CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 00-046
UPDATED WASTE DISCHARGE REQUIREMENTS AND
RESCISSION OF ORDER NO. 77-19 FOR:

CITY OF SOUTH SAN FRANCISCO OYSTER POINT LANDFILL
SOUTH SAN FRANCISCO, SAN MATEO COUNTY

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

SITE OWNER AND LOCATION

1. The City of South San Francisco, hereafter referred to as the Discharger, owns the Oyster Point Landfill. The site is located adjacent to San Francisco Bay in the City of South San Francisco as shown in **Figure 1**. The site encompasses an area of approximately 57 acres. The site does not have a formal street address and is bounded on the north, east, and south by the San Francisco Bay and on the west by Oyster Point Boulevard and Gull Drive, as shown in **Figure 2**.

PURPOSE OF ORDER UPDATE

2. These Waste Discharge Requirements are updated to incorporate general provisions for anticipated site development and to bring the landfill into compliance with the appropriate portions of Title 27 of the California Code of Regulations (formerly contained in Chapter 15, Title 23), referred to hereinafter as Title 27.

3. The Discharger submitted a Joint Technical Document (JTD) for the site in March 2000 which provided information regarding current site conditions and proposed development. Additional technical information pertinent to design is required by this Order.

SITE DESCRIPTION

4. The Oyster Point Landfill is a closed, unlined Class III landfill. The landfill operated between 1956 and 1970, and was used for the disposal of primarily solid wastes. No waste has been disposed of at the site since 1970. Prior to 1956, the existing Oyster Point Landfill area consisted of tidal marshlands and upland bedrock and soils. Waste disposal operations resulted in the extension of the shoreline approximately 3,000 feet to the east of the pre-landfill shoreline. Consistent with landfill practices at that time, no liner was installed at the site. Instead, the waste materials were placed directly onto the Younger Bay Mud and soils overlying bedrock.

5. Between 1956 and 1970, the Discharger leased the site to the now defunct landfill operator (The South San Francisco Scavenger Company, hereafter called Scavenger). Between 1970 and 1977, the Discharger conducted maintenance activities at the closed landfill. The Discharger operated a marina constructed in 1962 adjacent to a portion of the former landfill. The marina was expanded in 1978. Since 1977, the San Mateo County Harbor District (Harbor District) has managed and maintained the landfill property under a joint powers agreement with the Discharger. The Harbor District operates the municipal marina and a park at the landfill and manages property leases for other facilities located at the landfill.

REGULATORY HISTORY

6. In 1961, the Regional Board first adopted Waste Discharge Requirements (WDR) for the landfill in Resolution 388. The Resolution prohibited the direct disposal of waste to the Bay, and established self-monitoring requirements for the landfill. The resolution required the Discharger and Scavenger to keep wastes from directly contacting Bay water by placing an impermeable dike around the landfill, to eliminate odors associated with the waste disposal operation, and to eliminate turbidity or discoloration of the water in the Bay due to waste disposal.

7. The Board then issued Cease and Desist Order 407 in March 1962. This Order stated that the Discharger and Scavenger had not provided a time schedule that would identify what steps would be taken to comply with Resolution 388.

8. In December 1964, the Board issued Cease and Desist Order 607, addressing the monitoring wells that had been installed on site. The Order stated that the Discharger and Scavenger had not reported data for these wells for the second and third quarter of 1964, that groundwater monitoring wells had been destroyed by burial, and that further discharge of liquid industrial waste must cease until suitable monitoring wells have been provided.

9. In 1967, the Board issued Resolution 67-38, which prescribed requirements regarding the discharge of industrial waste into the landfill and acknowledged the location of a second liquid industrial waste sump. This Resolution stated that groundwater samples collected from wells located near a liquid industrial waste disposal sump revealed that the liquid wastes were impacting these wells.

10. In 1977, the Board issued Order 77-19 to the Discharger and Scavenger, which prescribed waste discharge requirements and a self-monitoring program for the landfill during final closure activities and expansion of the marina. This Order updates and rescinds Order No 77-19.

LANDFILL CONSTRUCTION HISTORY

11. The operation of the landfill conformed to regulations existing in the late 1950s and 1960s. Waste containment was consistent with practices in the industry at that time. Waste disposal design features such as liners, cellular division of waste, and leachate collection systems were not installed. Waste fill was placed directly on the Bay Mud in the eastern portion of the landfill and directly on the soil overlying bedrock in the upland western portion of the landfill.

12. In order to contain the solid waste from contact with waters of the State, Bay Mud berms were constructed around portions of the waste disposal areas in 1961, 1962, and 1964. However, there is no data to suggest that the industrial waste sumps were ever constructed with additional berms or dikes to control the migration of liquid wastes.

