CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 97-073

UPDATED WASTE DISCHARGE REQUIREMENTS
AND RESCISSION OF ORDER NO. 82-56 FOR:

CITY OF MENLO PARK, BAYFRONT PARK (formerly Marsh Road Landfill)
CLASS III SOLID WASTE DISPOSAL SITE, MENLO PARK, SAN MATEO COUNTY

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

1. The City of Menlo Park (hereinafter referred to as the discharger), owns and operates a closed municipal solid waste disposal site referred to as the Marsh Road Landfill. The Marsh Road Landfill is a closed Class III non-hazardous solid waste management facility which covers about 155 acres of refuse filled area, and is located on a 160-acre parcel at the northeastern end of Marsh Road within the City limits of Menlo Park, San Mateo County as shown on Figure 1 which is incorporated herein and made part of this Order.

PURPOSE OF ORDER UPDATE:

2. The purpose of this Order is to:
   (1) Update the site's groundwater and leachate monitoring programs, and monitoring points,
   (2) Evaluate the efficiency of the existing leachate extraction and disposal system,
   (3) Require maintenance activities such as grading of the site to promote runoff, and removal of ponded and settled areas.

SITE DESCRIPTION:

3. The permitted landfill area covers 155 acres of an 160 acre parcel. The facility is located 1/4 mile east of U. S. Highway 101 in the bay lands adjacent to the San Francisco Bay. It is bounded by Marsh Road and Flood Slough on the west, the old Menlo Park sewage treatment plant and Westpoint Slough on the north, Leslie salt ponds on the east, and a pump station, salt pond, and Bohannon Industrial Park on the south.

SITE DISPOSAL HISTORY:

4. The waste management facility opened in 1957 and has been closed to landfilling operations since May 1984. It has since been converted to a bayfront park. The waste management unit was constructed in compliance with state regulations applicable at the time, using an area-fill method. The facility is unlined and was used for the disposal of municipal solid waste and a small quantity of sewage sludge. The facility was operated by the South County Garbage and Refuse Disposal District and San Mateo County Scavenger Company. The facility contains an estimated 1,500,000 cubic yards of refuse with an in place thickness of 10 to 100 feet.

5. The Board adopted Waste Discharge Requirements (WDRs) Order No. 78-111 on December 19, 1978, No. 82-3 on February 17, 1982, and No. 93-113 on September 15, 1993 (General Amendment of Waste Discharge Requirements).

6. The Board adopted Waste Discharge Requirements Order No. 82-56 on September 15, 1982, rescinding Order Nos. 78-111 and 82-3.

7. A landfill gas recovery system consisting of 72 wells was installed at the Marsh Road Disposal Site in 1986 and 1987. The wells are piped into a common header which leads to a cogeneration plant situated along the northern perimeter of the facility.

REGIONAL GEOLOGIC SETTING:

8. The Marsh Road Landfill is located in the northeastern part of the Santa Clara Valley adjacent to San Francisco Bay. The San Francisco Bay is a structural depression that slowly subsided along several parallel northwest-trending faults. The surface of the depression has been periodically inundated by water in response to global changes in sea level, and it is filled with alluvial stream and estuarine type deposits to form a thick sequence of interbeded alluvium and Bay Mud. Exploratory borings drilled at the site encountered a thick sequence of Holocene Bay Mud and interbeded alluvial deposits. The Holocene Bay Mud is divided into two units, older and younger Bay Mud. The Older Bay Mud occurs below approximately -20 feet mean sea level, and consists of semiconsolidated silty clay interbeded with alluvial sand and gravel deposits and exposed in southwest of the site. The younger Bay Mud consists of approximately 5 to 20 feet of organic-rich silty clay interbeded with minor sand layers.

HYDROGEOLOGIC SETTING OF THE SITE:

9. The site lies within the northern part of the Santa Clara Valley groundwater basin, which contains over 1,000 feet of unconsolidated to semiconsolidated clays, silts, sands, and gravel. Regional groundwater studies indicate that the primary freshwater aquifer along the western San Francisco Bay margin are restricted to buried channel deposits with the alluvium. The buried channel deposits are regionally grouped into upper and lower aquifers. Near the Bay, these aquifers are separated form each other by the older Bay Mud, with forms and extensive clay aquitard. Regional groundwater flow within the aquifer system is towards the San Francisco Bay and is recharged by runoff from the Santa Cruz Mountains. Beneath the site, the upper water-bearing zone occurs within the younger Bay Mud.

MONITORING SYSTEM:

10. Groundwater: The existing groundwater monitoring networks consists of four groundwater monitoring wells, G-2 through G-5 that monitor groundwater quality in the younger Bay Mud.

