CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. R2-2019-xxxx

UPDATED WASTE DISCHARGE REQUIREMENTS and RESCISSION OF ORDER No. 94-187 for:

WASTE MANAGEMENT OF ALAMEDA COUNTY and
EAST BAY REGIONAL PARK DISTRICT
OYSTER BAY REGIONAL PARK
SAN LEANDRO, ALAMEDA COUNTY

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

DISCHARGER AND LOCATION

1. This Order prescribes requirements for Oyster Bay Regional Park (Park), which occupies approximately 194 acres of the former 247-acre Davis Street Sanitary Landfill (DSS Landfill), a closed Class III landfill located on the western terminus of Davis Street in San Leandro, California. The East Bay Regional Park District is the current legal owner of the 194-acre Park, which overlies the capped waste of the majority of DSS Landfill. The remaining 53-acre portion of the landfill (northeast corner) is currently a Transfer Station owned and operated by Waste Management of Alameda County. The Transfer Station is not covered by this Order as waste has been mostly removed (clean-closed) from that portion of the site over the past 40 years. Previous Orders have excluded this 53-acre area as well. Hereafter, this Order will use the terms “Landfill” and “Park” to refer to the 194-acre parcel over which Oyster Bay Regional Park was constructed. The term DSS Landfill is used to refer to the entire 247-acre property once used for storing waste.

2. Waste Management of Alameda County (formerly Oakland Scavenger Company), a division of Waste Management, Inc., is the previous landfill owner/operator and currently monitors the groundwater, leachate and landfill gas at the site. Waste Management of Alameda County transferred title of a portion of the landfilled area (excluding the area of the Davis Street Transfer Station) to the East Bay Regional Park District (the District). Both parties (the District and Waste Management of Alameda County, hereinafter referred to collectively as the Discharger) are responsible for any corrective action measures at the 194-acre site.

PURPOSE OF ORDER UPDATE

3. The primary objectives of this Order are to:

    a. Rescind Order No. 94-187, the previous Waste Discharge Requirements (WDRs) for the Park.

b. Update the WDRs to reflect the current post-closure land use; results of historic water quality monitoring; and upgrades made to the leachate collection system; and

c. Require the Dischargers to develop a strategy for the long-term protection of the site from flooding and inundation due to sea level rise and extreme climate/weather events.

REGULATORY HISTORY

4. The Regional Water Board has regulated the Landfill under the following orders:

   a. On May 16, 1963, the Board adopted Resolution 464 prescribing Waste Discharge Requirements for Oakland Scavenger Company for the Landfill.

   b. On October 17, 1978, the Board adopted Order No. 78-84, prescribing Waste Discharge Requirements for Oakland Scavenger Company.

   c. On August 5, 1980, the Board adopted Waste Discharge Requirements Order No. 80-37.

   d. In December 1994, the Board adopted WDR Order No. 94-187, prescribing waste discharge requirements and compliance time schedules for the Landfill.

   e. This Order rescinds and supersedes WDR Order No. 94-187 and all previous orders.

LANDFILL DESCRIPTION AND HISTORY

5. **Dates of Operation:** The DSS Landfill was owned, operated, and closed by the Oakland Scavenger Company (OSC). The DSS Landfill began operating in 1942 and stopped accepting waste in 1980, achieving full, final closure in 1984. Waste Management of Alameda County acquired OSC in 1986. The ownership of the landfill property was transferred from OSC to the East Bay Regional Park District (EBRPD) according to an agreement dated April 17, 1979.

   The closed DSS Landfill site covers approximately 247 acres just east of the San Francisco Bay and is built on reclaimed tidal flat lands (Figure I). A perimeter levee (dike) was constructed during the early 1940s into the Bay. The area enclosed by the levee was subsequently de-watered and waste was placed directly on the tidal mud flats.

6. **Wastes Accepted:** During its operation between 1942 and 1980, the DSS Landfill was used for disposal of municipal solid waste (i.e., Class III waste), including non-hazardous residential, commercial, and industrial waste. Municipal solid waste collected from the DSS Landfill's former service area is now processed at the Davis Street Transfer Station for distribution to other landfills.