13. After landfill operations ceased in 1970, the Discharger and Scavenger conducted various site closure activities. Between 1971 and 1976, the upper surface of the landfill was compacted and a 2-foot layer of low-permeability soil was placed on top of the compacted fill. Additional remedial measures were constructed between 1979 and 1981. They included installation of a 2- to 3-foot thick Bay Mud cap across the site, placement of additional riprap and Bay Mud along the Marina, construction of bentonite-cement trenches between the landfill and the drainage channel and along an approximately 300-foot length of shoreline on the west basin (beach area), and realignment of the drainage channel. In addition, Bay Mud was placed along the southern boundary of the landfill where leachate seepage had been observed. In 1987, a Bay Mud leachate cutoff trench was constructed along the northern landfill boundary, between the mole and beach area. A gas barrier trench consisting of compacted soil (85%) and chlorinated polyethylene (CPE) liner (20 mils thick) was also installed along the western landfill boundary.

SITE WASTE DISPOSAL HISTORY

14. Scavenger began disposal operations at the landfill in 1956. Initially, municipal solid waste was disposed of on the ground and burned. This activity ended in 1957. Scavenger then placed waste directly into the tidelands and used a wire fence to control the discharge of solids into the Bay due to tidal action.

15. Beginning in 1961, the landfill received liquid industrial waste for disposal. The types of liquid waste included paints, thinners, and coagulated solvent sludge. The liquid wastes were placed in a sump (Sump 1) constructed within the waste fill. No records describing the construction of the sump have been found. Liquid industrial wastes were disposed of in this sump from 1961 until 1966. In July 1966, the Discharger discontinued the use of Sump 1 and used Sump 2 until 1967. The total volume of liquid industrial waste received by the landfill in 1965 and 1966 is estimated at 608,351 and 378,680 gallons, respectively.

16. The landfill material consists of up to 45 feet of poorly compacted municipal and industrial waste. Typical waste found within the landfill includes the following: paper, cardboard, organic matter, wood, glass, metal, rocks, concrete, rubber, drums, chemicals, and other materials. The base of the landfill material has been compressed into, and mixed with, the upper part of the Bay Mud. The volume of waste in the landfill is approximately 2.5 million cubic yards and total tonnage of this material is approximately 1.4 million tons.

SITE GEOLOGIC SETTING

17. The site lies on the western shores of San Francisco Bay on reclaimed bay lands and adjacent uplands at the eastern base of San Bruno Mountain. The site itself is a relatively flat lying area with an average elevation of about 20 feet above sea level. Bedrock belonging to the Franciscan Formation, alluvial material, and Bay Mud lie directly beneath the refuse materials. The Franciscan Formation consists primarily of sandstone and shale. Bedrock is near the surface at the western end of the landfill but lies at depth beneath the eastern end. Alluvial units consisting of medium stiff to hard, green, gray-green, and brown sandy and silty clay and medium dense to dense silt, silty sand, and sand unconformably overlie the bedrock surface. These alluvial units are absent from beneath the western edge of the landfill, but lap onto the bedrock surface about 300 feet east of the original Bay shoreline. Borings at the eastern end of the landfill penetrate, in aggregate, over 30 feet of these units. The alluvial units are overlain by Bay Mud ranging in thickness from less than 1 foot along the original Bay shoreline to over 90 feet at the eastern end of the landfill. The Bay Mud consists of very soft to soft, dark gray silty clay to clayey silt, with occasional shell fragments and sandy clay zones.

SITE HYDROGEOLOGIC SETTING

18. The hydrogeologic units in the vicinity of the site include the Franciscan Formation bedrock, the alluvial units between the bedrock and the Bay Mud, the Bay Mud, and the landfill and perimeter berms. The landfill and perimeter berms are a water table hydrostratigraphic unit referred to by others as the A hydrologic zone or A-zone.

19. Groundwater occurs under confined conditions in the alluvial units between the bedrock and the Bay Mud, the Bay Mud acting as the confining layer. These alluvial units may be hydraulically connected to similar units farther to the south that may be equivalent to and in hydraulic connection with the hydrogeologic units from which San Bruno draws a portion of its domestic water supply, approximately 2.5 miles away. This hydrologic unit has been referred to by others as the B hydrologic zone or B-zone. The Bay Mud forms a low-permeability layer that acts as an aquitard that confines the underlying B-zone units

and restricts infiltration of leachate from the overlying landfill. Laboratory permeability tests conducted on two representative samples of Bay Mud indicate vertical conductivities of 1.21×10^{-8} and 1.51×10^{-8} cm/sec. Horizontal conductivities were 9.06×10^{-9} and 1.14×10^{-8}.

20. Water levels within the A-zone range from approximately 2.8 feet to 24 feet below ground surface. Leachate contours indicate a general flow direction from the landfill interior towards San Francisco Bay on the east and on the west.

21. Tidal fluctuations were measured in wells GW-4a, GW-5a, GW-6a, GW-7a, and GW-11a which are located along the perimeter of the landfill but were not measured in wells GW-3a and GW-10a, located along the central axis of the landfill. Therefore, wells along the perimeter of the landfill are in hydraulic connection with San Francisco Bay.