11. Surface water: The main surface water bodies adjacent to the site are Flood and Westpoint Sloughs and salt evaporator ponds. A surface water collection basin and pumping station at the upstream end of the Flood Slough regulates flow from

Atherton Channel which drains runoff from the cities of Menlo Park, Atherton, and uplands to the southwest. Flood Slough flows north along the western perimeter of the facility and terminates at Westpoint Slough. Water elevation in the Slough is generally controlled by tides. Permanent drainage structures at the waste management facility are used to direct storm water runoff into the sloughs.

12. Leachate Monitoring System: A leachate monitoring and collection system was installed at the Marsh Road Disposal Site in 1986 and 1987 and consists of 9 wells and 7 sumps. The leachate extraction system for this landfill was constructed during the summer of 1991 and it has been in operation since then. The system functions automatically on level or timer controls and extracts between 5 to 30 gallons per minute of leachate form the landfill. The sumps were installed in 1986 and 1987 for periodic manual extraction of leachate. Each sump consists of a gravel-filled trench with a horizontal perforated pipe near the base. The mid point of the perforated pipe is joined to a vertical pipe riser (sump) which terminates above the ground surface.

13. In January of 1993, the City obtained a Mandatory Waste Water Discharge Permit, issued jointly by the West Bay Sanitary District and the South Bay Side System Authority. This permit (No. WB930110) allows the City to discharge leachate to the sewer system at an average rate of 21,600 gallons per day (gpd) (equivalent to 15 gpm), a maximum daily rate of 43,200 gpd (30 gpm), and a peak hourly rate of 70 gpm. The Mandatory Waste Water Discharge Permit requires leachate sampling and analysis. The existing Waste Discharge Requirements do not require monitoring of leachate other than quarterly fluid elevation measurements. However, leachate monitoring is required as part of the permit to discharge leachate to the sanitary sewer system.

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

14. This action is exempt from the provisions of the California Environmental Quality Act pursuant to Section 15301, Title 14 of the California Code of Regulations.

BASIN PLAN:

15. The Regional Board adopted a revised Water Quality Plan for the San Francisco Bay Basin (Basin Plan) in June 21, 1995. This updated and consolidated plan represents the Boards master water quality control planning document. The Revised Basin Plan was approved by the State Water Resource Control Board and the Office of Administrative Law on July 20 and November 13, respectively, of 1995. A summary of regulatory provisions is contained in Title 23 of the California Code of Regulations at Section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater.

BENEFICIAL USES:

16. The beneficial uses of surface water (Westpoint Slough and San Francisco Bay) and groundwater basin are:

    (a) Habitat and resting areas for waterfowl
    (b) Fish and Shellfish habitat
    (c) Recreation
    (d) Aesthetic enjoyment
    (e) Industrial Service
    (f) Navigation

17. This landfill was formerly classified as a Class II-2 facility, and pursuant to the 1984 revision of Chapter 15 is reclassified as a Class III facility.

18. Sanitary landfills could potentially impact groundwater if not properly designed maintained and/or operated. Groundwater can also be affected by water that percolates through waste materials and extracts or dissolves substances from it and carries them into the groundwater.

19. No solid waste has been disposed of at this site since its closure to the public in 1976. The site is inactive and considered closed. The following documents were prepared as part of the landfill closure process: Closure Certification Report (EMCON, March 10, 1986), and Report of Disposal Site Information for the Closure and Postclosure Periods (EMCON, May 1986).

20. The Board has notified the discharger and interested agencies and persons of its intent to prescribe updated waste discharge requirements for the discharge, and has provided them with an opportunity to submit their written views and recommendations.

21. The Board in a public meeting heard and considered all comments pertaining to this Order.

ITS HEREBY ORDERED that the discharger, their agents, successors and assigns shall meet the applicable provisions contained in Division 3, Title 23, Chapter 15 of the California Code of Regulations, and Division 7 of California Water Code, and shall comply with the following:

A. PROHIBITIONS:

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 (CWC). (H & SC Section 5411, CWC Section 13263), and wastes shall not be in contact with ponded water.

2. Leachate from wastes and ponded water containing leachate or in contact with refuse shall not be discharged to waters of the State or of the United States.

3. The site is regulated as a closed facility. Therefore, no additional wastes of any origin or type shall be allowed to be deposited or stored within or upon this site.

4. The discharger, or any future owner or operator of this site, shall not cause the following conditions to exist in waters of the State at any place outside the waste management facility:

    A. Surface Waters

        1. Floating, suspended, or deposited macroscopic particulate matter or foam.

        2. Bottom deposits or aquatic growth.

3. Adversely alter temperature, turbidity, or apparent color beyond natural background levels.

4. Visible, floating, suspended or deposited oil or other products of petroleum origin.

B. Groundwater

The groundwater shall not be degraded as a result of the waste maintained at the facility.

B. SPECIFICATIONS:

1. All reports pursuant to this Order shall be prepared under the supervision of a registered civil engineer, California registered geologist or certified engineering geologist.

