

MSA

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

**ORDER NO. 96-15  
WASTE DISCHARGE REQUIREMENTS  
FOR POST-CLOSURE MAINTENANCE  
FOR  
NORTH MIRAMAR LANDFILL  
CITY OF SAN DIEGO**

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

1. On February 19, 1960, the State of California San Diego Regional Water Pollution Control Board adopted Resolution 60-R3, "**A Resolution Prescribing Requirements Regulating the Discharge of Waste from a Sanitary Landfill to be Operated in and by the City of San Diego.**" The City of San Diego began landfill operations, on property owned by the U.S. Navy, at the Miramar Sanitary Landfill in December 1959. The disposal site would be known as Miramar Sanitary Landfill and is currently referred to as the South Miramar Landfill.
2. In May 1973 landfill operations were moved to a new canyon north of the South Miramar Landfill. This landfill is referred to as the North Miramar Landfill, which operated from May 1973 until July 1982.
3. Disposal operations implemented the authorized discharge requirements specified in Resolution 60-R3. The requirements prohibited disposal of hazardous and toxic substances. Approximately 16.2 million cubic yards of waste were deposited in the North Miramar Landfill. According to investigations by the City of San Diego, wastes accepted at the North Miramar Landfill consists of approximately 50% paper, 30% putrescibles, 15% miscellaneous, and 5% metals.
4. By letter dated August 18, 1993, the City of San Diego, Waste Management Department requested that separate Waste Discharge Requirements be issued for both the North Miramar Landfill and the South Miramar Landfill.
5. As authorized by Section 13263 of the California Water Code, this Order prescribes requirements for the post-closure maintenance of the North Miramar Landfill. This Order includes a monitoring and reporting program in order to address current State and Regional Water Quality Control Board (RWQCB) policies, regulations, and the current status of the project. Information reviewed and incorporated in this Order include technical information contained in ground water monitoring reports, and the Solid Waste Assessment Test Report.

### Closure Findings

6. Applicable regulations governing the North Miramar Landfill are the California Code of Regulations, Title 23, Division 3, Chapter 15, **Discharges of Waste to Land** (23 CCR 15).
7. Pursuant to 23 CCR 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. However, these landfills are subject to post-closure maintenance requirements contained in 23 CCR 2581(b) and (c).
8. Pursuant to 23 CCR 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 23 CCR 15.
9. The City of San Diego may be required to comply with Article 8 closure requirements under the following conditions: a) when there is a proposed site development or land use change that jeopardizes the integrity of the existing cover; b) when water quality impairment is found, as part of a ground water monitoring program; or c) when nuisance conditions exist that warrant such activity.

### Water Quality and Site Investigations

10. The North Miramar 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 constituents to surface or ground water. The City of San Diego submitted a SWAT report dated August 23, 1991.
11. On May 17, 1994, RWQCB staff made determined that the SWAT report was complete. The SWAT report indicated that an increase in total dissolved solids, hardness, and conductivity values in ground water down gradient of the landfill was occurring.
12. On March 10, 1994, the City of San Diego submitted a proposal and supporting information to place approximately one million cubic yards of soil as cover material on top of the North Miramar Landfill. The new cover would have thicknesses ranging up to 30 feet and raise the final cover to a maximum elevation of 465 feet MSL. The new cover material is needed to improve landfill maintenance by adding grade to improve site drainage, reduce infiltration of storm runoff, and to improve the control of landfill gas emissions. Grading and importation of fill material to achieve final design began in 1994 and is expected to continue into the future.
13. According to City of San Diego staff, the City intends to collect landfill gas to power a cogeneration facility. Construction of the landfill gas collection system is planned to begin May 1996 in conjunction with the Fiesta Island Replacement Project (F.I.R.P.). Regional Board staff has not reviewed this new project to determine any potential adverse impacts to water quality.