GEOLOGICAL AND HYDROGEOLOGICAL SETTING

7. **Geology:** The Landfill is located on the eastern side of San Francisco Bay within the Bay Plain Physiographic Province. This Province is bordered on the east by the Diablo Mountain Range. The Landfill is underlain by 10 to 35 feet of Young Bay Mud consisting of dark gray plastic clays. The Bay Mud is present beneath the Landfill to a depth of 60 ft below mean sea level (Locus, 2001). Sand zones with thicknesses of 2 to 11.5 feet thick were identified beneath the Young Bay Mud. The underlaying Old Bay Mud consists of a light olive brown high-plasticity clay with occasional clay nodules. Unconsolidated sediments several hundred feet thick occur beneath the Old Bay Mud.

8. **Seismicity:** The Hayward Fault is located about 4 miles east of the Landfill. This fault is classified as an active fault in this region and is included on the Alquist-Priolo Special Study Zone Maps (CDMG, 1982).

9. **Hydrogeology:** Regional groundwater flow near the Landfill occurs within sediments that comprise the San Leandro alluvial fan, which consists of discontinuous lenses and layers of sand and gravel separated by thick layers of clay. The San Leandro alluvial fan extends between 600 and 1,000 feet below ground surface (bgs) where it overlies Franciscan Group bedrock (CDMG, 1969). The occurrence and movement of groundwater within the San Leandro alluvial fan is divided into five separate unnamed aquifers. The uppermost aquifer, or water table zone, extends to a depth of approximately 50 feet bgs and is generally considered unconfined. Aquifers encountered below this unconfined zone are separated by thick, low-permeability clay zones and are confined.

   Groundwater within the shallow, unconfined water table aquifer (less than 50 feet bgs) migrates in a westerly direction toward San Francisco Bay. Many water supply wells exist within a 1-mile radius of the site, but all are upgradient of the site. Some of these supply wells are used for industrial purposes and irrigation. However, groundwater in the vicinity of the Landfill is not used for drinking water purposes, and that status is not expected to change. Domestic drinking water is supplied to upgradient customers by the East Bay Municipal Utility District with water imported from the Sierra Nevada.

   The uppermost water-bearing zone beneath the Landfill consists of interbedded sand layers in the upper portion of the Bay Mud. The sand layers are discontinuous, approximately 2 to 10 feet thick, and occur between 10 and 35 feet below the original (i.e., pre-landfill) tidal flat surface. Due to the low permeability of the intervening clay and silt deposits (typically 10-7 to 10-8 centimeters per second [cm/sec]), groundwater flow within the water-bearing zone is presumed to occur primarily within the interbedded sand and gravel layers. The uppermost water-bearing zone is generally considered to be unconfined; however, some individual water-bearing layers may be under confined conditions. Hydraulic conductivity of the sand units has been determined to average approximately 3.6 x 10-4 cm/sec (EMCON, 1988) or 1.02 feet per day. Consistent with the regional flow direction, groundwater beneath the Landfill flows in a generally westerly direction.

Groundwater elevations at individual monitoring points can vary by as much as several feet depending on tidal and seasonal conditions.

10. **Groundwater Quality:** Shallow groundwater at the Landfill is not used as a source of drinking water given its immediate proximity to the San Francisco Bay and the effects of saltwater intrusion. The natural electrical conductivity of the groundwater typically ranges from 1,000 to over 12,000 microsiemens per centimeter (µS/cm). Groundwater in the vicinity of the Landfill is tidally influenced and the chemistry resembles brackish water typically observed along the San Francisco Bay margins.