2. The site shall be protected from any washout or erosion of wastes from inundation which could occur as a result of a 100-year 24-hour precipitation event, or as the result of flooding with a return frequency of 100 years.

3. The discharger shall maintain and monitor the waste unit so as not to cause a statistically significant difference to exist between water quality parameters at the compliance point and Water Quality Protection Standards as defined in Section 2550.2 of Article 5. The point of compliance as per Section 2550.5, Article 5 of Chapter 15 is a vertical surface located at the hydraulically downgradient limit of the waste management unit that extends through the uppermost aquifer underlying the unit.

4. In the event of a release of a constituent of concern beyond the Point of Compliance, the site will begin a Compliance Period pursuant to Section 2550.6(a) of Chapter 15. During the Compliance Period, the discharger shall perform an Evaluation Monitoring Program and a Corrective Action Program.

5. The discharger shall install any reasonable additional groundwater and leachate monitoring devices required to fulfill the terms of any Discharge Monitoring Program issued by the Executive Officer.

6. Landfill gases shall be adequately vented, removed from the landfill, or otherwise controlled to minimize the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to lateral migration. The existing site gas extraction system and its gas flare system must be maintained operational. The results of landfill gas evaluation and monitoring shall be performed pursuant to the requirements of the Bay Area Air Quality Management District and shall be included in the facility's semi annual and annual discharge monitoring report.

7. The discharger shall maintain all devices or designed features, installed in accordance with this Order, such that they continue to operate as intended without interruption as provided for by the performance standards adopted by the California Integrated Waste Management Board.

8. The discharger shall provide and maintain a minimum of two permanent surveyed monuments near the landfill from which the location and elevation of wastes, containment structures, and monitoring facilities can be determined throughout the post-closure and maintenance periods. These monuments shall be installed by a licensed land surveyor or registered civil engineer.

9. The landfill cap shall be graded and maintained to promote lateral runoff of precipitation and to ensure that ponding does not occur.

10. The discharger shall maintain the facility so as to prevent a statistically significant increase in water quality parameters at the point of compliance as provided in Section 2550.5. According to Sections 2550.2 and 2550.3 of Chapter 15, the discharger is also required to establish a Water Quality Protection Standards (WQPS) and a list of Constituents of Concern (COCs) . The discharger shall meet the following schedule in implementing the requirements of this specification. The discharger shall monitor a minimum of four events for the parameters listed in Table 2. Based upon the results of the monitoring, the discharger shall propose a revised list of COC's and monitoring parameters in accordance with the requirements of this Order and Article 5 of Chapter 15. Within 15 months following the adoption of this Order, the discharger shall submit a monitoring program to include a statistical analysis method to the Board for approval by the Executive Officer. A non statistical method (e.g., concentration trend analysis and comparison to practical quantitation limits) will be utilized to evaluate the significance of groundwater data until the proposed statistical methods are approved by the Board.

C. PROVISIONS:

1. The discharger must comply with all conditions of this waste discharge requirements immediately upon its adoption. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board. [CWC Section 13261, 13263, 13265, 13268, 13300,13301, 13304, 13340, 13350).

2. The reports pursuant to these Provisions shall be prepared under the supervision of a registered civil engineer, registered geologist, or California certified engineering geologist.

3. The discharger shall comply with the Discharge Monitoring Program which is attached to and made part of this Order and/or any amendments thereafter. The discharger shall submit semi-annual monitoring reports by April 30 for the winter/spring and October 30 for the summer/fall monitoring reporting period of each year in accordance with the attached updated Discharge Monitoring Program. By April 30 each year the discharger shall also submit an annual report to the Board covering the previous calendar year as described in Parts A&B of the updated Discharge Monitoring Program.

SEMI-ANNUAL REPORT DUE DATE:	**APRIL 30 AND OCTOBER 30 OF EACH YEAR.**
ANNUAL REPORT DUE DATE:	**APRIL 30 OF EACH YEAR. (ANNUAL REPORT MAY BE COMBINED WITH SEMI-ANNUAL REPORT.)**

4. The discharger shall immediately notify the Board of any flooding, equipment failure, slope failure, or other change in site conditions which could impair the integrity of waste or leachate containment facilities or precipitation and drainage control structures.

NOTIFICATION:	**IMMEDIATELY**
REPORT DUE DATE:	**WITHIN 7 DAYS AFTER THE INCIDENT**

5. In the event of settlement which threatens to allow ponding of water or exposure of waste, the discharger shall reconstruct the settled portions of the landfill's cap.

6. In the event of release of leachate from the waste unit into the environment, the discharger shall develop and implement a leachate management plan. This plan must include detailed information regarding leachate collection, recovery, treatment and disposal system. The implementation of this plan shall prevent leachate migration off site.

