CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 95-056

UPDATED WASTE DISCHARGE REQUIREMENTS FOR;

CITY OF SAN MATEO
SAN MATEO LANDFILL-EAST THIRD AVENUE DISPOSAL SITE
SAN MATEO, CALIFORNIA

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

SITE DESCRIPTION:

1. The City of San Mateo (hereinafter referred to as the discharger), owns an inactive municipal solid waste disposal site referred to as the East Third Avenue Disposal Site.

2. The East Third Avenue Disposal Site is bounded on the north and east by San Francisco Bay, on the west by San Mateo Creek, and on the south by East Third Avenue, as shown in Figure 1, which is incorporated herein and made part of this Order. The landfill extends about 2,100 feet in an east-west direction, varying in width from 300 feet at the west end to about 900 feet at the east end. The maximum height of the closed landfill will range from 55 to 60 feet when the final cap is completed.

PURPOSE OF ORDER UPDATE:

3. The purpose of this Order is to update the site's groundwater, surface water and leachate monitoring systems, and to incorporate the requirements of the General Industrial Stormwater Runoff program. This Order requires the discharger to protect shoreline stability and to prevent waste exposure to the Bay water. Additionally, this Order requires the discharger to monitor the leachate buildup in the waste unit over time. This Order also requires the discharger to bring the site into full compliance with the current requirements of Chapter 15 of the California Code of Regulations.

SITE HISTORY:

4. The landfill was constructed by disposing of approximately 1.73 million cubic yards of garden, construction and demolition wastes, creek and channel cleaning and other non-garbage type waste into the Bay. However, there is documentation that non inert wastes, such as incinerator ash from the San Mateo sewage treatment plant and material from street sweeping has been disposed of at this landfill.

5. The landfill closed to general dumping on April 28, 1982.

6. Since 1982, the discharger has been allowed to conduct an on site composting operation to provide compost for using in the vegetative layer for the final closure cap. The discharger ceased composting operation in 1990.

7 In June of 1992, the City of San Mateo, submitted a closure plan which has been tentatively approved by the California Integrated Waste Management Board.

8. The Board adopted Resolution No. 62-404 on March 15, 1962 prescribing Waste Discharge Requirements for this landfill.

9. The Board updated Waste Discharge Requirements (WDR) Order No. 87-140 on October 21, 1987.

REGIONAL GEOLOGY:

10. The East Third Avenue Disposal Site is located on the western shore of San Francisco Bay. The bay occupies a major structural depression between the Coast Ranges and the San Andreas fault zone to the west, and the Berkeley Hills and Hayward and Calaveras faults to the east. The present day geomorphic structures of this region has been the result of downwarping movements along these faults and tectonic structures.

11. Subsurface geology is characterized by series of continental and marine sediments overlying bedrock. The bedrock is exposed in the surrounding highlands and in isolated hills on the lowlands adjacent to the bay. Most of the bedrock consisted of Jurassic to Pliocene marine sediments, serpentine, quartz diorite, and rhyolite, with rocks of the Franciscan Complex predominating. Franciscan chert and greenstone outcrop at Coyote Point Regional Park, approximately 1 mile northwest of the site.

12. The Quaternary alluvium consisting of unconsolidated sand, silt, and clay overlies the bedrock. These sediments are stream, alluvial fan, and outwash plain deposits that occur as interfingering layers. In addition to these continental deposits, there is a blue-gray clay layer that represents marine deposits during interglacial periods. This unit commonly referred to as bay mud. The regional geology map is shown in Figure 2.

SITE GEOLOGY:

13. The surficial geology of the Third Avenue Disposal Site area is dominated by artificial fill material and recent alluvium. The peninsula on which the landfill is located consists of fill placed on former tidal flats. The fill is composed of poorly-to well-consolidated gravel, sand, silt and clay. Alluvial sequences are found in the site vicinity. These alluvial sequences provided sediments to form the Bay Mud. The soft impermeable clays know as the Younger Bay Mud are underlain by stiff impermeable clay of unknown thickness, generally referred as the Older Bay Mud.