### Site Description

14. The North Miramar Landfill is located in Section 24, Township 15S, Range 3W, San Bernardino Base and Meridian (SBB&M) co-ordinate system, on a portion of Kearney Mesa (Figure 1). The site is bound on the north by the Miramar Naval Air Station, Highway 163 to the east, the West Miramar Landfill to the west and State Route Highway 52 to the south. The landfill property is owned by the U.S. Navy and operated by the City of San Diego.
15. The geology of the area of the North Miramar Landfill consists of recent alluvium in canyon bottoms, beach and nearshore sediments of the Linda Vista Formation, marine sediments of the Mission Valley Formation, non-marine and nearshore (lagoonal) sediments of the Friars Formation, and beach and nearshore (marine) sediments of the Scripps Formation.
16. Near-surface groundwater immediately beneath the North Miramar Landfill has not been fully characterized. Groundwater levels in monitoring wells in the landfill vicinity vary in elevation from approximately 150 to 250 feet MSL. Groundwater flows to the west-southwest. Water wells in the vicinity of the site are likely producing from sand and gravel interbeds in the Friars Formation.
17. Faults nearest the site include the Rose Canyon fault zone and the Torrey Pines fault. The Rose Canyon fault zone lies approximately 4 miles to the west of the site and includes several northwest trending faults which strike north-northwest. These faults are at least 15 miles in length and have vertical separations of several hundred feet. The Torrey Pines fault lies approximately 4 miles to the northwest of the site and has a vertical separation of approximately 400 feet.
18. The North Miramar Landfill was developed by filling in two tributaries to the San Clemente Canyon. These tributary canyons, which directed flow southwest, were filled from their base elevation of approximately 340 feet mean sea level (MSL) to 420 feet MSL.
19. Present land use is undeveloped open space. The land will continue to serve as a vacant buffer and crash zone for aircraft flight testing. An unlined drainage channel surrounds the perimeter of the landfill area. The channel collects runoff from the landfill cover and routes it away to two discharge points along San Clemente Canyon.

### Water Quality Control Plan

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 North Miramar Landfill is located within the Miramar Hydrologic Area (6.40) of the Penasquitos Hydrologic Unit.
22. The Basin Plan contains the following prohibitions which are applicable to the site:
  - a. "The dumping, deposition or discharge of waste directly into waters of the state or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board."
  - b. "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."
  - c. "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."
  - d. "The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code Section 13050, is prohibited."
  - e. "The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264 is prohibited."

23. The Basin Plan establishes the following beneficial uses for the waters of the Miramar Hydrologic Area (906.40) of the Penasquitos Hydrologic Unit:

a. Inland Surface Waters

1. Potential industrial service supply
2. Water contact recreation
3. Non contact water recreation
4. Warm fresh-water habitat
5. Cold fresh-water habitat
6. Wildlife habitat
7. Preservation of rare, threatened, and endangered species

b. Groundwater

1. Potential industrial service supply (does not apply west of Interstate Highway 15).

24. The Basin Plan established the following water quality objectives for water of the Miramar Hydrologic Area (6.40):

Constituent	Surface Water	Ground Water <sup>1</sup>
Total Dissolved Solids	500 mg/l	750 mg/l
Chloride	250 mg/l	300 mg/l
Percent Sodium	60%	60%
Sulfate	250 mg/l	300 mg/l
Nitrate (as NO <sub>3</sub> )	---	10 mg/l
Nitrogen & Phosphorus	---	---
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	0.5 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

1. The beneficial uses of groundwater do not apply west of Interstate Highway 15.
2. 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**

25. 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.
26. 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.
27. The Regional Board has considered all water resource related environmental factors associated with the North Miramar Landfill.
28. The Regional Board has notified the City of San Diego, and all known interested parties of the intent to update waste discharge requirements and issue post-closure maintenance requirements for the North Miramar Landfill.
29. The Regional Board in a public meeting heard and considered all comments pertaining to the North Miramar Landfill.

**IT IS HEREBY ORDERED**, That the City 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 North Miramar 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 Miramar 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 Miramar 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 North Miramar Landfill to surface drainage courses or to ground water is prohibited.
5. Injection of liquid condensate into the landfill that has been 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 discharger shall develop, implement and submit to this Regional Board, a water quality monitoring program **within 9 months** of adoption of this Order that is consistent with 23 CCR 15 Section 2510 (g). The report shall include a discussion and rationale of post-closure monitoring locations, maps that show location of monitoring points and construction details of monitoring wells.
3. The landfilled areas shall be adequately protected from any washout, erosion of wastes or cover material. The surface drainage system shall be designed to adequately handle the rainfall from a 100-year 24 hour storm event.
4. 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.
5. 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.
6. 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 suited for inland valleys and mesas of Southern California.
7. 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.
8. 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.

### C. PROVISIONS

1. Neither the treatment nor the discharge of waste shall create pollution, contamination, or a nuisance, as defined by Section 13050 of the California Water Code.
2. The discharger shall comply with applicable provisions of 23 CCR 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/or 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 23 CCR 15 shall be subject to the approval of the Executive Officer and shall be authorized only as provided for by 23 CCR 15. Implemented alternatives to 23 CCR 15 requirements shall meet the conditions for approval of such alternatives established in 23 CCR 15 throughout the post-closure period.
  13. This Order becomes effective on the date of adoption by the Regional Board.

#### **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 eg. 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 alter existing surface drainage patterns or change existing slope configurations. These activities may include, but not be limited to, significant grading activities, the importation of fill material, the design and installation of soil borings, ground water monitoring wells and other devices for site investigation purposes.

c. Written Notification

The discharger shall provide written notification at least 2 working days prior to any maintenance activities that are minor and/or routine in nature, 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) gas surveys with temporary probes; or
- 4) 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 for construction, operation, closure, or post-closure maintenance of a waste management unit. 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 which includes the post-closure maintenance of the waste management unit.
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. 96-15. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 96-15.
9. 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."