NOTIFICATION: **IMMEDIATELY**
REPORT DUE DATE: **WITHIN 60 DAYS FROM EVENT**

7. A copy of this waste discharge requirements order shall be maintained at the discharger's office with the environmental compliance staff who are responsible for related operation of this site.

8. This Board considers the property owners and site operators to have continuing responsibility for correcting any problems which arise in the future as a result of this waste discharge or related operations during the post-closure maintenance period.

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. [CWC Section 13267]

10. The discharger must notify the Executive Officer, in writing at least 30 days in advance of 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 acknowledgment 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. [CWC Sections 13267 and 13263]

11. These waste discharge requirements are subject to review and revision by the Regional Board. [CWC Section 13263]

13. 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. [CWC Sections 13260 and 13267]

14. 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, do not protect the discharger from his liability under Federal, State or local laws, nor do they create a vested right for the discharger to continue the waste discharge. (CWC Section 13263(g)]

15. Provisions of this waste discharge requirements are severable. If any provision of these requirements are found invalid, the remainder of these requirements shall not be affected. [CWC 9213]

16. 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. This provision requires the operation of backup or auxiliary facilities or similar systems only when

necessary to achieve compliance with the conditions of this order. [CWC Section 13263(f)]

17. Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the office of Emergency Services of the discharge in accordance with the spill reporting provision of the state toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the discharger is in violation of a prohibition in the applicable water Quality Control Plan. [CWC Section 13271(a)]

18 The discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive officer. Records of monitoring information shall include:

(a) The date, exact place, and time of sampling or measurements;

(b) The individuals who performed the sampling or measurements;

(C) The date(s) analyses were performed;

(d) The individuals who performed the analyses;

(e) The analytical techniques or method used; and

(f) The results of such analyses.

19. (A) All application reports or information to be submitted to the Executive officer shall be signed and certified as follows:

(1) For a corporation--by a principal executive officer or 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.

(B) A duly authorized representative of a person designated in paragraph (a) of this provision may sign documents 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 position having responsibility for the overall operation of the regulated facility or activity; and

(3) The written authorization is submitted to the executive officer.

20. 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. [CWC Sections 13263, 13267, and 13268]

21. The discharger is required to submit a technical report, acceptable to the Executive Officer, that documents that the groundwater monitoring wells G-6, G-7, G-8 as listed in Table No. 1 Part B of the attached Discharge Monitoring Program have been installed. Based on site topography and site development, the discharger may

adjust the installation location of the three compliance groundwater monitoring wells within the downgradient perimeter of the landfill. The discharger is also required to install a leachate monitoring well GR1 which was destroyed in 1989.

REPORT DUE DATE: APRIL 15, 1998

22. The discharger is required to submit a technical report, acceptable to the Executive Officer, that documents that the five Piezometer Wells, P1, P2, P3, P4, and P5 as listed in Table No. 1 Part B of the attached Discharge Monitoring Program have been installed. Based on site topography and site development, the discharger may adjust the installation locations of Piezometer wells within the refuse. The purpose for installation of these wells is to measure the level of leachate within the refuse, construct a leachate contour map, and determine the effectiveness of the existing leachate extraction system.

REPORT DUE DATE: AUGUST 15, 1998

23. The discharger is required to submit a technical report, acceptable to the Executive Officer, documenting evaluation of the effectiveness of the existing leachate extraction system. The purpose for evaluation is to determine whether the system needs improvement.

REPORT DUE DATE: JANUARY 15, 1999

24. The discharger is required to submit a technical report, acceptable to the Executive Officer, documenting that grading of the cap has been completed, potential for precipitation water has been minimized, and settled area have been repaired. The discharger must also make a visual inspection of the shoreline toe berm and document problem areas and proposed corrective action in the technical report.

REPORT DUE DATE: OCTOBER 1, 1997

25. This Order rescinds WDR Order No. 82-56.

26. These requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws; and do not authorize the discharge of wastes without appropriate permits from other agencies or organizations.

27. This Order is subject to Board review and updating, as necessary, to comply with changing State or Federal laws, regulations, policies, or guidelines; changes in the Board's Basin Plan; or changes in the discharge characteristics.

28. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications and Provisions of this Order, shall also be provided to the Environmental Health Services Division of San Mateo Country.