HYDROGEOLOGIC SETTING OF THE SITE:

14. According to the California Department of Water Resources (1967), the site is in the Belmont Subarea of the San Mateo groundwater basin. The Belmont subarea includes the small alluvial fans on the eastern side of the Santa Cruz mountains, as well as much of the bay plain on the western side of San Francisco Bay between San Francisco and Redwood City. Groundwater is recharged from infiltration along the small streams in the uplands to the west. Groundwater flow is reportedly eastward toward the bay. The Belmont subarea is considered an important groundwater basin because the water-bearing sequences are generally fine-grained and less than 300 feet thick. Aquifer thickness is reported to decrease toward the Bay.

15. The groundwater beneath the site is confined by layers of bay mud above sand layers. The groundwater is interconnected with the bay waters, and water levels in wells will vary due to tidal influences. The water levels represent similar fluctuations as the San Francisco Bay tides, with water levels in the wells changing 20-40 percent of the bay's elevation change.

16. The groundwater chemical composition in the site vicinity is similar to that of San Francisco Bay. High electrical conductivities, total dissolved solids, and chlorides, frequently appear in the quarterly self monitoring reports.

BENEFICIAL USES:

17. The beneficial uses of San Francisco Bay surrounding the landfill are:

    a. Navigation
    b. Water contact recreation
    c. Non-water contact water recreation
    d. Ocean Commercial and Sport Fishing
    e. Commercial and sport fishing
    f. Wildlife Habitat
    g. Preservation of rare and endangered species
    h. Fish migration and spawning

i Shellfish Harvesting
j. Esturaine habitat

18. The present and potential beneficial uses of the deeper groundwater are as follows:
    a. Domestic and municipal water supply
    b. Industrial process supply
    c. Industrial service supply
    d. Agricultural supply

MONITORING PROGRAM:

19. Nine monitoring wells monitor the groundwater quality of the site. Four of these wells which are labeled as MW1, MW2, MW3, and MW4 are 4-inch diameter groundwater wells, and are located outside the perimeter of the refuse. These wells were installed in October of 1987 and are 30 to 60 feet deep. The remaining five wells are 2-inch diameter leachate monitoring wells. These wells are labeled as LW1, LW2, LW3, LW4 and LW5 and are located within the refuse limit. The leachate wells were installed in 1987, but three of the wells were replaced in 1991 as the refuse settlement caused the well casings damage. The leachate wells are each approximately 75 feet deep, with the exception of LW2 which is 40 feet deep.

20. This landfill is an existing Class III facility pursuant to Section 2510(d) of Chapter 15, but it does not meet the siting criteria for a Class III landfill as cited in Sections 2530(c) and 2533.

21. Federal Regulations [40 Code of Federal Regulations (CFR) Parts 122, 123, and 124] require specific categories of industrial activities, including landfills, to obtain a NPDES permit for storm water discharges. The State Water Resources Control Board has issued a General Permit for Storm Water Discharges Associated with Industrial Activities (NPDES Permit No. CAS000001). This facility is subject to these requirements. Pursuant to the Stormwater Discharge Program, this facility is required to submit a Notice of Intent for coverage under the General Permit; to prepare and implement a monitoring program; and to submit an annual report. Compliance with the monitoring and reporting requirements of this Order are intended to assure compliance with the requirements of the General Permit.

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

22. This action is exempt from the provision of the California Environmental Quality Act pursuant to Section 15308, Title 14 of the California Code of Regulations.

23. Sanitary landfills could potentially impact groundwater if not properly designed maintain

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.

24. Since its closure to public in 1982, no solid waste has been disposed of at this site, and the site is considered an inactive facility.