22. The primary sources of recharge to the shallow units are through direct infiltration of precipitation and tidal seepage from the Bay. Street runoff from south of the landfill is channeled to an east-west drainage ditch that traverses a portion of the southern landfill boundary and empties into the Bay. Landfill surface water runoff is collected in six drainage pipes, four that empty into the east-west drainage ditch and two that drain directly to the Bay on the north side of the landfill.

23. At the location of the A-zone and B-Zone groundwater monitoring well pair within the landfill, a consistent vertical gradient has not been observed.

GROUNDWATER CONTAMINATION AND WATER QUALITY

24. Groundwater within the A-zone in both the landfill and perimeter berms has detectable concentrations of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) as well as dissolved metals. Shallow groundwater in the A-zone generally exceeds 3000 mg/l total dissolved solids (TDS) and is not reasonably expected by the Board to supply a public water supply system. Therefore, the A-zone meets the exemption criteria of the State Water Resources Control Board's Sources of Drinking Water Policy (SWRCB Resolution 88-63).

25. Groundwater within the B-zone has detectable concentrations of chloroform and dimethylphthalate. The Discharger has attributed these organic compounds to the addition of potable water to this well during drilling to counter flowing sands. Dissolved metals are also present within the B zone.

26. Groundwater within the Franciscan Formation bedrock outside the landfill does not contain detectable concentrations of VOCs or SVOCs, and dissolved metals and mineral concentrations are low to nondetectable.

27. Groundwater within the gravelly fill materials on the south bank of a drainage ditch that separates the landfill from the Cabot-Cabot & Forbes industrial park does not contain detectable concentrations of VOCs or SVOCs. This indicates that releases of VOCs and SVOCs have not occurred at this location.

CURRENT AND FUTURE LAND USES

28. Present landfill useage consists primarily of open space and commercial uses including the Oyster Point Marina and an office complex located at the western end of the landfill.

29. In 1994, the Discharger adopted the East of 101 Area Plan describing future land use at the landfill site as a mixture of open space and commercial development. Recent proposals include the development of hotel facilities. Commercial development represents a change in post-closure land use of the site.

SITE INVESTIGATIONS

30. Board Resolution 388 included a self-monitoring program requiring the Discharger and Scavenger to monitor groundwater between Sump 1 and the Bay. These wells were buried within the landfill prior to 1964 and their number and location are unknown and therefore they could potentially be vertical conduits.

31. In 1989, Applied Consultants completed a groundwater assessment for development of the Oyster Point Marina Inn site. Applied Consultants installed six groundwater monitoring wells at the site (Wells MW-1 through MW-6).

32. In 1989, Harding Lawson Associates (HLA) conducted a site investigation along Gull Drive to collect geotechnical data for the design and construction of road improvements to facilitate access to businesses along Oyster Point Boulevard. Borings completed by HLA did not encounter municipal or industrial waste.

33. Levine-Fricke conducted a soil boring program in 1991 to determine if landfill wastes were present between the location of a former rod and gun club on the landfill site and the beach area. The borings encountered metallic slag below the ground surface and sandy gravel fill beneath that. The precise location of these borings is not known. However, the gun club on this parcel included an indoor shooting range where firearms were discharged inside a concrete bunker. According to the Discharger's personnel, the lead shot was recovered and recycled.

34. During construction of improvements to Gull Drive in 1995, wastes associated with Sump 2 were uncovered. The Discharger removed an estimated 4,000 cubic yards of wastes and extended the landfill cover over this area with oversight from the San Mateo County Health Services Agency and the Board. As a result of these activities, the Board requested that a groundwater and leachate monitoring plan be prepared for the site.

35. In 1999 and 2000, Gabewell and PES Environmental conducted investigations of the landfill which included a geophysical investigation to identify the boundaries of Sumps 1 and 2, landfill gas sampling, leachate grab sampling, monitoring well installation and sampling, aquifer testing including slug tests, tidal monitoring, and test pit excavation.

BASIN PLAN

36. The Regional Board adopted a revised Water Quality Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The State Water Resource Control Board and the Office of the Administrative Law approved the revised Basin Plan 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 groundwaters.

    Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas containing high TDS, high background contaminant levels, or those areas with a low-yield. Some groundwater underlying and adjacent to the site qualifies as a potential source of drinking water, though there is no current use of the site's groundwater, nor any anticipated plans for its use.

BENEFICIAL USES

37. The beneficial uses of South San Francisco Bay include:

    a. Wildlife habitat;
    b. Navigation;
    c. Water contact recreation;
    d. Non-contact water recreation;
    e. Commercial and sport fishing;
    f. Preservation of rare and endangered species;
    g. Estuarine habitat;
    h. Fish migration;
    i. Fish habitat;
    j. Industrial service supply; and

k. Shellfish harvesting.

The existing and potential beneficial uses for groundwater in the vicinity of the Oyster Point Landfill include municipal and domestic water supply, industrial process water supply, industrial service water supply, and agricultural water supply. The site overlies the Visitacion Valley Groundwater Basin. As discussed in Finding 24, groundwater within the A-zone is brackish. Furthermore, there is no historical, current or planned use of the shallow brackish groundwater in the vicinity of the landfill as a source of drinking water. However, the deeper aquifers beneath the site are a potential source of drinking water.

