CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 2000-06
WASTE DISCHARGE REQUIREMENTS
FOR THE
RAMONA LANDFILL INC.
A SUBSIDIARY OF ALLIED WASTE INDUSTRIES INC.
RAMONA LANDFILL
SAN DIEGO COUNTY

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

Background

1. On February 24, 1970, this Regional Board adopted Resolution No. 70-R14, **A Resolution Prescribing Requirements for the County of San Diego Regulating the Discharge of Wastes into Ramona Landfill Operated by the County of San Diego.** Resolution No. 70-R14 established requirements for the disposal of Type 2 and Type 3 wastes from the community of Ramona. The Ramona Landfill has been in operation since 1969. The site was formerly operated as a rubbish burn site prior to conversion into a sanitary landfill. Attachment No. 1 to this Order shows the location of the former burn dump and the 80-acre parcel for the Ramona Landfill.

2. Resolution No. 70-R14 classified the site as a Class II-2 landfill. The landfill accepted household, commercial and inert wastes. The site is currently a daily average of 125 tons per day (tpd) of solid waste, with a peak daily tonnage of 295 tpd. The air capacity of the Ramona Landfill is 2.2 million cubic yards (mcy). There is approximately 824, 444 cubic yards of remaining air capacity based on the October 15, 1999 quarterly report submitted to the County of San Diego, Local Enforcement Agency.

3. In 1987 the County of San Diego purchased an additional 80-acre parcel to expand the landfill northwest of the existing 80-acre landfill site. The County of San Diego did not obtain waste discharge requirements for the disposal of waste outside the landfill footprint approved under Resolution No. 70-R14. In order to discharge waste to the expansion area, the discharger shall submit a complete Report of Waste Discharge in accordance with Water Code Section13260 and obtain regulatory approval for the landfill expansion. The location of the northwest expansion area is also shown on Attachment No. 1 to this Order.

4. On September 24, 1990, this Regional Board adopted Addendum No. 1 to Resolution No. 70-R14, **An Addendum Modifying the Waste Discharge Requirements for the Ramona Landfill for Management of Sewage Sludge, County of San Diego.** Addendum No. 1 to Resolution No. 70-R14 amended waste discharge requirements for the use of nonhazardous, non-infectious sewage sludge and soil mixture as cover material.

5. The County of San Diego notified the Regional Board by letter dated January 20, 1994 that as of January 28, 1993 the Sludge Mixing program was being discontinued by order of the California Integrated Waste Management Board (CIWMB) until further approvals were obtained from the CIWMB. Pursuant to the CIWMB order suspending the sludge program, the sludge reporting requirements of the RWQCB as required in Addendum 1 to Resolution No. 70-R14 are also suspended until further notice by this Regional Board.

6. On October 15, 1997, this Regional Board adopted Addendum No. 2 to Resolution No. 70-R14, **An Addendum Transferring Responsibility for Resolution No. 70-R14 From County of San Diego to Ramona Landfill Inc., and Allied Waste Industries Inc.** Addendum No. 2 to Resolution No. 70-R14 transferred ownership of the Ramona Landfill from the County of San Diego to Ramona Landfill, Inc., a subsidiary of Allied Waste Industries Inc.

7. On December 10, 1997, this Regional Board adopted Addendum No. 3 to Resolution No. 70-R14, **An Addendum Approving an Engineered Alternative Liner for Ramona Landfill Inc. and Allied Waste Industries, Inc., San Diego County**. Addendum No. 3 to Resolution No. 70-R14 approved an engineered alternative liner for Phase III of the Ramona Landfill.

Subtitle D

8. On August 16, 1993, this Regional Board adopted Order No. 93-86, **Waste Discharge Requirement Amendment for all MSW Landfills in this Region, to Implement State Water Board Resolution No. 93-62, Adopted June 17, 1993, as State Policy for Water Quality Control Under Section 13140 of the Water Code.** Order No. 93-86 amended waste discharge requirements for all landfills in this region that received wastes after October 9, 1991, which includes Ramona Landfill. By incorporating regulations contained in 40 Code of Federal Regulations (40CFR), Part 258, Order No. 93-86 brought these landfills into compliance with State and Federal regulations.

9. On October 8, 1993, the County of San Diego transmitted the required reports for compliance with Order No. 93-86. The following reports were required under Order No. 93-86:

   a. *100-year Floodplain Report*

      Section 3 of Order No. 93-86 requires the submittal of a report which demonstrates whether or not the Ramona Landfill is within a 100-year floodplain. The 100-year Floodplain Report indicated that the Ramona Landfill is located approximately 1.6 miles from the nearest 100-year floodplain.

   b. *Wetlands Report*

      Section 4 of Order No. 93-86 requires the submittal of a report which demonstrates if the Ramona Landfill contains or adjoins wetlands. The Wetlands Report indicated that there are no existing wetlands at/or adjoining the Ramona

Landfill.

c. *Proximity to a Drinking Water Intake Report*

Section 8 of Order No. 93-86 requires the submittal of a report which demonstrates whether or not the landfill is located within one mile of a drinking water intake. This report indicated that the Ramona Landfill is located within one mile of a drinking water intake.

d. *Closure and Post-Closure Maintenance Plan*

Section 14 of Order No. 93-86 requires the submittal of a closure and post-closure maintenance plan for the Ramona Landfill. The County of San Diego submitted a preliminary closure and post-closure maintenance plan (PCPCMP) dated July 1992 and a revised PCPCMP dated October 1992. The submission of the PCPCMP meets the requirement for the closure and post-closure maintenance plan required under the federal MSW regulations.

e. *Existing Footprint*

Section 4 of Order No. 93-86 requires documentation of the existing footprint of the Ramona Landfill on October 9, 1993. By letter dated September 10, 1993, the County of San Diego transmitted a map which shows the existing footprint for the Ramona Landfill.