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

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

IT IS HEREBY ORDERED that the City of San Mateo, their agents, successors and assigns shall meet the applicable provisions contained in Title 23, Division 3 of Chapter 15, and Division 7 of California Water Code, and shall comply with the following:

A. PROHIBITIONS

1. 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. <u>Surface Waters</u>

      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.

5. Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

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. Waste shall not be exposed to the surface.

3. 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.

4. The discharger is required to monitor leachate build up over time, and implement a leachate management plan acceptable to executive officer to contain leachate with the waste management unit. If a leachate build up is detected within the waste management unit, a leachate collection and recovery system be installed.

   REPORT DUE DATE: WITHIN 90 DAYS OF CONFIRMED LEACHATE BUILDUP

5. The discharger shall assure that the foundation of the site, the refuse fill, and the structures which control leachate, surface drainage, erosion and gas for this site are constructed and maintained to withstand conditions generated during the maximum probable earthquake.

6. The landfill's cap shall be graded to a minimum slope of 3 percent in order to promote lateral runoff of precipitation.

7. 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.

8. 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.

9. 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.

10. Methane and other landfill gases shall be adequately vented, removed from the landfill units, or otherwise controlled to minimize the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration.

11. This Board considers the property owner and site operator 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.

12. 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.

13. 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.

14. The Regional Board shall be notified immediately of any failure occurring in the waste management unit. Any failure which threatens the integrity of containment features or the landfill shall be promptly corrected after approval of the method and schedule by the Executive Officer.

15. 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 Provision. The discharger shall monitor a minimum of four quarters (one year) 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.

16. Following the establishment of the COC's list, the discharger is required to monitor the chemical quality of leachate on a semi-annual basis for the parameters listed in Table 2.

17. The discharger must comply with all applicable provisions of Chapter 15 that are not specifically referred to in this Order.

18. The proposed sampling analysis program submitted by the discharger in August 1992, must be revised to include the monitoring requirements of this Order for approval by the executive officer.

REPORT DUE DATE: SIX MONTHS AFTER THE ADOPTION OF THIS ORDER

C. PROVISIONS:

1. The discharger shall comply with all Prohibitions, Specifications, and Provisions of this Order, immediately upon adoption of this Order or as provided below.

2. The discharger shall submit a detailed **Post Earthquake Inspection and Corrective Action Plan** acceptable to the Executive Officer to be implemented in the event of any earthquake generating ground shaking of Richter Magnitude 7 or greater at or within 30 miles of the landfill. The report shall describe the containment features, and ground water monitoring and leachate control facilities potentially impacted by the static and seismic deformations of the landfill. The plan shall provide for reporting results of the post earthquake inspection to the Board within 72 hours of the occurrence of the earthquake. Immediately after an earthquake event causing damage to the landfill structures, the corrective action plan shall be implemented and this Board shall be notified of any damage.

NOTIFICATION:	IMMEDIATELY
REPORT DUE DATE:	WITHIN THREE MONTHS OF ADOPTION OF THIS ORDER

3. The discharger shall submit a **Contingency Plan** to be instituted in the event of a leak or spill from the leachate facilities. The discharger shall give immediate notification to the San Francisco Bay Regional Water Quality Control Board, the Local Enforcement Agency (LEA), and the California Department of Toxic Substance Control. The discharger shall initiate its corrective action plan to stop and contain the migration of pollutants from the site.

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

4. The discharger shall file with the Regional Board Discharge Monitoring Reports prepared under the supervision of a registered civil engineer or California registered geologist performed according to any **Discharge Monitoring Program** issued by the Executive Officer.

REPORT DUE DATE: July 1, 1995

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

6. The discharger shall comply with the Self Monitoring Program which is attached to and made part of this order and/or any amendments thereafter.

7. 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

8. The discharger shall prepare, implement and submit a Storm Water Pollution Prevention Plan in accordance with requirements specified in State Water Resources Control Board General Permit for Storm Water Discharges Associated with Industrial Activities (NPDES Permit No. CAS000001).