10. The discharger shall submit reports required under this Order and other information requested by the Executive Officer, to:

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

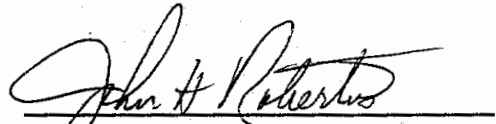
**E. Notifications**

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 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 23 CCR 15.

I, John H. Robertus, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Water Quality Control Board, San Diego Region, on March 14, 1996.

Ordered by



John H. Robertus  
Executive Officer

DFHj

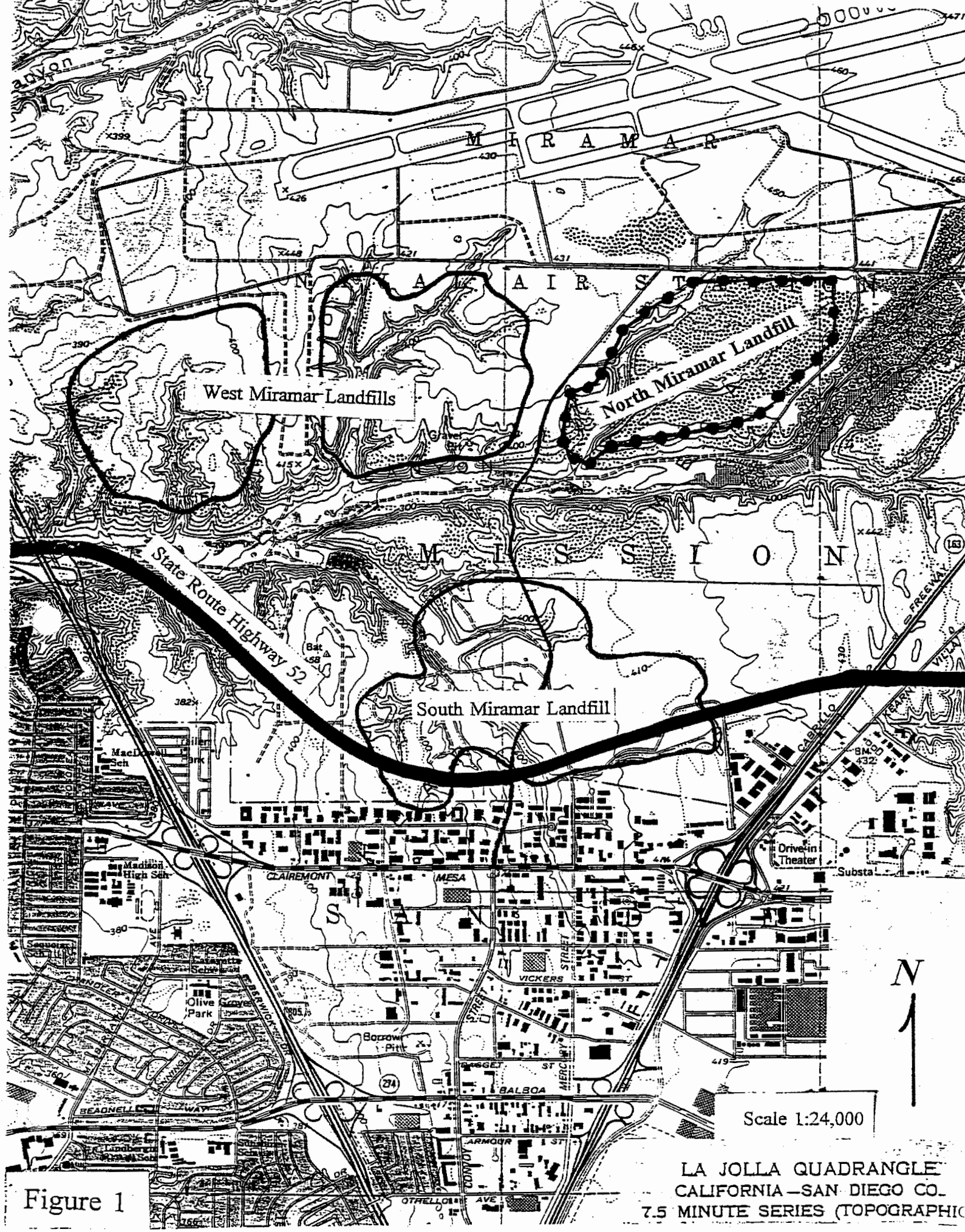


Figure 1

LA JOLLA QUADRANGLE  
 CALIFORNIA-SAN DIEGO CO.  
 7.5 MINUTE SERIES (TOPOGRAPHIC)