Disposal of Contaminated Soils

10. On June 7, 1999, this Regional Board adopted Addendum No. 1 to Order No. 93-86, **Maximum Concentration Limits for Soils Containing Nonhazardous Concentrations of Petroleum Hydrocarbons, Organic and Inorganic Compounds, Metals, and Pesticides for MSW Landfills with Subtitle D Liners.**

11. Landfills with liners and leachate collection systems approved in accordance with 27 CCR provides enhanced waste containment and an additional level of protection against leakage as compared to unlined landfills.

12. Section 25157.8(a) of the California Health and Safety Code prohibits the disposal of waste containing total lead in excess of 350 parts per million (ppm), copper in excess of 2500 ppm, and Nickel in excess of 2000 ppm to other than a Class I hazardous waste site, unless (1) the appropriate Regional Board amends waste discharge requirements to specifically allow the disposal of the waste and (2) the appropriate local enforcement agency has revised the solid waste facility permit of the facility to specifically allow the disposal of the waste. As noted in Finding No. 10, this Regional Board has amended Order No. 93-86 which allows for the disposal of waste containing total lead between 350 – 1000 ppm.

13. Soils containing non-hazardous concentrations of petroleum hydrocarbons, organic and inorganic compounds, metals and pesticides discharged to lined waste management units shall be considered to not pose a significant threat to water quality if concentration levels are below the threshold concentrations listed in the Discharge Specifications of this Order.

14. Soil wastes shall be considered to pose a threat to water quality if it has contamination levels above the threshold concentrations listed in the specifications of this Order and may not be discharged at these sites.

Ground Water Quality

15. Ground water occurs in deep fractures in fresh quartz diorite or granites and in voids of highly weathered granitic rocks. Ground water flows primarily within fractures and highly weathered portions of the granitic rocks beneath the site. Ground water is unconfined beneath the landfill and is interpreted to flow eastward, toward Pamo Valley and Santa Ysabel Creek.

16. The County of San Diego submitted two technical reports regarding the ground water quality for the Ramona Landfill. The first technical report was a Solid Waste Assessment Test , dated August 1992, which confirmed leakage from the Ramona Landfill. The second technical report was entitled Ramona Site Investigation, dated February 1993, included a comprehensive program of on and offsite ground water sampling and testing was conducted to characterize local ground water quality. The purpose of this report was to define the nature and extent of ground water contamination downgradient of the Ramona Landfill. The Ramona Site Investigation stated that volatile organic constituents and elevated chloride concentrations in a domestic well south of the landfill boundary suggested leachate migration from the Ramona Landfill.

17. Based on the above technical reports, this Regional Board adopted **Cleanup and Abatement Order (CAO) No. 97-17 for the County of San Diego, Ramona Sanitary Landfill, San Diego County** on March 7, 1997. CAO No. 97-17 noted ground water quality impairment due to the discharge of volatile organic constituents from municipal solid waste discharged at the Ramona Landfill. It required the County of San Diego to implement an Evaluation Monitoring Program and subsequently required the development and implementation of a Corrective Action Plan for the impacted ground water.

18. The County of San Diego installed a gas collection system along the perimeter of the landfill as part of the corrective action plan for the impacted ground water. The gas collection system includes a flare to remove organic constituents.

Water Quality Control Plan

19. The Ramona Landfill is located approximately 2.5 miles north of the community of Ramona, in the N1/2 of the SE 1/4 of Section 34, T12S, R1E, SBBM. The landfill is located in the Ramona Hydrologic Subarea (5.41) of the Santa Maria Hydrologic Area and in the Boden Hydrologic Subarea (5.51) of the Santa Ysabel Hydrologic Area of the San Dieguito Hydrologic Unit.

20. The **Water Quality Control Plan Report, San Diego Basin (9)** (hereinafter Basin Plan), was adopted by this Regional Board on September 8, 1994, and subsequently approved by the State Water Resources Control Board (State Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board. The Basin Plan designates beneficial uses and narrative and numerical water quality objectives, and prohibitions which are applicable to the discharges regulated under this Order.

21. The Basin Plan established the following beneficial uses of inland surface waters of the Santa Maria Valley HA (5.40) and the Santa Ysabel HA (5.50):

Beneficial Use	Santa Maria Valley HA	Santa Ysabel HA
Municipal and Domestic Supply	X	X
Agricultural Supply	X	X
Industrial Service Supply	X	X
Industrial Process Supply	X	X
Water Contact Recreation	X	X
Non-Contact Water Recreation	X	X
Warm Freshwater Habitat	X	X
Cold Freshwater Habitat		X
Wildlife Habitat	X	X

Note: x = Existing beneficial use.