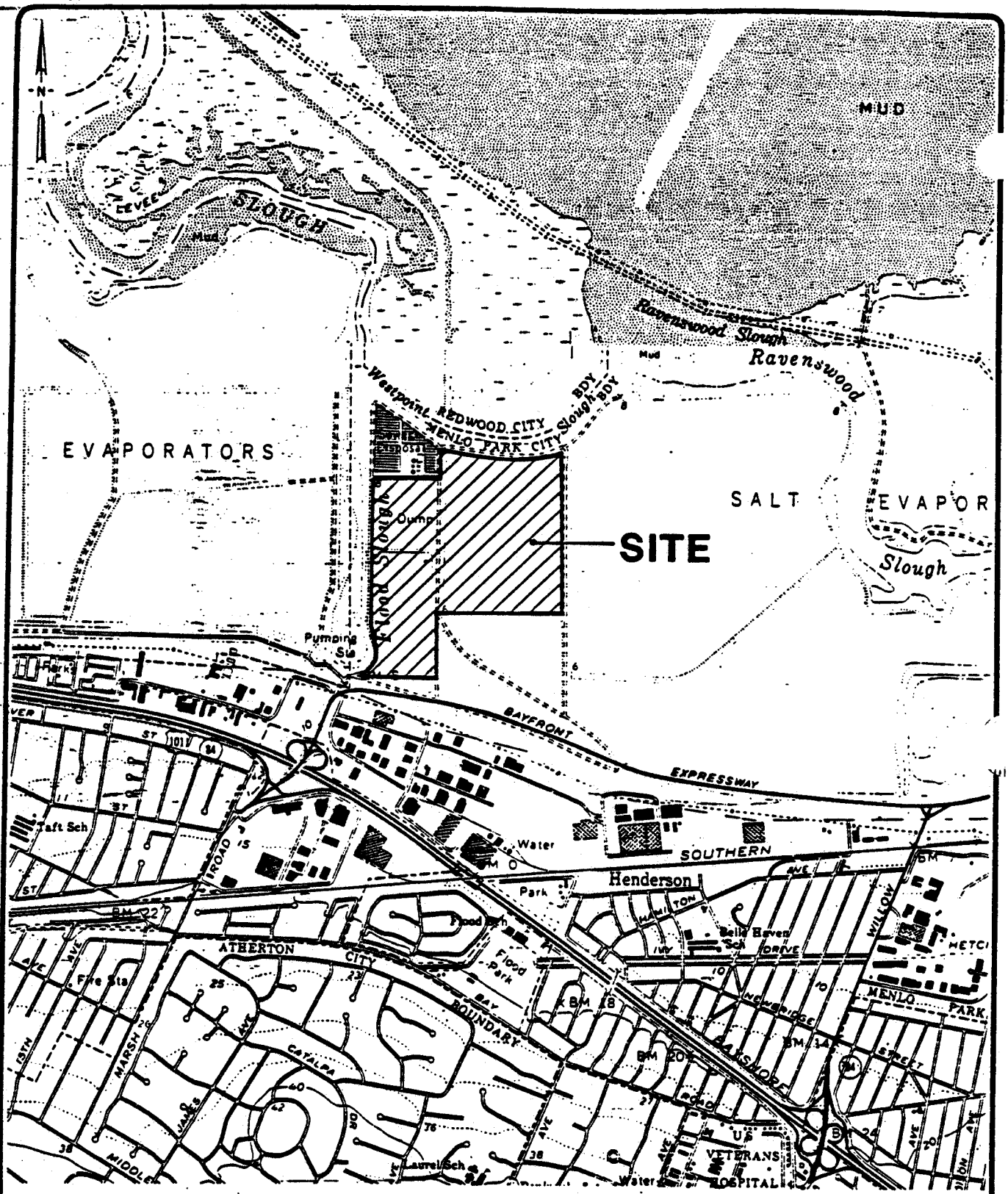
I, Loretta K. Barsamian Executive Officer, do hereby certify that the foregoing is a full, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, June 18,1997.

_____

Loretta K. Barsamian
Executive Officer

Attachments:
A. Figure 1: Site Location Map
B. Discharge Monitoring Program

152753



EMCON Associates

Figure No. 1

Site Location Map

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

DISCHARGE MONITORING PROGRAM

FOR

CITY OF MENLO PARK, BAYFRONT PARK
(formerly Marsh Road Landfill)
CLASS III SOLID WASTE DISPOSAL SITE, MENLO PARK,
SAN MATEO COUNTY

ORDER NO. 97-073

CONSISTS OF

PART A

AND

PART B

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16. This Discharge Monitoring Program is issued in accordance with Provision C.3 of Regional Board Order No. 97-073.

The principal purposes of a discharge monitoring program are:

(1) to document compliance with waste discharge requirements and prohibitions established by the Board,

(2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge,

(3) to develop or assist in the development of standards of performance, and toxicity standards,

(4) to assist the discharger in complying with the requirements of Article 5, Chapter 15 as revised July 1, 1991.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the most recent version of EPA Standard Methods and in accordance with an approved sampling and analysis plan.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and he/she or their authorized representative shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is a discrete sample collected at any time.

2. Receiving waters refers to any surface water which actually or potentially receives surface or groundwater which pass over, through, or under waste materials or contaminated soils. In this case, the groundwater beneath and adjacent to the landfill areas and the surface runoff from the site are considered receiving waters.

