Discharge in application for new or revised Waste Discharge Requirements.



3. In an enforcement action, it shall not be a defense for the discharger to say, it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order.
4. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
5. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate laboratory and process controls including appropriate quality assurance procedures.
6. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
  - a. Violation of any terms or conditions of this Order;
  - b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or
  - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the discharger for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

7. This Order is not transferable to any person except after notice to the Executive Officer. The Regional Board may require modification or revocation and reissuance of this Order to, change the name of the discharger and incorporate such other requirements as may be necessary under the California Water Code. The discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage to a new discharger as described under Reporting Requirement D.3.
8. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from liability under federal, state, or local laws, nor create a vested right for the owner and operator to continue the regulated activity.

9. The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law to:
  - a. Enter upon the discharger premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.
10. A copy of this Order shall be maintained at the local offices of the discharger and shall be available to operating personnel at all times.
11. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
12. Alternatives, exceptions, and exemptions of waivers from requirements of Chapter 15 shall be subject to the approval of the Executive Officer and shall be authorized only as provided for by Chapter 15. Implemented alternatives to Chapter 15 requirements shall meet the conditions for approval of such alternatives established in Chapter 15 throughout the post-closure period.
13. This Order becomes effective on the date of adoption by the Regional Board. This Order supersedes Order No. 60-R25.

#### **D. REPORTING REQUIREMENTS**

1. The discharger shall file the following reports in accordance with the following schedule:
  - a. Report of Waste Discharge

The discharger shall file a new Report of Waste Discharge at least 120 days prior to the following:

- 1) Significant change in post-closure maintenance activities which would significantly alter existing drainage patterns and slope configurations, or pose a potential threat to the integrity of the site;
- 2) Change in land use other than as described in the findings of this Order;
- 3) Significant change in disposal area e.g., excavation and relocation of waste on site; or
- 4) Any planned change in the regulated facility or activity which may result in noncompliance with this Order.

b. **Workplan**

The discharger shall submit a workplan at least 30 days prior to any maintenance activities that could pose a potential threat to the integrity of the existing landfill cover, alter existing surface drainage patterns or change existing slope configurations. These activities may include, but not be limited to:

- 1) Design and installation of ground water monitoring wells;
- 2) Design and installation of vadose zone monitoring system (e.g., lysimeters, neutron probes, etc.); or
- 3) Placement of soil borings for site investigation purposes.

c. **Written Notification**

The discharger shall provide written notification at least 24 hours prior to any maintenance activities that are minor and/or routine in nature that do not add water, do not inhibit drainage, have limited potential for impacts to beneficial use of water, and will not interfere with future routine maintenance. These activities may include, but not be limited to:

- 1) routine maintenance grading;
- 2) landscaping with minimal/no water application;
- 3) installation of shallow borings into waste that do not extend into surrounding subsoil or ground water;
- 4) gas surveys with temporary probes; or
- 5) replacement/removal of gas collection wells.

2. The discharger shall furnish to the Executive Officer of this Regional Board, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Executive Officer upon request, copies of records required to be kept by this Order.

3. The discharger shall notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage between the current owner and new owner. This agreement shall include an acknowledgement that the existing owner is liable for violations up to the transfer date and that the new owner is liable from the transfer date on. The agreement shall include an acknowledgement that the new owners shall accept responsibility for compliance with this Order.
4. Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information.
5. The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the owner becomes aware of the circumstances. A written submission shall also be provided within five days of the time the owner becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
6. The discharger shall notify the Executive Officer immediately of any slope failure occurring in a waste management unit. Any failure which threatens the integrity of the containment features or the waste management unit shall be promptly corrected after approval of the method and schedule by the Executive Officer.
7. The discharger shall operate and maintain a landfill gas migration control and detection system as required by the Air Pollution Control District (APCD) and the Local Enforcement Agency (LEA).
8. The discharger shall comply with the attached Monitoring and Reporting Program No. 94-164. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 94-164.
9. All applications, reports, or information submitted to the Executive Officer of this Regional Board shall be signed and certified as follows:
  - a. The Report of Waste Discharge shall be signed as follows:
    1. **For a corporation** - by a principal executive officer of at least the level of vice-president.

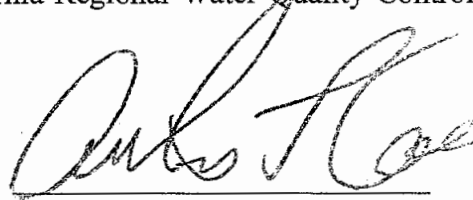
2. **For a partnership or sole proprietorship** - by a general partner or the proprietor, respectively.
  3. **For a municipality, state, federal or other public agency** - by either a principal executive officer or ranking elected official.
  4. **For a military installation** - by the base commander or the person with overall responsibility for environmental matters in that branch of the military.
- b. All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
1. The authorization is made in writing by a person described in paragraph (a) of this provision;
  2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
  3. The written authorization is submitted to the Executive Officer.
- c. Any person signing a document under this Section shall make the following certification:
- "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 fine and imprisonment."
10. The discharger shall submit reports required under this Order and other information requested by the Executive Officer, to:

Executive Officer  
California Regional Water Quality Control Board  
San Diego Region  
9771 Clairemont Mesa Blvd., Suite B  
San Diego, California 92124-1331