22. The Basin Plan established the following beneficial uses of ground waters of the Santa Maria Valley HA (5.40) and the Santa Ysabel HA (5.50):

Beneficial Use	Santa Maria Valley HA	Santa Ysabel HA
Municipal and Domestic Supply	X	X
Agricultural Supply	X	X
Industrial Service Supply	X	
Industrial Process Supply	X	

Note: x = Existing beneficial use.

23. The Basin Plan established the following water quality objectives for surface waters of the Santa Maria Valley HA (5.40) and the Santa Ysabel HA (5.50) not to be exceeded more than 10% of the time:

Constituent	Santa Maria Valley HA	Santa Ysabel HA
Total Dissolved Solids	500 mg/l	500 mg/l
Chloride	250 mg/l	250 mg/l
Percent Sodium	60%	60%
Sulfate	250 mg/l	250 mg/l
Nitrogen & Phosphorus	A	A
Iron	1.0 mg/l	0.3 mg/l
Manganese	1.0 mg/l	0.05 mg/l
Methylene Blue Active Substances	0.5 mg/l	0.5 mg/l
Boron	1.0 mg/l	0.75 mg/l
Odor	None	None
Turbidity	20 NTU	5 NTU
Color	20 Units	15 Units
Fluoride	----	1.0 mg/ l

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

[a]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.

24. The Basin Plan established the following water quality objectives for ground waters of the Santa Maria Valley HA (5.40) and the Santa Ysabel HA (5.50) not to be exceeded more than 10% of the time:

Constituent	**Santa Maria Valley HA**	**Santa Ysabel HA**
Total Dissolved Solids	1000 mg/l	500 mg/l
Chloride	400 mg/l	250 mg/l
Percent Sodium	60%	60%
Sulfate	500 mg/l	250 mg/l
Nitrate (as NO_3)	10 mg/l	5 mg/l
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	0.75 mg/l	0.75 mg/l
Odor	None	None
Turbidity	5 NTU	5 NTU
Color	15 Units	15 Units
Fluoride	1.0 mg/l	1.0 mg/ l

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

25. The Basin Plan also contains the following prohibitions applicable to the discharge:

"The dumping, deposition or discharge of waste directly into waters of the State, or adjacent to such waters any manner which may permit its being transported into the waters is prohibited, unless authorized by the Regional Board."

"The discharge of waste into a natural or excavated site below historic water levels is prohibited, unless the discharge is authorized by the Regional Board."

"The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited."

CEQA and Other Legal References

26. This Order implements:

    a. Water Quality Control Plan, San Diego Basin – Region 9;

    b. Prescriptive standards and performance goals of Subdivision 1, Division 2, Title 27, California Code of Regulations, effective July 18, 1997, and subsequent revisions;

    c. Prescriptive standards and performance criteria of Part 258, Title 40, Code of Federal Regulations (Subtitle D, Resource Conservation and Recovery Act); and

    d. State Water Resources Control Board Resolution No. 93-62, Policy for Regulation of Discharges of Municipal Solid Waste, adopted June 17, 1993.

    e. Applicable requirements contained in Order No. 93-86.

27. This Order reclassifies the Ramona Landfill as a Class III landfill based on review of monitoring reports, geologic siting criteria and construction standards in accordance with 27 CCR Section 20080(e), Section 20240(b) and Section 21720(c), respectively.

28. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to the following:

    (a) Beneficial uses to be protected and the water quality objectives reasonably required for that purpose;

    (b) Other waste discharges;

    (c) The need to prevent nuisance;

    (d) Past, present, and probable future beneficial uses of the hydrologic unit under consideration;

    (e) Environmental characteristics of the hydrologic unit under consideration;

    (f) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;

    (g) Economic considerations; and

(h) The need for developing housing within the region.

29. The Ramona Landfill 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.

30. The Regional Board considered all environmental factors associated with the discharge of waste.

31. The Regional Board has notified the discharger and all known interested parties of its intent to update/revise waste discharge requirements for the Ramona Landfill.

32. The Regional Board in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the Ramona Landfill Inc., a subsidiary of Allied Waste Industries Inc., (hereinafter discharger) shall comply with the following:

A. PROHIBITIONS

1. The discharge shall neither cause nor contribute to the contamination or pollution of ground water via the release of waste constituents in either liquid or gaseous phase.

2. The discharge shall neither cause nor contribute to any surface water contamination, pollution, or nuisance, including, but not limited to:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Increases in bottom deposits or aquatic growth;

   c. An adverse change in temperature, turbidity, or apparent color beyond natural background levels;

   d. The creation or contribution of visible, floating, suspended, or deposited oil or other products of petroleum origin;

   e. The introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of beneficial uses of waters of the State.

3. The discharge shall not cause any increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, or other geologic materials outside of the Unit if such waste constituents could migrate to waters of the State -- in either the liquid or the gaseous phase --and cause a condition of contamination, pollution, or nuisance.