    Groundwater monitoring performed around the Landfill perimeter has identified the occurrence of low concentrations volatile organic compounds (VOCs), presumably released from the Landfill. Data included in the April 2019 Monitoring Report indicate detections of four VOCs in site groundwater (chlorobenzene; 1,4-dichlorobenzene; tetrahydrofuran, and 1,4-dioxane). In general, the concentrations of VOCs have declined over the past ten years. Current time-series analysis indicates significant decreasing trends for chlorobenzene and tetrahydrofuran in well G02R, and 1,4-dichlorobenzene, chlorobenzene, tetrahydrofuran, and 1,4-dioxane in well MW01R.

    The *Amended Report of Waste Discharge* also identified the occurrence of four pesticides in groundwater (aldrin, lindane, 4-4'-DDE and 4,4'-DDT); these parameters have been included in the routine groundwater monitoring program since 2000. However, the April 2019 Monitoring Report indicates that none of these pesticides have been detected in groundwater and leachate since at least 2007.

11. **Surface Waters:** Surface water in the Park drains via channels to the San Francisco Bay, and flow in these channels is intermittent and only occurs during rain fall events. Surface water along the margins of San Francisco Bay is brackish due to tidal influence. The mean annual precipitation at the Landfill is about 18.5 inches. Most rain falls between November and April.

CONSTRUCTION AND CLOSURE

12. **Landfill Construction:** The DSS Landfill was constructed in the late 1940s and early 1950s on land reclaimed from the margin of San Francisco Bay. A perimeter levee, which forms the western margin of the Landfill, was constructed from Bay Mud that was dredged from a channel approximately 100 to 300 feet wide. The area inside the levee was then dewatered and municipal solid waste was placed directly on Bay Mud.

    The Park overlies fill material and waste ranging in thickness from 30 to 80 feet, including the landfill cover. The highest elevation in the Park is approximately 75 feet above mean sea level (msl). In most places, the base of the Landfill is at an elevation ranging from 5 to 11 feet below msl. However, the base is as much as 15 to 20 ft below msl near the margin of the Landfill where Bay Mud was dredged to construct the perimeter levee.

13. **Landfill Base Liner:** The DSS Landfill was constructed prior to Federal (40 CFR 258) and State (Title 27) regulations for modern landfills and does not have an engineered base liner. In accordance with accepted practices at the time, when the DSS Landfill began receiving wastes, they were deposited directly onto the Bay Mud. Due to its naturally low permeability, the Bay Mud has functioned as a fairly effective barrier to leachate migration, although groundwater impacts persist, as described in Finding 10, above.

14. **Final Cover Construction:** A cover up to 15 feet thick composed of low plasticity clay and clayey sand was constructed between 1980 and 1984 over the Park. An additional layer of Bay Mud material, approximately 2 feet thick, was applied to the southern half of the Park. Mention vegetation growing there now.

15. **Stormwater Drainage:** The final cover of the Landfill is graded to allow stormwater to flow into perimeter drainage ditches that discharge to the San Francisco Bay. Regular maintenance of the perimeter ditches is necessary to minimize infiltration of stormwater into the Landfill. The Park is not subject to Industrial General Permit (IGP) requirements due to its use as an undeveloped park.

16. **Leachate Collection and Removal System:** The Landfill did not originally contain a leachate collection and removal systems (LCRS) because Landfill construction predated regulations requiring such systems. The Regional Water Board required the Dischargers to evaluate leachate management alternatives at the Landfill in 1996. Based on this evaluation, leachate extraction from vertical wells along the western perimeter of the Landfill was recommended. The permitting and construction of leachate extraction system began following Board approval. An LCRS consisting of seven extraction wells along the western margin of the landfill began operation in October 1999. The original leachate extraction wells are LE03, LE07, LE09, LE10, LE12, LE13, and LE14.