It should be noted that the A zone discharges to San Francisco Bay and has the potential to impact the beneficial uses of San Francisco Bay.

WATER QUALITY PROTECTION STANDARDS

38. Title 27 of the California Code of Regulations requires the RWQCB to establish a Water Quality Protection Standard (WQPS) in Waste Discharge Requirements for each waste management unit covered by that order. The four components of the WQPS are as follows:

a. Montoring Parameters

Title 27 defines Constituents of Concern (COCs) as "all waste constituents, reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the Unit". Monitoring parameters (MPs), a subset of the COCs, are typically the most mobile and commonly detected COCs in groundwater at the site and are measured on a more frequent basis than the entire list of COCs. During a corrective action period, monitoring parameters provide a means to evaluate the effectiveness of the corrective action.

b. Concentration Limits

Maximum Allowable Concentration Limits (MACLs) shall be established for each COC. Because it may be technologically and/or economically infeasible to clean up all landfill-related constituents in the groundwater to background concentrations (non-detect for organics), MACLs are developed to protect the beneficial uses of shallow groundwater beneath the landfill (see Finding 37 - Beneficial Uses). The applicable beneficial uses with the most stringent water quality objectives are related to shallow groundwater discharge to surface waters of San Francisco Bay and include uses involving the health of aquatic organism receptors in the bay and humans who consume aquatic organisms from the bay.

c. Point of Compliance

Title 27 defines the Point of Compliance as the "vertical surface located at the hydraulically downgradient limit of the Unit that extends through the uppermost aquifer underlying the Unit." This Order defines that the appropriate Point of Compliance for the landfill is the hydraulically downgradient perimeter of the waste fill area and directly beneath the waste fill area

d. Monitoring Points

Monitoring points, as defined in Title 27, "means a well, device, or location specified in the waste discharge requirements at which monitoring is conducted and at which the water quality protection standard applies". This Order requires that the monitoring points shall be located along the perimeter of the landfill.

MONITORING PROGRAMS

39. **Groundwater Monitoring** – The site contains a network of ten leachate wells (GW-1a, GW-3a, GW-10a, GW-11a, GW-12a, GW-13a, GW-14a, GW-15a, GW-17a, and MW-5), one alluvial unit well underlying the Bay Mud (GW-2b), four wells (GW-4a, GW-5a, GW-6a, and GW-16a) screened in the landfill perimeter containment berm, and two wells (GW-7a and GW-9a) screened in earth fill. One well (GW-8c), screened in the bedrock west of the former shoreline, is located upgradient of the landfill.

40. **Leachate Monitoring** - The leachate program is detailed in the Discharge Monitoring Plan attached to this Order (Attachment A). The Discharger is required to analyze for the monitoring parameters as presented in the attached Discharge Monitoring Program attached to this Order (Attachment A).

41. **Surface Water Monitoring** –Surface water monitoring will be conducted as part of a General Industrial Storm Water Discharge Permit through Industrial and Construction Stormwater Monitoring Plans.

42. **Vadose Zone Monitoring -** Vadose zone monitoring as required by Section 20415, Title 27, is not technically feasible as there is no vadose zone at this site.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

43. The Discharger has completed Mitigated Negative Declarations that were certified complete on September 28, 1998 and March 12, 1999 for two future developments on the Oyster Point Landfill, as described in findings 28 and 30 above. The Mitigated Negative Declarations found that that there is no substantial evidence that the proposed projects, following implementation of the mitigation measures contained in the Negative Declarations, will have a significant effect on the environment. The Board accepts these environmental documents and finds that this Order protects the water resources associated with the project.

Impacts of geology and soils outlined in the Negative Declarations. The Mitigated Negative Declarations list several potential impacts of geology and soils including the potential for seismic-related ground failure, including liquefaction; construction of the development on a geologic unit or soil that is unstable, or would become unstable as a result of the project and potentially result in on- or off-site landslide; lateral spreading, subsidence, liquefaction, or collapse. The Mitigated Negative Declarations incorporate several mitigation measures by reference to the "Geotechnical Investigation for the Proposed Expansion of the Oyster Point Marina", October 20, 1976, and "Geotechnical Investigation Report proposed Hilton Suites Hotel at Oyster Point Marina", January 7, 1999. The proposed mitigation measures address general facility conditions, foundations, settlement, earthwork, underground utilities, pavements, corrosivity, and site drainage. This WDR addresses the above-mentioned mitigation measures, as well as, soil and geological mitigation measures related to landfill closure and potential post closure construction at the landfill. All remaining mitigation measures are being overseen by the San Mateo County Department of Environmental Health.