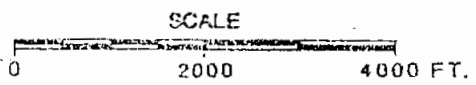
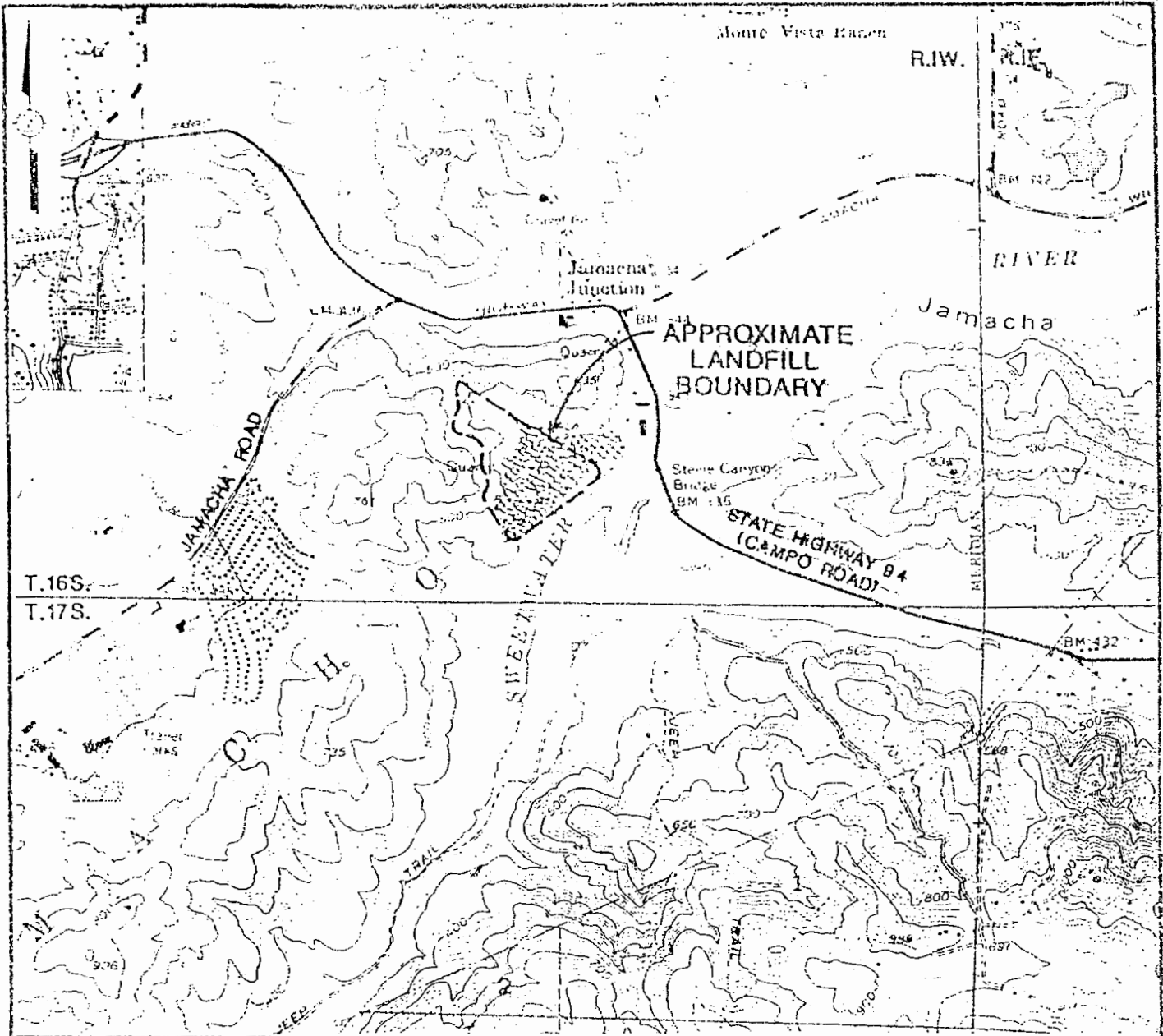
**E. Notifications**

1. These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Section 402 of the Clean Water Act.
2. The California Water Code provides that any person who intentionally or negligently violates any Waste Discharge Requirements issued, reissued, or amended by this Regional Board is subject to administrative civil liability of up to 10 dollars per gallon of waste discharged, or if no discharge occurs, up to 1000 dollars per day of violation. The Superior Court may impose civil liability of up to 10,000 dollars per day of violation or, if a cleanup and abatement order has been issued, up to 15,000 dollars per day of violation.
3. The California Water Code 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 subject to administrative civil liability of up to 1000 dollars per day of violation.
4. Closure of this waste management unit may be subject to regulations of the California Integrated Waste Management Board and the San Diego County Air Pollution Control District.
5. Definitions of terms used in this Order shall be as set forth in California Code of Regulations Chapter 15.

I, Arthur L. Coe, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on December 8, 1994.



ARTHUR L. COE  
Executive Officer



SITE LOCATION MAP  
JAMACHA LANDFILL

REFERENCE:  
7.5 MIN. USGS TOPOGRAPHIC MAP OF JAMUL MOUNTAINS,  
CALIFORNIA QUADRANGLE DATED 1955,  
PHOTOREVISED 1971 AND 1975  
SCALE: 1:24,000