    The leachate extraction system was reevaluated by Geosyntec Consultants in 2011. Based on evaluation of monitoring data, it was concluded that the LCRS was achieving hydraulic containment of leachate along most of the Landfill perimeter. To augment containment, six additional leachate extraction points (LE18 through LE23), new extraction pumps and associated piping were added to the LCRS in December 2012. The system currently has an average monthly collection of approximately 1.5 million gallons of leachate. During the Winter 2018-Spring 2019 period, approximately 9,599,503 gallons of leachate were removed from the Landfill. The leachate contains low concentrations of metals (primarily iron, zinc and cadmium). Leachate concentrations are low enough for the leachate to be discharged under an Industrial Waste Discharge Permit to the nearby City of San Leandro Water Pollution Control Plant (POTW). The Dischargers report the volume of leachate pumped from the LCRS to the POTW in its semi-annual monitoring reports.

17. **Leachate Level Monitoring:** Leachate levels are monitored routinely in 80 wells and piezometers installed in the Landfill. Based on contour maps generated from

the data and provided in semi-annual reports submitted to the Board, the LCRS provides hydraulic control of the leachate and prevents it from migrating off-site migration. There has been no evidence of leachate mounding and the LCRS has worked effectively in removing leachate. This Order (Provision 3) continues to require the Discharger to maintain and operate the LCRS to maintain hydraulic control of Landfill leachate. Continued operation of the LCRS is expected to continue to control off-site migration of leachate.

18. **Landfill Gas Collection and Removal System:** The Landfill gas collection and control system (GCCS) consists of sixty-six vertical landfill gas extraction wells and seven horizontal collectors, which are connected by a below-grade pipe network. The GCCS collectors are installed on both Oyster Bay Regional Park and Davis Street Transfer Station properties. Extracted landfill gas is transported from the extraction points to the on-site flare for thermal destruction.

19. **Operation and Maintenance Plan:** In 2016, the Discharger provided a Post-Closure Land Use Development Maintenance Plan (PLUDMP) that addresses site operations and maintenance, and identifies the respective responsibilities of the District and Waste Management of Alameda, including:

    - Monthly final cover system inspections
    - Periodic maintenance of the LCRS, leachate monitoring wells, and landfill gas monitoring and control systems
    - Periodic groundwater monitoring
    - Periodic vegetation inspection and management
    - Periodic inspection and monitoring of final slopes
    - Periodic inspection and maintenance of landfill drainage structures.

POST-CLOSURE LAND USE

20. The current and intended future use of the closed landfill site is open space as a public recreational area. The District established the Park on the property in 1979. The Park, which is continuing to be developed as a public-access park, includes a paved walking path along the perimeter of entire 194-acre parcel and a public recreation area, with picnic tables, grills, occupying approximately 12 to 15 acres at the southeastern corner of the site. Additional improvements planned for the Park include a disc golf course, a dog park, and bicycle paths. EBRPD continues to import clean soil to the property as part of the long-term development plan.

MONITORING PROGRAMS

21. **Groundwater and Leachate:** The Self-Monitoring Program (SMP) attached to this Order revises the groundwater and leachate monitoring program that was contained in WDR Order No. 94-187. Groundwater sampling is performed at a network of nine monitoring wells (listed in Table B.1 of the SMP). The leachate chemistry monitoring program consists of taking a single composite leachate sample prior to treatment and discharge to the POTW.

22. **Surface Water:** No surface water monitoring is conducted at the Park because there are no perennial surface water bodies, and the thick landfill cover makes it extremely unlikely the buried waste would affect the intermittent surface water flows in the Park.

FINANCIAL ASSURANCE

23. Under 27 CCR Section 22210, the requirements for financial assurance for the post-closure period do not apply to disposal facilities that ceased operations before January 1, 1988. Since disposal operations at the Davis Street Landfill terminated in 1980, the post-closure maintenance financial assurance requirements do not apply to the Park.

ANTIDEGRADATION POLICY

24. CFR Title 40, part 131.12, requires that state water quality standards include an antidegradation policy consistent with federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution 68-16, which incorporates the federal antidegradation policy where federal policy applies. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. This order complies with the antidegradation policy because it requires maintenance of existing water quality in the vicinity of the Landfill; prohibits degradation by directing continued operation of the LCRS and maintenance of the Landfill cap; and requires verification that degradation has not occurred through regular monitoring and inspections.