Impacts to hydrology and water quality outlined in the Negative Declarations. The Mitigated Negative Declarations lists several potential impacts to water quality including changing absorption rates, drainage patterns, and the amount of surface water runoff. The Mitigated Negative Declarations list several mitigation measures including the statement that the Discharger shall provide a Storm Water Pollution Prevention Plan and an Erosion Control Plan as a part of the building and grading permit process. Pursuant to City Ordinance, storm water pollution control devices and filters shall be installed to prevent pollutants from entering the Discharger's storm drain system at the Bay. If wetlands are affected, the Negative Declarations state that it would be necessary to obtain BCDC and/or U. S. Army Corps of Engineers approval. This WDR requires a Storm Water Pollution Prevention Plan and Erosion Control Plan and therefore addresses these mitigation measures.

Impacts of hazards and hazardous materials outlined in the Negative Declarations. The Mitigated Negative Declarations also list several other potential impacts to water quality including the fact that the proposed development will affect the closure status of the landfill, causing it to fall under the Title 27 postclosure requirements. Additionally, the Mitigated Negative Declarations list several mitigation measures including potential measures that may be necessary depending on the findings of the Sump 1 and Sump 2 investigations. Mitigation measures will be addressed by the documents required by this Order. Any remaining mitigation measures are being overseen by the San Mateo County Department of Environmental Health.

44. The Board has notified the Discharger and interested agencies and persons of its intent to adopt revised, updated Waste Discharge Requirements for the Discharger and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

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

IT IS HEREBY ORDERED that the Discharger, its agents, successors and assigns shall meet the applicable provisions contained in Title 27, Division 2, Subdivision 1 of the California Code of Regulations and Division 7 of the California Water Code and shall comply with the following:

A. PROHIBITIONS

1. The relocation of wastes to or from waste management units shall not create a condition of pollution or nuisance as defined in Section 13050 (l) and (m) of the California Water Code. Any relocated waste shall not be placed in or allowed to contact ponded water from any source whatsoever. Wastes shall not be relocated to any location where they can be discharged into waters of the State or of the United States.

2. Leachate and ponded water containing leachate or in contact with waste shall not be discharged to waters of the State or of the United States unless specifically authorized under an NPDES permit.

3. The creation of any new waste management units is prohibited without prior Regional Board approval.

4. The Discharger shall not excavate within or reconfigure any existing waste management unit without prior Regional Board approval.

5. No additional waste shall be deposited or stored at this site.

6. The Discharger, or any future owner or operator of the 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

        - Floating, suspended, or deposited macroscopic particulate matter or foam.
        - Bottom deposits or aquatic growths.
        - Alteration of temperature, turbidity, or apparent color beyond natural background levels.

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

- Further degradation of groundwater quality.
- Substantial migration of existing groundwater impacts.

B. SPECIFICATIONS

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

2. The site shall be protected from any washout or erosion of wastes or cover material and from inundation that 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. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes during the life of the site.

4. The existing containment, drainage, and monitoring systems at the facility, shall be maintained as long as leachate is present and poses a threat to water quality.

5. The Discharger shall assure that the structures which control leachate, surface drainage, erosion and gas are constructed and maintained to withstand conditions generated during the maximum probable earthquake.

6. The final cover system shall be graded and maintained to promote lateral runoff and prevent ponding and infiltration of water.

7. The Discharger shall analyze the samples from the existing groundwater wells as outlined in the Discharge Monitoring Program (Attachment A).

8. In the event of a release of a constituent of concern beyond the Point of Compliance (Section 20405, Title 27), the site begins a Compliance Period (Section 20410, Title 27). 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 future Discharge Monitoring Program issued by the Executive Officer.

10. 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.

11. 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.

12. The Discharger shall provide a minimum of two surveyed permanent monuments near the landfill from which the location and elevation of wastes, containment structures, and monitoring facilities can be determined throughout the operation and post-closure maintenance period. A licensed land surveyor or registered civil engineer shall install these monuments.

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

14. The Discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Order.

15. The Discharger shall maintain the facility so as to prevent a statistically significant increase in water quality parameters at points of compliance as provided in Section 20407 of Title 27.

16. A cap shall be placed on the landfill that meets the post-closure maintenance requirements for solid waste landfills as detailed in Section 21090 of Title 27.

C. PROVISIONS

1. The Discharger shall comply immediately, or as prescribed by the time schedule below, with all Prohibitions, Specifications and Provisions of this Order. All required submittals must be acceptable to the Executive Officer. The Discharger must also comply with all conditions of these Waste Discharge Requirements. 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, 13267, 13268, 13300, 13301, 13304, 13340, 13350].

2. All technical and monitoring reports required to be submitted pursuant to this Order are being requested pursuant to Section 13267 of the California Water Code. Failure to

submit reports in accordance with schedules established by this Order or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer may subject the Discharger to enforcement action pursuant to Section 13268 of the California Water Code.

3. The Discharger shall submit an **Annual Monitoring Report**, acceptable to the Executive Officer, by January 31 of each year in accordance with the attached Discharge Monitoring Program (Attachment A). The annual report to the Board shall cover the previous calendar year as described in Part A of the Monitoring Program. In addition to the requirements outlined in Attachment A, this report shall also include the following: location and operational condition of all leachate and groundwater monitoring wells; and groundwater and leachate contours for each monitoring event. Additionally, the Discharger shall submit semi-annual monitoring reports, to be submitted no later than July 31 and January 31 of each year; the January 31 semi-annual report may be combined with the annual report.