3. Standard observations refer to:

   a. Receiving Waters

      1) Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
      2) Discoloration and turbidity: description of color, source, and size of affected area.
      3) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
      4) Evidence of beneficial use: presence of water associated wildlife.
      5) Flow rate.
      6) Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

   b. Perimeter of the waste management unit

      1) Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flow rate. (Show affected area on a map.)
      2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
      3) Evidence of erosion and/or daylighted refuse.

   c. The waste management unit

      1) Evidence of ponded water at any point on the waste management facility.
      2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source
      3) Evidence of erosion and/or daylighted refuse.
      4) Standard Analysis (SA) and measurements are listed on Table 2 (attached).

D. SAMPLING, ANALYSIS, AND OBSERVATIONS

The discharger is required to perform sampling, analyses, and observations in the following media:

1. Groundwater per Section 2550.7(b)
2. Surface water per Section 2550.7(c) and per the general requirements specified in Section 2550.7(e) of Article 5, Chapter 15 and
3. Vadose zone per Section 2550.7(d). This item is neither feasible nor applicable for this landfill.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger or laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.

2. Date and time of sampling.

3. Date and time of analyses, and name of the personal performing the analyses.

4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used where applicable; or reference to standard EPA methods.

5. Calculation of results.

6. Results of analyses, and detection limits for each analysis.

F. REPORTS TO BE FILED WITH THE BOARD

1. Written detection monitoring reports (semi-annual) shall be filed by April 30th and October 30th of each monitoring report period. In addition, an annual report shall be filed by April 30th annually as indicated in F.3 below. The reports shall be comprised of the following:

a. Letter of Transmittal

A letter transmitting the essential points in each report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period, this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge, the report is true, complete, and correct.

b. Each monitoring report shall include a compliance evaluation summary. The summary shall contain:

1) A graphic description of the velocity and direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations. A statistical evaluation of the water quality monitoring data for all groundwater compliance points (As required under Part B. Table 1).

2) The method and time of water level measurement, the type of pump used for purging, pump placement in the well; method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water.

3) Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualification of the person actually taking the samples, and any other observations.

c. A map or aerial photograph shall accompany each report showing observation and monitoring station locations.

d. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.

1) The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and approval by the Executive Officer prior to use.

2) In addition to the results of the analyses, laboratory quality assurance/quality control (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; and explanation for any recovery rate that is outside of the normal range specified by the EPA for that method; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name of the person(s) performing the analyses.

e. An evaluation of the effectiveness of the leachate monitoring or control facilities, which includes an evaluation of leachate buildup within the disposal units, a summary

of leachate volumes removed from the units, and a discussion of the leachate disposal methods utilized.

f. A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.

2. CONTINGENCY REPORTING

a. A report shall be made by telephone of any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Board within five days thereafter. This report shall contain the following information:

1) a map showing the location(s) of discharge;
2) approximate flow rate;
3) nature of effects; i.e., all pertinent observations and analyses; and
4) corrective measures underway or proposed.

b. A report shall be made in writing to the Board within seven days of determining that a statistically significant increase occurred at a point of compliance (between a down gradient sample and a WQPS). Notification shall indicate what WQPS(s) has/have been exceeded. The discharger shall immediately re-sample at the compliance point where this difference has been found and reanalyze.

c. If re-sampling and analysis confirms the earlier finding of a statistically significant increase between monitoring results and WQPS(s), the discharger must submit to the Board an amended Report of Waste Discharge as specified in Section 2550.8(k)(5) for establishment of an Evaluation Monitoring Program (EMP) meeting the requirements of Section 2550.9 of Chapter 15.

d. Within 180 days of determining statistically significant evidence of a release, submit to the regional board an engineering feasibility study for a Corrective Action Program (CAP) necessary to meet the requirements of Section 2550.10. At a minimum, the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all constituents of concern.

3. REPORTING

By April 30 of each year, the discharger shall submit an annual report to the Board covering the previous calendar year. This report shall contain:

a. Tabular and graphical summaries of the monitoring data obtained during the previous year; the report should be accompanied by a 5-1/4" or 3-1/2" computer data disk, MS-DOS ASCII format, tabulating the year's data.

b. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.

c. A written summary of the groundwater analyses indicating any change in the quality of the groundwater

d. An evaluation of the effectiveness of the leachate monitoring/control facilities, which includes an evaluation of leachate buildup within the disposal units, a summary of leachate volumes removed from the units, and a discussion of the leachate disposal methods utilized.

4. WELL LOGS

A boring log and a monitoring well construction log shall be submitted for each new sampling well established for this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 30 days after well installation.