REPORT DUE DATE: July 1, 1995

9. The discharger must reconstruct those portions of the landfill's cap which have settled such as to prevent ponding of water or exposure of waste.

10. The discharger shall prepare and submit an updated site topographic map prepared based on aerial photography of the site. The age of the aerial photography shall not be older than December 1, 1994. The map shall be annotated to show all groundwater, surface

water and leachate monitoring stations.

REPORT DUE DATE: WITHIN THREE MONTHS OF ADOPTION OF THIS ORDER

11. 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 offsite.

REPORT DUE DATE: WITHIN 60 DAYS FROM EVENT

12. The discharger shall maintain a copy of this Order at its office with the environmental compliance staff who are responsible for related operation of this site.

13. This Board considers the property owner to have continuing responsibility for correcting any problems which may arise in the future as result of this waste discharge or related operations.

14. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office. To assume operation of this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. (Refer to Standard Provisions referenced above). The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contract with the Board and a statement. The statement shall comply with the signatory paragraph described in Standard Provisions and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.

15. The discharger shall permit the Board or its authorized representative, upon presentation of credentials:

    a. Immediate entry upon the premises on which wastes are located or in which any required records are kept.

    b. Access to copy any records required to be kept under the terms and conditions of this Order.

    c. Inspection of any treatment equipment, monitoring equipment, or

monitoring method required by this Order or by any other California State Agency.

d. Sampling of any discharge or ground water governed by this Order.

16. 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.

17. 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.

18. 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.

19. This Order rescinds WDR Order No. 87-140

20. The shoreline protection project, which is to protect the landfill's toe berm against erosion and destruction resulting from the wave actions, must be implemented as approved. The discharger shall submit technical reports upon completion of the project to include as-built plans and Construction Quality Assurance (CQA) documents.