REPORT DUE DATES:

Annual Report	**January 31 (Each Year)**
Semi-Annual Report	**July 31 and January 31**

4. The Discharger shall submit an **Annual Maintenance Report** to the Board, acceptable to the Executive Officer, detailing the repair and maintenance activities that need to be completed prior to the commencement of the next rainy season. This letter report shall also include a schedule for repair and maintenance activities, and a cost analysis detailing the anticipated expense for all repairs, maintenance and monitoring during the next 12 months. Repair and maintenance estimates shall be based on rainy season inspections conducted throughout the winter as required in the Discharge Monitoring Plan. The report shall also contain a demonstration of the adequacy of the funds needed for the site repair and maintenance.

REPORT DUE DATE: **July 31 (Each Year)**

5. The Discharger shall submit an **Emergency Response Contingency Plan**, acceptable to the Executive Officer, intended to stop and contain the migration of pollutants to receiving waters as the result of any earthquake generating ground shaking of Richter Magnitude 7 or greater at or within 30 miles of the landfill, excessive rainfall, tidal action, or other significant events. The contingency plan shall describe the containment features, and groundwater monitoring and leachate monitoring facilities potentially impacted by such events. The plan shall also include methods of containment and cleanup of waste exposed or displaced at the site. 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 event causing damage to the landfill structures, the corrective action plan shall be implemented and the Discharger shall give immediate notification to the Regional Board as well as the Local Enforcement Agency (LEA) of any damage, including corrective actions and cleanup activities, and the environmental

impacts of such. The plan shall also include a demonstration of the adequacy of the funds needed for the site contingency actions.

REPORT DUE DATE: September 21, 2000

6. The Discharger shall prepare and submit a **Closure/Post-Closure Maintenance Plan**, acceptable to the Executive Officer for the entire landfill, pursuant to Title 27. The plan shall outline activities to be implemented to complete final closure of the landfill, including development of a plan to regrade and repair the landfill cover in compliance with Title 27, sections 20950 to 21200. The plan shall also outline post-closure maintenance activities pursuant to Title 27, Section 21769. The maintenance plan shall be updated to reflect changes in landfill development.

PLAN DUE DATE: September 21, 2000
UPDATE DUE DATE: 60 days prior to completion of construction of any new development

7. The Discharger shall prepare and submit a **Water Quality Monitoring Plan** acceptable to the Executive Officer, for the entire landfill, pursuant to Title 27 and as required by The Self-Monitoring and Reporting Program included as Attachment A to this Order. The plan shall propose points of compliance (POCs), Contaminants of Concern (COCs), Monitoring Parameters (MPs), Maximum Allowable Concentration Limits (MACLs), and the methods for validating data and statically evaluating whether a MACL exceedence at a POC is significant. Approved MACLs shall be attached to the Self-Monitoring and Reporting Program and identified as Table B. The plan shall include a Water Quality Sampling and Analysis Plan (SAP) which gives a complete and detailed description of the physical process for obtaining field information, measurement, and water quality samples. The SAP shall be usable as a stand alone document and shall be provided to each member of the sampling team. The plan shall also include a Leachate Management Plan to contain leachate within the waste management unit. Upon the detection of leachate buildup within the waste unit, a leachate collection, extraction, disposal systems must be installed. The implementation of this plan must establish an inward leachate gradient.

REPORT DUE DATE: November 21, 2000

8. The Discharger shall submit a **Post-Closure Development Standards Report**, acceptable to the Executive Officer, with general guidelines to be implemented prior to all future developments. This document shall contain an overview of the design criteria for piles, foundations, caps, etc. that are proposed for all potential developments on the Oyster Point landfill. This document shall include engineering design criteria for activities that would affect the engineering geologic and hydrogeologic properties of the landfill. For all new development within the landfill, the document shall include assurance that:

- A Title 27 cap shall be placed over the entire landfill prior to development activities;

- The cap integrity shall be maintained during and after construction;

- Any penetrations of the cap, such as from piles, utility pipes, foundations, plants, etc., shall be adequately sealed to prevent infiltration of water;

- All utility lines and right-of-ways shall be placed in an overexcavated trench lined with a minimum of two-feet of clean, low hydraulic conductivity fill such that releases to the landfill are prevented and workers are prevented from being exposed to landfill materials.

- Stormwater run-on and run-off shall be adequately controlled to prevent excessive erosion and damage to the cap. Any applied irrigation water shall likewise be controlled;

- All constructed buildings and utilities shall be built to accommodate the maximum anticipated settlement without being damaged; and

- New construction shall not promote additional standing water on top of the landfill.