4. The 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.

5. The discharge of any hazardous waste materials as defined in Title 22 of CCR (22 CCR) at the landfill is prohibited.

6. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50% solids) other than dewatered sewage or water treatment sludge as described in California Code of Regulations, Division 2, Title 27 (27CCR) Section 20220(c) to the landfill is prohibited.

7. The discharge of solid waste, liquid waste or leachate to surface waters, surface water drainage courses or ground water is prohibited.

8. The discharge of municipal solid waste to a wetland [as defined in 40CFR§232.2(r)] or to any portion thereof is prohibited, unless the Regional Board finds that the discharger has successfully completed all demonstrations required for such discharge under 40CFR§258.12(a).

9. The disposal of designated waste at the Ramona Landfill (other than as approved by this Order) is prohibited unless the discharger establishes in accordance with 27 CCR, Section 20200(a)(1) and to the satisfaction of the Regional Board, that the designated waste will present a lower risk to water quality.

10. The discharge to the landfill of solid waste containing free liquid or moisture in excess of the waste's moisture holding capacity is prohibited.

11. The discharge of leachate or landfill gas condensate to an MSW landfill is prohibited, unless:

    (a) The landfill gas condensate or leachate is being returned to the landfill that produced it; and

    (b) The portion of the landfill to which these materials are discharged is equipped with a containment system meeting the requirements of Discharge Specifications B.33, B.34 and B.35 of this Order.

12. It is prohibited to discharge wastes which have potential to reduce or impair the integrity of the containment structure or which, if commingled with other wastes in the Ramona Landfill, could produce violent reaction, heat or pressure, fire or explosion, toxic by-products, or reactions products which in turn:

    a. Require a higher level of containment than provided by the Ramona Landfill;

    b. Constitute "restricted hazardous wastes"; or

c. Impair the integrity of the containment structure.

13. The discharge of solid wastes outside of the existing footprint without a RCRA Subtitle D liner or engineered alternative as approved by this Order is prohibited.

B. DISCHARGE SPECIFICATIONS

1. Only nonhazardous wastes (including wastes approved by this Order) and inert wastes as described by 27 CCR, Sections 20220 and 20230 may be disposed at the Ramona Landfill.

2. The discharge shall remain within the designated disposal area at all times.

3. The discharger is responsible for accurate characterization of wastes, including determinations of whether or not wastes will be compatible with containment features and other wastes at the Ramona Landfill in order to comply with 27 CCR, Section 20200(c), and whether or not wastes are required to be managed as hazardous wastes under 22 CCR Section 66300.

4. Water used for facility maintenance shall be limited to the minimum amount necessary for dust control, shall only be applied by spraying and shall be applied only on covered areas and not directly on trash, in quantities not to exceed those necessary to reduce immediate dust hazards.

5. Methane and other landfill gases shall be adequately vented, removed from landfill units, or otherwise controlled to prevent the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration through the vadose (unsaturated) zone.

6. The owner of the waste management facility shall have the continuing responsibility to assure protection of usable waters from discharged wastes and from gases and leachate generated by discharged waste during the active life, closure, and post-closure maintenance period of the WMUs and during subsequent use of the property for other purposes.

7. The discharger shall maintain at least 5 feet separation between ground water and waste material at all times.

8. The Ramona Landfill shall have an approved load check program in compliance with 27 CCR Section 20870.

9. During the rainy season, the landfill shall be operated and graded to minimize infiltration and the production of leachate. The active disposal area shall be confined to the smallest area practicable, based on the anticipated quantity of waste discharge and other waste management facility operations.

10. By November 15 each year, the discharger shall submit:

    a. An annual report describing measures taken to comply with Discharge Specification B.14.

    b. A copy of its Storm Water Pollution Prevention Plan, or as updated.

Monitoring

11. The discharger shall implement the attached Monitoring and Reporting Program No. 2000-06 in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Unit, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the Unit.

12. The discharge shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any Monitoring Point assigned to Detection Monitoring pursuant to Section B of the attached Monitoring and Reporting Program No. 2000-06.

13. The discharge shall not cause the release of pollutants, or waste constituents in a manner which could cause a condition of contamination, pollution, or nuisance to occur, as indicated by the most appropriate statistical [or non-statistical] data analysis method and retest method listed in section **C. Response to a Release** of the attached Monitoring and Reporting Program No. 2000-06.

Erosion Control and Landfill Cover

14. **Annually, by October 31** the discharger shall implement adequate erosion control measures, maintenance and repairs of the landfill cover, drainage control facilities and use soil stabilization practices on all disturbed areas of the landfill to prevent erosion or flooding of the facility and to prevent surface drainage from contacting or percolating through wastes. The soil stabilization practices shall be designed to revegetate open areas as soon as feasible after grading or maintenance. In developing these practices, the discharger shall consider: temporary seeding, permanent seeding, mulching, vegetative buffer strips or other soil stabilization practices. At a minimum, the discharger must implement these practices on all disturbed areas during the rainy season.

15. Where flow concentrations result in erosive flow velocities, surface protection such as asphalt, concrete asphalt, concrete riprap, or other erosion control material shall be used for protection of drainage conveyance features. Interim bench ditches shall be provided with erosion control material and riprap to control erosion where necessary.