REPORT DUE DATE: SEPTEMBER 1, 1996

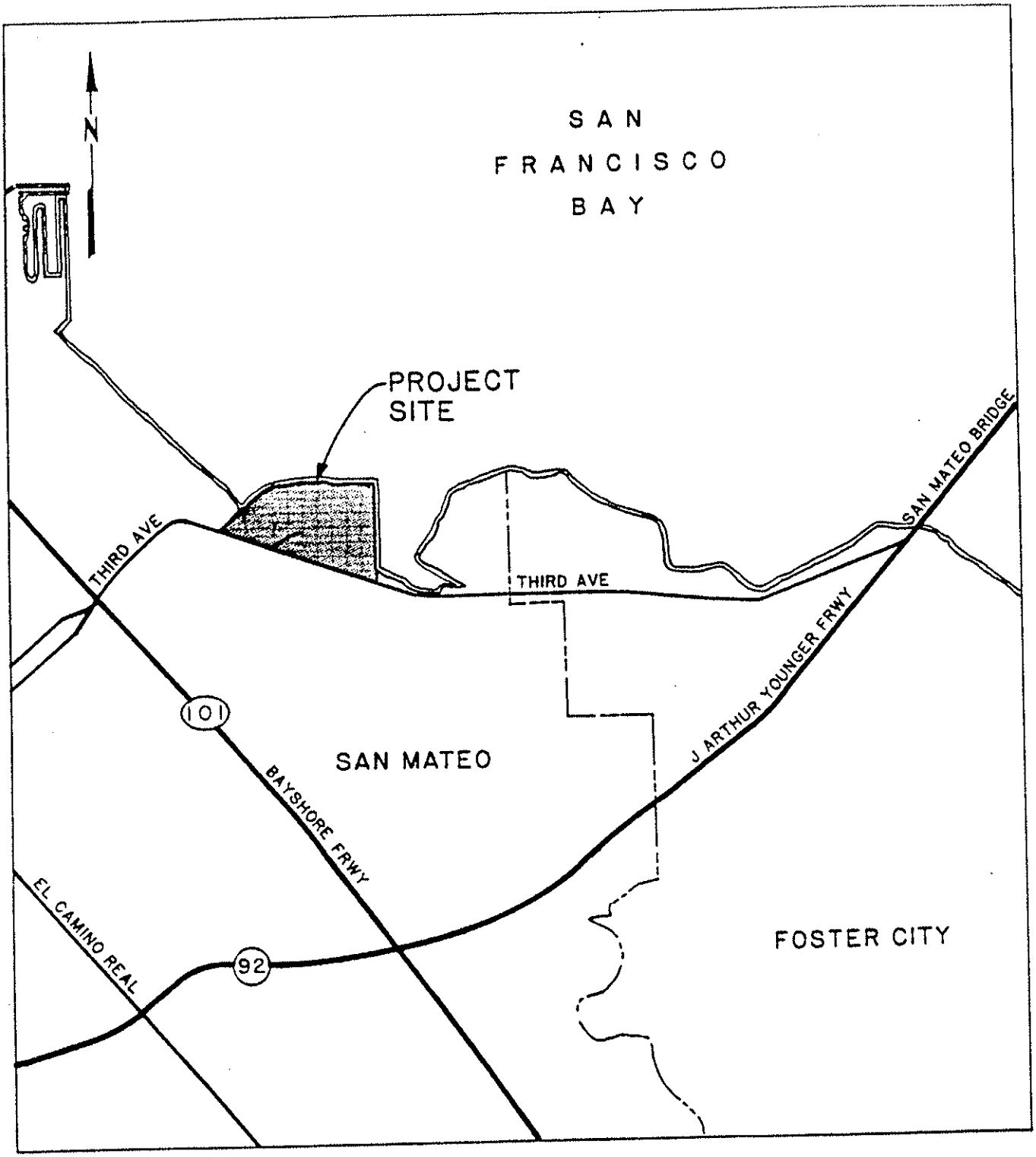
I, Steven R. Ritchie Executive Officer, do hereby certify that the foregoing is a full, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on March 15, 1995.

Steven R. Ritchie
Executive Officer

Attachments:

A. Figures:
   1. Site Location Map
   2. Regional geologic map

B. Discharge Monitoring Program



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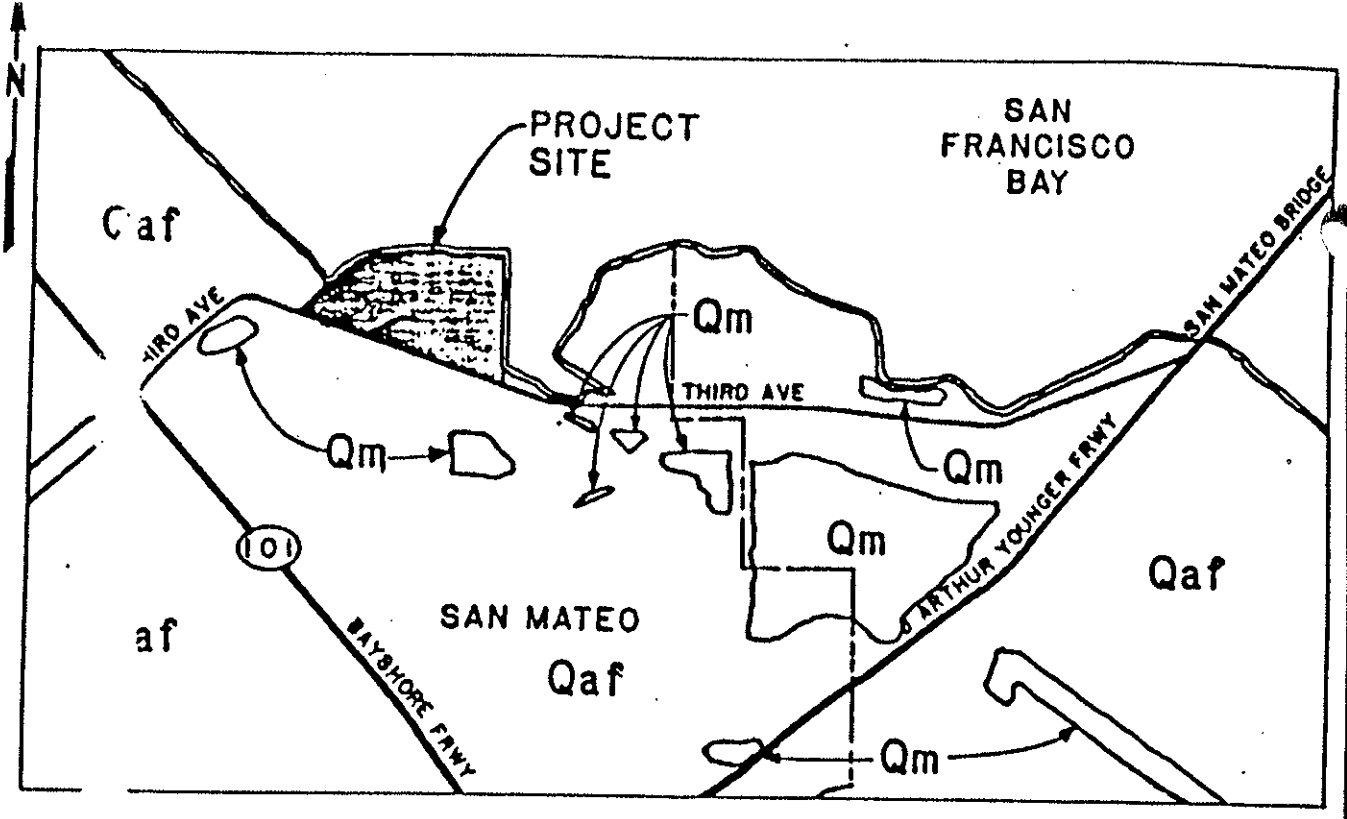
GRAPHIC SCALE

DATE 07/01/90	EGC ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC. CONSULTANTS IN APPLIED EARTH SCIENCE	
JOB NO. E056-02	PROJECT SITE LOCATION MAP	FIGURE NO.
DWG NO. E056-02/4	SAN MATEO LANDFILL	1
DRAWN J VALLAN	EAST THIRD AVENUE DISPOSAL SITE	
CHK'D L HUCKINS	CITY OF SAN MATEO	REV NO.
APP'D J HICKS		



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1. C .OGY TAKEN FROM BRABB, E.E. AND PEYAN 1983 GEOLOGIC MAP OF MATEO COUNTY, CALIFORNIA, ED STATES GEOLOGICAL SURVEY I-1257-A.

EXPLANATION

Qaf	ARTIFICIAL FILL
Qm	SAN FRANCISCO BAY MUD: SOFT CLAY AND SILT WITH SOME LENSES OF SAND, SHELL AND PLANT MATERIAL.

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GRAPHIC SCALE

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ronmental Geotechnical Consultants, Inc.
ional Geologic Map,
y 1990.

Harding Lawson Associates
Engineering and Environmental Services

Regional Geology Map
City of San Mateo
East Third Avenue Disposal Site
San Mateo, California

FIGURE No. 2

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
JZ	17968,012.13		4/92	

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

DISCHARGE MONITORING PROGRAM

FOR

CITY OF SAN MATEO
SAN MATEO LANDFILL-EAST THIRD AVENUE
SAN MATEO COUNTY

ORDER NO. 95-056

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.4 of Regional Board Order No. 95-056.