REPORT DUE DATE: November 21, 2000

9. The Discharger shall prepare and submit a **Development or Redevelopment Proposal**, acceptable to the Executive Officer, for each individual development or redevelopment proposed for the landfill. Each individual proposal shall:

- Describe the project;

- Identify key components of the design that may impact the landfill; and

- Refer to and document components of the design that will comply with the **Post-Closure Development Standards Report.**

REPORT DUE DATE: 120 days prior to commencement of construction

10. The Discharger shall immediately notify the Board of any flooding, ponding, settlement, equipment failure, slope failure, exposure of waste, or other change in site conditions that could impair the integrity of the landfill cap, waste or leachate containment facilities, and/or drainage control structures and shall immediately make repairs. Within 30 days, the Discharger shall prepare and submit a technical report, acceptable to the Executive Officer, documenting the corrective measures taken.

    NOTIFICATION DUE DATE: Immediately upon occurrence
    REPORT DUE DATE: 30 days after initial notification

11. The Discharger shall file with the Regional Board **Discharge Monitoring Reports** performed according to any Discharge Monitoring Program issued by the Executive Officer.

12. The Discharger shall prepare, submit and implement a **Storm Water Pollution Prevention Plan**, acceptable to the Executive Officer, 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).

    COMPLIANCE DUE DATE: September 21, 2000

13. For each proposed development, the Discharger shall submit a **Notice of Intent** to the State Water Resources Control Board, prepare and submit a **Storm Water Pollution Prevention Plan,** acceptable to the Executive Officer, and implement Best Management Practices (BMPs) for the control of storm water, in accordance with requirements specified in the State Water Resources Control Board General Permit for Storm Water Discharges Associated with Construction Activities (NPDES Permit No. CAS000002).

    COMPLIANCE DUE DATE: October 15 of the year construction takes place or prior to starting construction if construction begins between October 15 and May 15

14. The Discharger shall submit a **Well Installation Report**, acceptable to the Executive Officer, that provides well construction details, geologic boring logs, and well development logs for all new wells installed as part of the present or future Discharge Monitoring Program (Attachment A).

    COMPLIANCE DUE DATE: 45 days following completion of well installation activities

15. The Discharger shall maintain a copy of these waste discharge requirements and these requirements shall be available to operating personnel at the facility at all times [CWC Section 13263].

16. This Board considers the property owner and site operator to have continuing responsibility for correcting any problems that arise in the future as a result of the waste discharged or related operations.

17. In the event that the Discharger-owns property adjacent to the landfill is developed into residential dwellings, the Discharger will notify prospective home purchasers of the presence of the landfill.

18. The Discharger shall permit the Regional 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 methods required by this order or by any other California State Agency.
    d. Sampling of any discharge or groundwater governed by this order.

19. 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.

20. 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. 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]. The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contact with the Board and statement. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.

21. This Order is subject to Board review and updating, as necessary, to comply with changing State and Federal laws, regulations, policies, or guidelines; changes in the Board's Basin Plan; or changes in the discharge characteristics [CWC Section 13263].

22. 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].

23. 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)].

24. Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

25. 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)].

26. 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)].

27. The Discharger shall report any noncompliance that may endanger public health or the environment. Any such information shall be provided orally to the Executive officer within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates

and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours [CWC Sections 13263 and 13267].

28. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

29. This Board's Order No. 77-19 is hereby rescinded.

I, Lawrence P. Kolb, Acting Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 21, 2000.

_____
Lawrence P. Kolb
Acting Executive Officer

Figures: Figure 1 - Site Location Map
Figure 2 - Landfill map

Attachment: Attachment A - Discharge Monitoring Program

ATTACHMENT A
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

DISCHARGE MONITORING PROGRAM

FOR

OYSTER POINT LANDFILL
CITY OF SOUTH SAN FRANCISCO, SAN MATEO COUNTY

ORDER NO. 00-046

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 Title 27 of the California Code of Regulations.

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 Title 27.

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 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 that actually or potentially receives surface or groundwaters that pass over, through, or under waste materials or contaminated soils. In this case the groundwater beneath and adjacent to the landfill areas, the surface runoff from the site, and the Pacific Ocean 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 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, slope or ground movement, and/or daylighted refuse.
4) Adequacy of access road
5) Condition of site drains, silt basin capacity
6) Standard Analysis and measurements are listed on Table A (attached)

D. SAMPLING, ANALYSIS, AND OBSERVATIONS

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

1. Storm drain discharges per Section 20415
2. Groundwater and leachate per Section 20415

and per the general requirements specified in Section 20415(e) of Title 27.

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 that analyses are started and completed, and name of the personnel performing the analyses.

4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.

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 January 31 and July 31 of each year. In addition an annual report shall be filed by January 31 of each year. 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.

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 qualifications 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 with the 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 approved 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; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality

control analysis; and the name and qualifications of the person(s) performing the analyses.

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

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 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 if any;
2) approximate flow rate;
3) nature of effects; i.e. all pertinent observations and analyses; and
4) corrective measures underway, proposed, or as specified in the Waste Discharge Requirements.

3. REPORTING

By January 31 of each year the Discharger shall submit an annual report to the Board covering the previous calendar year. The annual report may incorporate the second semi-annual report of the previous year. The annual report shall contain:

a. Tabular and graphical summaries of the monitoring data obtained during the previous year; the report should be accompanied by a computer data disk, tabulating the year's data in Microsoft Excel.