16. Energy dissipators shall be installed to control erosion at locations where relatively high erosive flow velocities are anticipated.

17. Where high velocities occur at terminal ends of downchutes or where downchutes cross the final cover access roads, erosion control material shall be applied to exposed soil surfaces.

18. Silt fences, hay bales, and other measures shall be used to control noncontact surface water runoff from landfill areas where daily, intermediate and final cover have been placed, and from areas where landfill containment system construction is occurring.

19. Areas with slopes greater than 10 percent, surface drainage courses, and areas subject to erosion by wind or water shall be designed and constructed to minimize such erosion.

20. The working face of the landfill shall be limited to one day of operation at a time, so as to minimize the amount of contact water.

21. Slopes on the landfill shall be benched to control flow velocities.

22. Landfill areas with intermediate cover (as defined in 27 CCR Section 20700), which have been/will be exposed for longer than two rainy seasons, shall have a minimum two-foot soil cover maintained over all but the active disposal area of the landfill unit. The intermediate cover shall be designed and constructed to minimize percolation of liquids through wastes.

23. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure, and post-closure maintenance period of the waste management unit.

Drainage

24. Surface drainage from the landfill is subject to State Board Order No. 97-03-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001 (General Permit), **Waste Discharge Requirements (WDRS) for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities**.

25. Surface drainage from tributary areas and internal site drainage from surface and subsurface sources shall not contact or percolate through waste and shall either be contained onsite or be discharged in accordance with applicable storm water regulations.

26. Any precipitation that falls on the working face of the landfill and comes in contact with waste (contact water) shall be treated as leachate.

27. Noncontact surface water runoff within the boundary of the landfill (i.e., precipitation that falls on the intermediate and final cover) shall be collected by a system of berms, ditches, downchutes, swales and drainage channels, and shall be diverted off the landfill to either the detention basins or to the natural watercourses offsite.

28. Sediments shall be removed from the detention basins whenever the volume of the basin has been reduced by 25% of the basin's design capacity.

Landfill Construction

29. The Ramona Landfill shall be designed, constructed and operated to prevent inundation or washout due to a 100-year flood.

30. Class III landfill units and related containment structures shall be constructed and maintained to prevent, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, and overtopping under a 100-year, 24-hour storm.

31. Each landfill unit phase constructed after the effective date of this Order shall be designed and constructed in accordance with Title 27 and this Order and approved by Regional Board staff prior to operation.

32. Hydraulic conductivities determined through laboratory methods shall be confirmed by appropriate field testing, and the results shall be submitted to the Regional Board prior to construction.

Engineered Alternative Liner

33. The engineered alternative liner for Phase III shall consist of an upper and lower component. The upper component shall consist of: 1) two feet of protective cover soil (effective saturated hydraulic conductivity of 7.2×10^{-4} cm/sec); 2) a geotextile; 3) one foot drainage layer of gravel (effective saturated hydraulic conductivity of 1×10^{-3} cm/sec); and 4) nonwoven geotextile for cushioning the underlying membrane. The lower component shall consist of : 1) a 60-mil thick high density polyethylene (HDPE) geomembrane liner; and 2) a geosynthetic clay liner (GCL) with a permeability of 5×10^{-9} cm/sec installed in direct and uniform contact with the underlying materials.

34. The engineered alternative liner for the sideslopes shall consist of : 1) two feet of protective soil; 2) 60-mil HDPE geomembrane; and 3) geosynthetic clay liner installed in direct and uniform contact with the underlying materials.

Leachate Collection and Removal System

35. All containment systems shall include a leachate collection and removal system (LCRS) which shall convey all leachate which reaches the liner to an appropriately lined sump or other appropriately lined collection area. The LCRS shall not rely upon unlined or clay-lined areas for such conveyance.

36. Materials used to construct leachate collection and removal systems (LCRS) shall have appropriate physical and chemical properties to ensure the required transmission of leachate over the life of the WMU and the post-closure maintenance period.

37. LCRS shall be designed, constructed, and maintained to collect twice the anticipated daily volume of leachate generated by the WMU and to prevent the buildup of hydraulic head on the underlying liner at any time. The depth of fluid in any LCRS sump shall be kept at or below six inches, the minimum needed to ensure efficient pump operation.

38. The LCRS shall function without clogging throughout the active life of the waste management unit and during the post-closure maintenance period.

39. Leachate generation by a landfill unit LCRS shall not exceed 85% of the design capacity of the LCRS or the sump pump. If leachate generation exceeds this value and/or if the depth of fluid in the LCRS sump exceed 24 inches, then the discharger shall immediately cease the discharge of sludge and other high-moisture wastes to the landfill unit and shall notify the Regional Board in writing within seven days. Notification shall include a time table for a corrective action necessary to reduce leachate production.

Contaminated Soils Within Lined Areas

40. Soil samples shall be taken in accordance with sampling guidelines set forth in the most recently promulgated edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846", U.S. Environmental Protection Agency. At a minimum, for quantities of soil less than or equal to 500 cubic yards, four samples per 100 cubic yards will be taken. For quantities of soil between 500 to 5000 cubic yards, an additional sample shall be taken for every 500 cubic yards.