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 shall be filed by the 15th day of the month following the report period. In addition, an annual report shall be filed 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.

g. The quantity and types of wastes disposed of during the past quarter, and the locations of the disposal operations. [Not applicable for this site]

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 January 31 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.	monthly
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 perimeter.	monthly

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, Leachate and seepage monitoring points shall be monitored as outlined below on Table 1 and Table 2 and shown on Figure 1 (Attached).

During the wet season (October through April), estimate or calculate the volume of

storm water discharge from each outfall and collect and analyze samples of storm water discharge from two storm events during each wet season which produce significant storm water discharge as defined in State Water Resources Control Board Order No. 92-12-DWQ (General Permit for Storm Water Discharges). The samples must be analyzed for:

- pH, total suspended solids (TSS), specific conductance, and total organic carbon (TOC);

- Toxic chemicals and other pollutants that are likely to be present in storm water discharge in significant quantities.

TABLE 1

Monitoring Points For Each Monitoring Medium.:

MONITORING MEDIA	COMPLIANCE POINTS	UPGRADIENT POINTS
Surface Water	SW1, SW2	SW3
Groundwater	MW-1, MW-2, MW-3, MW-4	MW-4
Leachate	LW-1, LW-2, LW-3, LW-4, LW-4, LW-5	Not Applicable
Seepage	S-1 through S-n	

C. FACILITIES MONITORING

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

a. Leachate collection and removal systems;
b. Surface water monitoring points;
c. Shallow and deep groundwater monitoring wells;
d. Perimeter diversion channels;

e. Leachate wells;

I, Steven Ritchie Executive Officer, hereby certify that the foregoing Self-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. 95-056
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.

Steven R. Ritchie
Executive Officer

Date Ordered: March 15, 1995
Figure 1 - Monitoring Points Location map
Table 2 - Discharge Monitoring Plan