PART B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS

A. ON-SITE OBSERVATIONS - Report Semi-annually

STATION	DESCRIPTION	OBSERVATIONS	FREQUENCY
V-1 thru V-'n'	Located on the waste disposal area as deli-neated by a 500 foot grid network.	Standard observations for the waste management unit.	Semi-annually
P-1 thru P-'n' (perim-eter)	Located at equidistant intervals not exceeding 1000 feet around the perimeter of the waste management unit.	Standard observations for the waste management unit	Semi-annually

A map showing visual and perimeter compliance points (V and P stations) shall be submitted by the discharger in the semi-annually monitoring report.

B. GROUNDWATER, LEACHATE AND SURFACE WATER MONITORING

Report Semi-annually

Groundwater, surface water and seepage monitoring points shall be monitored as detailed in Table 1 and Table 2 and shown on Figure 1 (Attached).

TABLE 1

Monitoring Points For Each Monitoring Medium.:

MONITORING MEDIA	COMPLIANCE POINTS	UPGRADIENT POINTS
Groundwater	G2, G3, G4, G5, G6, G7, G8	* will be established by the discharger
Surface Water	SW1 AND SW2 (Proposed surface water monitoring points)	
** Leachate Piezometric Points	P1, P2, P3, P4, P5, GR1, GR2, GR3, GR4, GR5, GR6, GR7, GR8, GR9, SMP1, SMP2, SMP3, SMP4, SMP5, SMP6, SMP7, and S1	
Leachate Monitoring Point	S1(a sanitary sewer manhole).	
Seepage	Landfill's perimeter must be inspected for any seepage occurrence on a semi-annual basis, and detection of any seepage must be reported immediately to the Board.	

* Correct groundwater elevations for density, and construct groundwater map indicating impact of tidal (high and low) action on groundwater fluctuation and direction.

** Only for leachate level measurement within the saturated thickness of refuse.

C. FACILITIES MONITORING

The discharger shall inspect all facilities to ensure proper and safe operation once per quarter and report semi-annually. The facilities to be monitored shall include, but not be limited to:

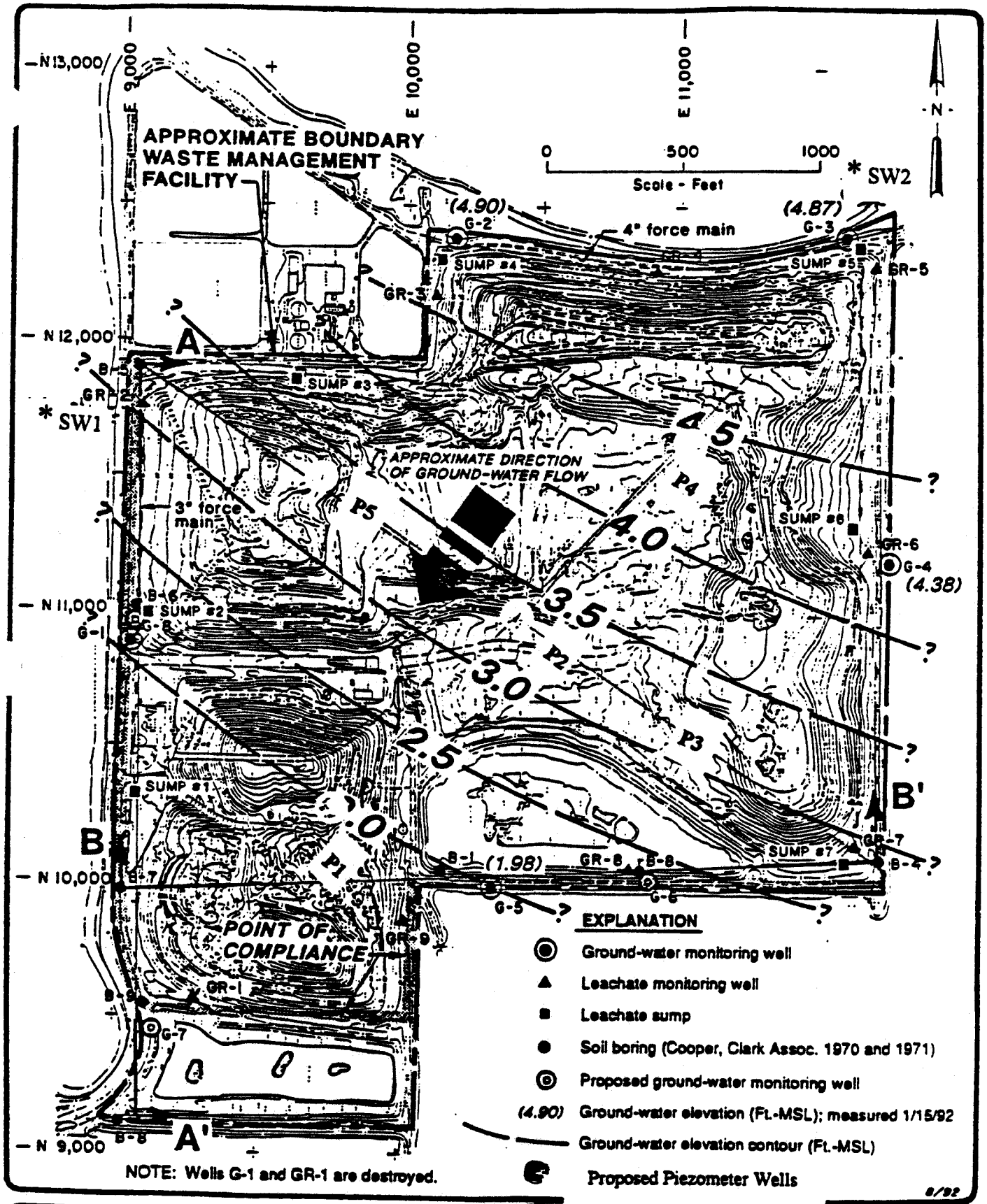
a. Surface water monitoring points;
b. Shallow and deep groundwater monitoring wells;
c. Perimeter diversion channels.