41. Waste soils shall be discharged into lined areas specifically approved by the Regional Board in accordance with 27 CCR. Soils may also be utilized for daily landfill cover within lined units if approved for such use by the appropriate agencies.

42. All wastes received at the Ramona Landfill are to be certified California non-hazardous according to 22 CCR.

43. Lined Class III Waste Management Units, as designed, may accept only soils contaminated with petroleum hydrocarbons, organic and inorganic compounds, metals, and pesticides below the following concentration limits which could pose a threat to water quality if discharged in an uncontrolled manner:

    a. Soils containing nonhazardous concentrations of metals and pesticides, organic and inorganic compounds shall not exceed hazardous waste classifications as determined using the waste extraction test (WET) (Reference CCR Title 22, Section 66261.24 as amended).

    b. Soils containing nonhazardous concentrations of metals, pesticides, organic and inorganic compounds shall not exceed maximum concentrations of contaminants using Toxicity Characteristic Leaching Procedure (TCLP) analysis (Reference: 22 CCR Section 66261.24 as Amended).

c. The discharge of total lead at concentrations shall not exceed the threshold for hazardous concentration established in 22 CCR. The current level is 1000 mg/kg (ppm). This Order would not effect the concentration levels established in 22 CCR Section 25157.8(a) for Nickel and Copper as these are equivalent to the threshold for hazardous waste for concentration levels in 22 CCR.

d. Soils containing nonhazardous concentrations of petroleum hydrocarbons. The following maximum concentration levels will be used to determine if soils containing petroleum hydrocarbons are acceptable for disposal.

Petroleum Hydrocarbon Contaminant	Maximum Concentration Limits	
Gasoline and lighter end hydrocarbons (C_4 -C_{12})	1,000 ppm TPH	1,000 -5,000 ppm TPH w/RCI and 96 hour bioassay
Diesel fuel, Kerosene Oil, Jet Fuel, (C_8-C_{22})_heavy end hydrocarbons	3,000 ppm TPH	3,000 -15000 ppm TPH w/RCI and 96 hour bioassay
Hydraulic Oil, Cutting and Grinding Oil, Virgin Motor Oil, Waste Oil (C_8-C_{40} heavy end hydrocarbons)	3000 ppm TRPH	3,000 -15000 ppm TPH w/RCI and 96 hour bioassay

TPH - Total Petroleum Hydrocarbon
TRPH - Total Recoverable Petroleum Hydrocarbon
RCI - Hazardous Waste Criteria for Reactivity, Corrosivity, Ignitiability and 96 Hour Acute Bioassay as established by CCR 22

44. Test Methods for Soils Containing Petroleum Hydrocarbons:

The following test methods shall be performed for soils containing Petroleum Hydrocarbons.

Petroleum Constituent	TPH (8015M) Gas	TPH (8015 M Diesel	(EPA 418.1)	BTEX (8020)	Lead (TCLP)	Metals (Cd, Cr, Pb, Ni, Zn), OX, and PCBs	Semi-Volatile Organics (8270 or EPA 625)	Volatile organics (8260)	Metals (CAM 17), and PCBs
Leaded Gasoline									
Unleaded gasoline					*				
Kerosene Oil									
Jet Fuel									
Diesel Fuel									
Hydraulic Oil									
Cutting and Grinding Oil									
Virgin Motor Oil									
Waste Oil									

** with documentation that only unleaded gas was historically on site*

45. Test Methods for Soils Containing Metals and Pesticides

The analyses can include the following methodologies:

TPH (418.1 or 8015M)	TCLP Analysis (8 RCRA metals)
8260	CAM 17
8270 (Semi-VOCs)	8080 (Chlorinated pesticides & PCBs)
8150 (herbicides)	

46. Recordkeeping

Copies of the waste approvals will be kept on file at the facility and at a minimum will include:

a. Certification from the generator certifying that the analyses submitted is representative of the material to be disposed.

b. Analytical data or Material and Safety Data Sheets representing the waste stream.

c. The Chain-of-Custody form showing the sample's integrity was not compromised.

d. The approximate yardage of the material and the transporter information.

Closure and Post-Closure

47. The closure of the Ramona Landfill shall be in accordance with 27 CCR Chapter 3, Subchapter 5, Articles 1 and 2 and Section 21710 (d) and under the direct supervision of a California registered civil engineer or certified engineering geologist.

48. At closure, the Ramona Landfill shall receive a final cover which is designed and constructed to function with minimum maintenance and consists of, at minimum, 2-foot thick foundation layer which may contain waste materials, overlain by a 2-foot thick clay liner having a permeability of 1×10^{-6} cm/sec or less, overlain by a one foot vegetation layer or an engineered equivalent final cover approved by the Regional Board pursuant to 27 CCR Section 20080(b) and (c).

49. The post-closure maintenance period shall continue until the Regional Board determines that remaining wastes in all waste management units (WMUs) will not threaten water quality.

50. Vegetation overlaying the landfill shall be selected to require minimum irrigation and maintenance, and shall not impair the integrity of the landfill cover or containment structures.