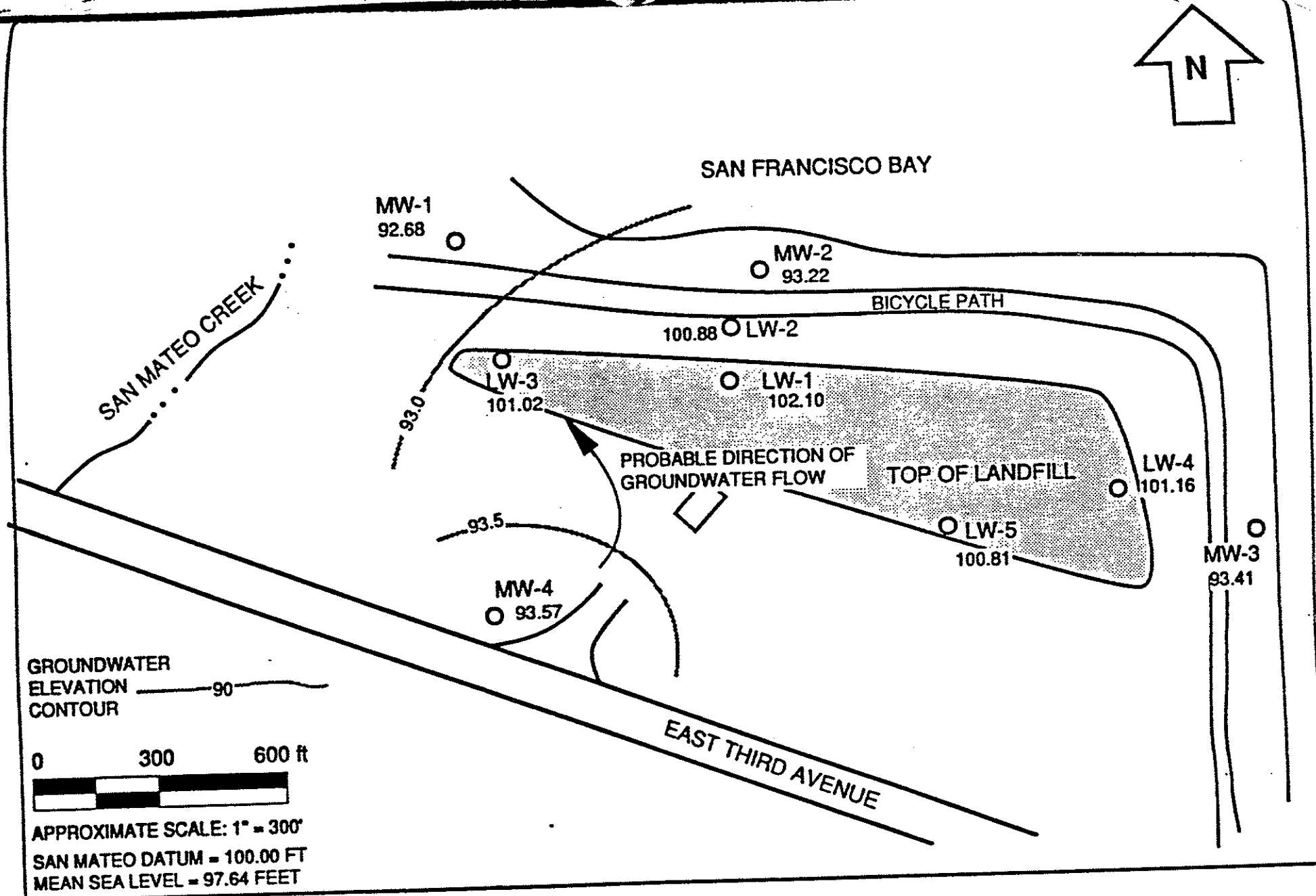

Figure 1 -- Monitoring Points Location map

Table 2 - Discharge Monitoring Plan, List of Analytical Parameters

Parameters	Method (USEPA)	Frequency	Reference
Leachate Level Measurements	Field	Semi-annual	1
Water Level Measurements	Field	Semi-annual	1
Temperature Measurements	Field	Semi-annual	1
Electrical Conductivity	Field	Semi-annual	3
pH	Field	Semi-annual	3
Total Organic Carbon	415.1	Semi-annual	2
Total Nitrogen (the sum of Nitrate Nitrogen and Kjeldahl Nitrogen)	351.2	Semi-annual	2
Turbidity	Field	Semi-annual	1 ,4
Alkalinity, bicarbonate	310.1	Semi-annual	2
Alkalinity, hydroxide	310.1	Semi-annual	2
Biological Oxygen Demand	410.4	Semi-annual	4
Amonia as N (nonionized)	350.1	Semi-annual	4
Chemical Oxygen Demand	410.2	Semi-annaul	2 ,4
Total Dissolved Solids	160.1	Semi-annual	2 ,4
Total Suspended Solids	160.2	Semi-annual	2 ,4
Volatile Organic Compounds (Appendix I)	8260 w/ capillary column	Once in 5 yrs	3
Volatile Organic Compounds (Appendix I&II)	8260/w capillary column	Once in 5 yrs	3
Appendix II Semi-volatile Organics Compounds	8270	Once in 5 yrs	3
Organophosphorus Pesticides & PCB's	8140 w/ capillary column	Once in 5 yrs	3

Chlorinated Herbicides	8150 w/ capillary column	Once in 5 yr	3
Arsenic	7061	Semi-annual	3
Cadmium	7131	Semi-annual	3
Chromium	6010	Semi-annual	3
Copper	6010	Semi-annual	3
Lead	7421	Semi-annual	3
Mercury	7470	Semi-annual	3
Nickel	6010	Semi-anual	3
Selenium	7740	Semi-annual	3
Silver	6010	Semi-annual	3
Zinc	6010	Semi-annual	3

1. Not Applicable
2. Methods for Chemical Analysis of Water and Wastes, EPA600/4/79/029, revised March 1983
3. EPA SW-846
4. Only for surface water monitoring