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.

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 45 days after well installation.

Part B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS

A. ON-SITE OBSERVATIONS – Observe quarterly, Report Semi-annually

STATION	DESCRIPTION	OBSERVATIONS	FREQUENCY
A-1 to A-'n'	Located on the area as delineated by a 500 foot grid network.	Standard observations for the waste management unit.	Quarterly
L-1 thru L-'n'	At each point of discharge. Include a map indicating locations of discharge(s)	Standard Test as outlined in Table A. Grab sample taken from seeps with flow rates exceeding 5 gpm.	Quarterly
P-1 thru P-'n'	Located at equidistant intervals not exceeding 1000 feet around the perimeter of the waste management unit.	Standard observations for the perimeter.	Quarterly
S-1 thru S-'n'	At any point(s) at which seepage is found occurring from the disposal area	Standard test as outlined in Table A (perform analysis) once per seep)	Daily until remedial action is taken and seepage ceases.

B. SURFACE, GROUNDWATER AND LEACHATE MONITORING - Report Semi-annually

i. Surface and Stormwater: Surface water shall be monitored as outlined below and in Table A (Attached). These monitoring points are also shown on Figure 2 (Attached). The results of the additional monitoring conducted as part of the General Permit for stormwater discharge shall be submitted as part of the annual report.

Monitoring Points:

Surface Water	Comply with the requirements of the General Industrial Storm Water Runoff Program

ii. Groundwater: Groundwater samples shall be analyzed as outlined below and in Table A (Attached).

Monitoring Points:

Groundwater	GW-4a, GW-5a, GW-6a, and GW-16a, GW-7a, GW-9a, GW-2b, and GW-8c, and any new wells

iii. Leachate: Leachate samples shall be analyzed as outlined below and in Table A (Attached).

Monitoring Points:

Leachate	GW-1a, GW-3a, GW-10a, GW-11a, GW-12a, GW-13a, GW-14a, GW-15a, GW-17a, and MW-5, and any new wells

C. **FACILITIES MONITORING**

The Discharger shall inspect all facilities to ensure proper and safe operation once per quarter and report semi-annually.

D. Reports shall be due on the following schedule:

First semi-annual report:	**July 31 of each year**
Second semi-annual Report:	**January 31 of each year**
Annual Report:	**Combined with the second semi-annual report, due January 31 of each year**

I, Lawrence P. Kolb, Acting 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. 00 - 046.

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.

_____
Lawrence P. Kolb
Acting Executive Officer

Date Ordered: June 21, 2000

Attachment: Table A - Schedule for Sampling, Measurement, and Analysis

Table A - Discharge Monitoring Plan, List of Analytical Parameters, Surface, Stormwater, Leachate and Groundwater

Parameters	Method*	Frequency
pH	Field	Quarterly** / Semi-Annual
Chloride	300.0	Quarterly** / Semi-Annual
Sulfate	300.0	Quarterly** / Semi-Annual
Total Dissolved Solids	160.1	Quarterly** / Semi-Annual
Ammonia (un-ionized)	350.1	Quarterly** / Semi-Annual
Total organic carbon	415.1	Quarterly** / Semi-Annual
Nitrate	9200	Quarterly** / Semi-Annual
COD	410.2	Quarterly** / Semi-Annual
Electrical conductivity	Field	Quarterly** / Semi-Annual
Volatile Organic Compounds (including MTBE)	8260	Quarterly** / Semi-Annual
Leachate Elevation	Field	Quarterly** / Semi-Annual
Groundwater Elevation	Field	Quarterly** / Semi-Annual
Semivolatile Organic Compounds	8270	Quarterly** / Semi-Annual
Organochlorine Pesticides & PCBs	8080	Quarterly** / Semi-Annual
Antimony	6010	Quarterly** / Semi-Annual
Arsenic	7060	Quarterly** / Semi-Annual
Barium	6010	Quarterly** / Semi-Annual
Beryllium	6010	Quarterly** / Semi-Annual
Cadmium	6010	Quarterly** / Semi-Annual

Chromium	6010	Quarterly** / Semi-Annual
Copper	6010	Quarterly** / Semi-Annual
Lead	7421	Quarterly** / Semi-Annual
Mercury	7470	Quarterly** / Semi-Annual
Nickel	6010	Quarterly** / Semi-Annual
Selenium	7740	Quarterly** / Semi-Annual
Silver	6010	Quarterly** / Semi-Annual
Thallium	7841	Quarterly** / Semi-Annual
Tin	6010	Quarterly** / Semi-Annual
Vanadium	6010	Quarterly** / Semi-Annual
Zinc	6010	Quarterly** / Semi-Annual

Notes:

* Test methods per Methods for Chemical Analysis of Water and Waste, USEPA 600/4/79/029, revised March 1983, or Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods, USEPA SW-846, 3rd edition, November 1986 and revisions.

** Quarterly for the first year; semi-annual thereafter.