51. The discharger shall comply with all applicable requirements of Title 27, CCR Subchapter 5, Article 2 for closure and post-closure maintenance of the Ramona Landfill. Title 27, CCR, Subchapter 5, Article 2 establishes closure and post-closure maintenance requirements.

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 must comply with all applicable provisions of 27 CCR 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 that 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 funding, adequate operator staffing and training, and 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.1(f).

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 discharger to continue the waste discharge.

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's 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. The discharger shall ensure that all site-operating personnel are familiar with the content of this Order and shall maintain a copy at the Ramona Landfill.

11. This Order becomes effective on the date of adoption by the Regional Board. This Order supersedes Resolution No. 70-R14 and addenda thereto. Order No 93-86 is hereby amended to delete Ramona Landfill from §1. Applicability.

12. 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.

13. The post-closure maintenance period shall continue until the Regional Board determines that remaining wastes in the landfill will not threaten water quality.

14. The concentration of indicator parameters or waste constituents in waters passing through the Point of Compliance shall not exceed the "water quality protection standards" established pursuant to Monitoring and Reporting Program No. 2000-06, which is attached to and made part of this Order.

D. REPORTING REQUIREMENTS

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

(a) An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements;

(b) A significant change in the disposal method, location or volume (e.g., change from land disposal to land treatment);

(c) A change in the type of waste being accepted for disposal;

(d) The addition of a major industrial waste discharge to a discharge of essentially domestic waste, or the addition of a new process or product by an industrial facility resulting in a change in the character or type of waste being discharged; or

(e) Any planned change in the regulated facility or activity which may result in noncompliance with this Order.

(f) Any proposed transfer of this Order's responsibility and coverage to a new discharger. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on.

2. The discharger shall furnish to the Executive Officer, 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 comply with the attached Monitoring and Reporting Program No. 2000-06, and future revisions thereto as specified by the Executive Officer. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2000-06.

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, such as slope failure occurring in the waste management unit. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger 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, and 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 immediately notify Regional Board of any flooding, equipment failure, slope failure, or other change in site conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control facilities.

7. The discharger shall immediately report by telephone concerning the discovery of any previously unreported seepage from the disposal area. A written report shall be filed with the Regional Board within seven days, containing at least the following information:

   (a) A map showing the location(s) of the seepage;

   (b) An estimate of the flow rate;

   (c) A description of the nature of the discharge (e.g., all pertinent observations and analyses); and

   (d) Corrective measures approved (or proposed for consideration) by the Executive Officer.

8. At least **120 days** prior to the beginning of construction for each new construction phase, a Final Design Report shall be submitted to Regional Board staff for review and approval and shall include, but not be limited to, the engineered design plans, the contract specifications, a construction quality assurance (CQA) plan to verify that construction specifications will be met, and a revised water quality monitoring plan. Approval of the final design report shall be obtained from Regional Board staff prior to the construction of the landfill liner or cover. A final construction report shall be submitted for approval by Regional Board staff after each phase of construction and prior to the discharge of waste into the constructed phase. The final construction report shall include, but not be limited to, as-built plans, a CQA report with a written summary of the CQA program and all test results, analyses, and copies of the inspector's original field notes, and a certification as described in 27 CCR Section 20324.

9. The discharger shall maintain legible records of the volume (cubic yards) and type (i.e., municipal solid waste, construction debris, ash, tires, woodwaste, etc.) of each waste discharged at the landfill and the manner and location of discharge. Such records shall be maintained at the facility until the beginning of the post-closure maintenance period. These records shall be available for review by representatives of the Regional Board at any time during normal business hours.

10. The discharger shall provide proof to the Board within sixty days after completing final closure that the deed to the landfill facility property, or some other instrument that is normally examined during title search, has been modified to include, in perpetuity, a notation to any potential purchaser of the property stating that:

    a. The parcel has been used as a municipal solid waste landfill (MSWLF);

    b. Land use options for the parcel are restricted in accordance with the post-closure land uses set forth in the post-closure plan and in WDRs for the

landfill; and

c. In the event that the discharger defaults on carrying out either the post-closure maintenance plan or any corrective action needed to address a release, then the responsibility for carrying out such work falls to the property owner.

11. The discharger shall notify the Regional Board at least 180 days prior to the beginning of any activities for partial or final closure of the landfill, in accordance with 27 CCR, Section 21710(c)(5).

12. The discharger or persons employed by the discharger shall comply with all notice and reporting requirements of the California Department of Water Resources with regard to the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this Order or with Monitoring and Reporting Program No. 2000-06, as required by Sections 13750 through 13755 of the California Water Code.

13. All reports pursuant to this Order shall be prepared under the supervision of a California Registered Civil Engineer or a Certified Engineering Geologist.

14. All applications, reports, or information submitted to the Executive Officer 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."

15. The discharger shall submit reports required under this Order, or other information required by the Executive Officer, to:

Executive Officer
Attention: Land Discharge Unit
California Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd, Suite A
San Diego, California 92124-1331

E. FINANCIAL ASSURANCE

1. The discharger shall maintain assurances of financial responsibility for initiating and completing corrective action for all known and reasonably forseeable releases from the landfill. The discharger shall also maintain an irrevocable closure fund or other means to ensure adequate closure and post-closure maintenance of the landfill.