I, Loretta K. Barsamian Executive Officer, hereby certify that the foregoing Discharge-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in this Board's Order No. 97-073
2. Is effective on the date shown below.
3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer.

Loretta K. Barsamian
Executive Officer

Date Ordered: June 18, 1997
Figure 1 - Monitoring Points Location map
Table 2 - Discharge Monitoring Plan



EMCON Associates

Figure No. 1

Monitoring Points Location Map

* - Surface Water Monitoring Points

Table 2 - Discharge Monitoring Plan, List of Analytical Parameters

MARSH ROAD Landfill, Menlo Park, San Mateo County

Parameter	Medium	Method	Frequency		Reference
Water Level Measurements	GW/L	Field	S	Q	1
Temperature	GW /L	Field	S	Q	1
Electrical Conductivity	GW	Field	S		3
pH	GW/ SW/L	Field	S	Q	3
Phenol	L	420.1		Q	
Total Kjeldel Nitrogen	GW/ SW	351.2	S		3
Biological Oxygen Demand	L	405.1		Q	3
Turbidity	GW/ SW	Field	S		3
Total Oil and Grease	L	413.1		Q	3
NO_3-N	GW	300	S		3
NH_3- N (un-ionized)	SW	350.1	S		3
Total Organic Carbon	GW/ SW	415.1	S		3
Total Suspended Solids	L	160.2		Q	3
Total Dissolved Solids	SW	160.1	S		3
VOCs (Appendix I&II)	GW/L	8260	S	Q	3
Polycyclic Aromatic Hydrocarbon	L	8100	S	Q	3
SMVOCs (Appendix II)[8]	GW /SW	8270	S	Q	3
Organophosphorus Pesticides and PCBs [8]	GW/SW	8140	S	Q	3
ChlorinatedHerbicide[8]	GW/SW	8150	S	Q	3
Arsenic	GW/ SW /L	7061	S	Q	3
Barium	GW/ SW/L	6010	S	Q	3
Cadmium	GW/ SW /L	7131	S	Q	3
Chromium	GW/ SW /L	6010	S	Q	3
Copper	GW/ SW /L	6010	S	Q	3
Lead	GW/ SW /L	7421	S	Q	3
Beryllium	GW/ SW	6010	S		3
Tin	GW/ SW /L	6010	S	Q	3
Cyanide	GW/ SW /L	9010	S	Q	3

Table 2-Discharge Monitoring Plan
Bayfront Park (formerly Marshroad Landfill)

Parameter	Medium	Method	Frequency		Reference
Cobalt	GW/ SW /L	6010	S	Q	3
Nickel	GW/ SW /L	7520	S	Q	3
Vanadium	GW/SW	6010	S		
Zinc	GW/ SW /L	6010	S	Q	3

NOTES:

1. Not Applicable
2. Methods for Chemical Analysis of Water and Wastes, EPA600/4/79/029, revised March 1983
3. EPA SW-846
4. Winter/ Spring Reporting Period: October 1 to March 31 (Samples to be collected between February 1 and March 31) Report due by April 30.
   Summer/ Fall Reporting Period: April 1 to September 30 (Samples to be collected between August 1 to September 30) Report due by October 30.
   Annual Report: Due April 30 of each year.
5. Monitoring Media: GW for groundwater, SW for surface water, L for Leachate, S for Semi-annual, and Q for Quarterly.
6. Alternative EPA-approved methods may be substituted for the above methods provided the alternative methods provide detection limits that are equal to or less than those attainable by the indicated method.
7. Metals samples shall be field filtered using a 0.45 micron filter.
8. Monitor parameters for two events to determine concentration, parameters not detected after two events the monitoring frequency will be decreased to once every 5 years.