2. The discharger shall submit a status report regarding the financial assurances for corrective action and closure every five years after the date of adoption of these requirements that either validates the ongoing viability of the financial instruments or proposes and substantiates any needed changes.

F. NOTIFICATIONS

1. California Water Code Section 13263(g) states:

"No discharge of waste into waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights."

2. 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.

3. 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 a civil monetary remedy of up to 20 dollars per gallon of waste discharged or, if a cleanup and abatement order is issued, up to 15,000 dollars per day of violation or some combination thereof.

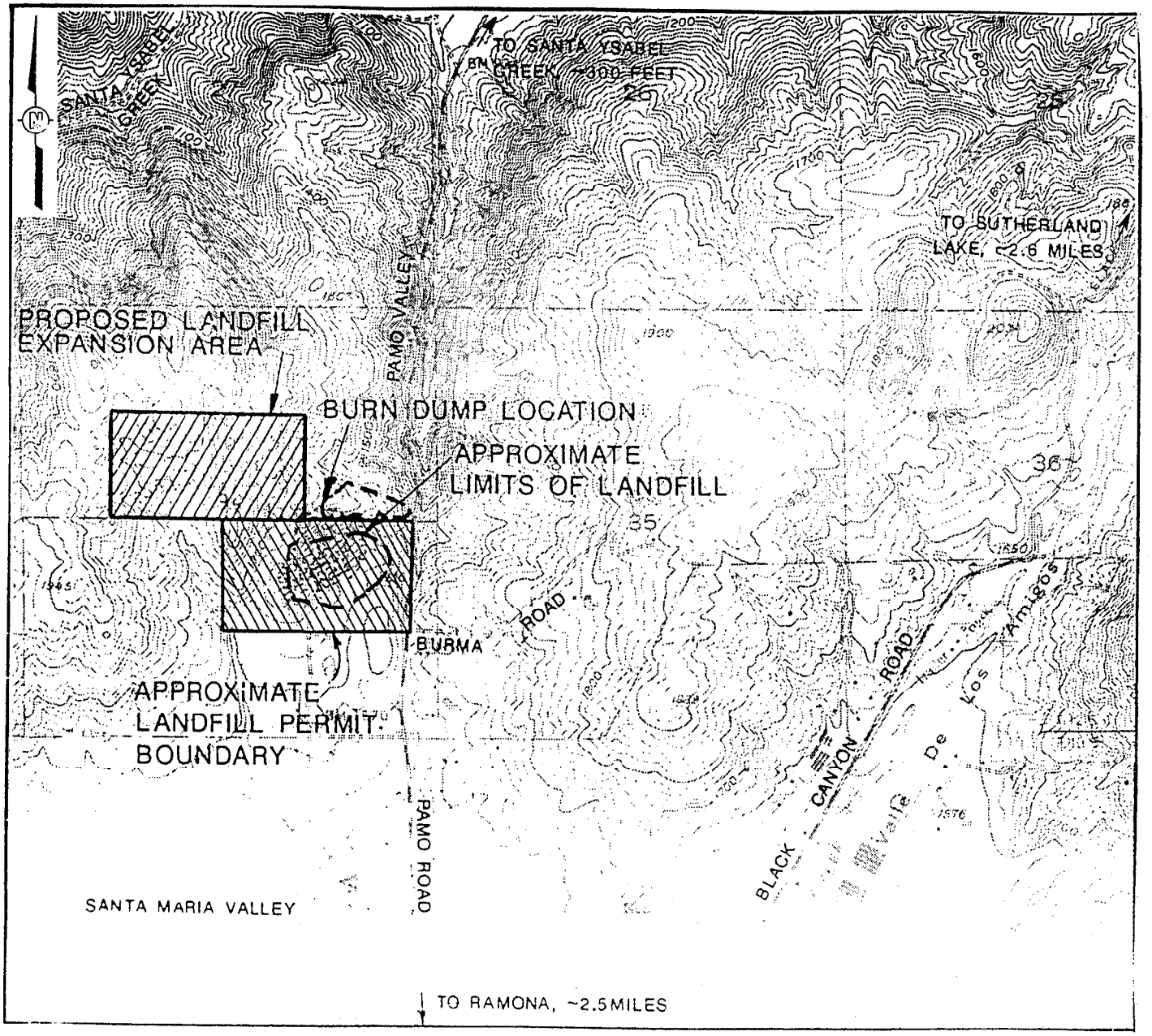
4. The California Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor and may be subject to administrative civil liability of up to one thousand dollars per day of violation.

5. Definitions of terms used in this Order shall be as set forth in Subdivision 1, Division 2, Title 27 CCR and 40CFR 258.

6. Operation of the Ramona Landfill may be subject to regulations of the California Integrated Waste Management Board.

7. This Order becomes effective on the date of adoption by the Regional Board.

I, John H. Robertus, Executive Officer, do hereby certify 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 February 9, 2000.

JOHN H. ROBERTUS
Executive Officer

ATTACHMENT NO. 1 TO
ORDER NO. 2000-06