BASIN PLAN

25. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board (State Water Board), U.S. EPA, and the Office of Administrative Law, where required.

BENEFICIAL USES AND SOURCES OF DRINKING WATER

26. The beneficial uses of surface waters along the East San Francisco Bay shoreline are as follows:

    - Wildlife habitat
    - Brackish and saltwater marshes
    - Water contact recreation
    - Non-water contact recreation
    - Commercial and sport fishing
    - Preservation of rare and endangered species

- Estuarine habitat, and
- Fish migration and spawning.

State Water Board Resolution 88-63 and Regional Board Resolution No. 89-39, both entitled “Sources of Drinking Water,” define potential sources of drinking water to include all groundwater, with limited exceptions for areas containing high TDS, high background contaminant levels, or those areas with a low yield. The groundwater underlying the Landfill is not a potential source of drinking water because it meets the exception for high salinity and TDS. The high salinity also prevents use of groundwater beneath the site for any other beneficial use.

SAFE DRINKING WATER POLICY

27. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring Dischargers to maintain the integrity of the Landfill cover, to continue operating the LCRS and sending leachate to a POTW for treatment, and to ensure that stormwater does not come into contact with leachate or waste.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

28. Adoption of this Order is exempt from the California Environmental Quality Act (CEQA). Under CEQA Guidelines §15061(b)(3), CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. This Order requires the Discharger to continue site monitoring and maintenance activities, and these will not result in any additional actions that may have an effect on the environment beyond the existing baseline conditions.

NOTIFICATIONS AND MEETING

29. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to amend the Landfill’s WDRs and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

30. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this amendment of WDRs.

IT IS HEREBY ORDERED, pursuant to the authority in California Water Code (CWC) section 13263, and CCR, Title 27, Division 2, Subdivision 1, that the Discharger shall meet the applicable provisions contained in Title 27 and shall comply with the following:

A. PROHIBITIONS

1. The creation of any new waste management unit is prohibited.

2. No additional waste shall be deposited or stored at this Landfill, with the exception of waste temporarily contained in trash receptacles at the Park. Such waste may be stored temporarily but not deposited at the Landfill.

3. Relocation of wastes is prohibited without prior Regional Water Board concurrence.

4. Waste materials shall not be exposed or relocated to any position where they can migrate from the Landfill to adjacent geologic materials, waters of the State, or of the United States during the post-closure maintenance period.

5. Untreated or inadequately treated groundwater or leachate shall not create a condition of pollution or nuisance, nor degrade the quality of waters of the State or of the United States.

6. The Discharger shall not perform any intrusive activities on the Landfill surface that have the potential to negatively affect the integrity and proper function of the Landfill cap, such as digging or trenching, without prior Regional Water Board approval, except for routine maintenance or park improvements as described in the PLUDMP (see Finding 21, supra) or in the event of an emergency repair to the environmental control system (landfill gas collection system and the leachate collection system) to protect human health and the environment. In addition, the Discharger may perform subsidence repairs if suitable soils and methods, as described in the PLUDMP, are utilized to repair the cap and maintain positive surface water flow.

7. The Discharger shall not damage the Landfill cap during vegetative growth control.

8. Excavation within, or reconfiguration of, any existing waste management unit is prohibited without prior concurrence of Regional Water Board. Minor excavation or reconfiguration activities, such as installation of signs or landscaping or for routine maintenance and repair, do not require prior staff concurrence.

9. Surface drainage shall be intercepted and controlled to promote flow off of the Park and prevent ponding during the post-closure period.

10. Leachate, stormwater, or groundwater 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.

11. Buildup of leachate levels within the Park that adversely impacts waters of the State is prohibited and shall be prevented by operation of the Landfill's LCRS.

12. The Discharger shall not cause the following conditions to exist in waters of the State or of the United States at any place outside existing waste management units:

a. Surface Waters:

i. Floating, suspended, or deposited macroscopic particulate matter or foam;
ii. Bottom deposits or aquatic growth;
iii. Adverse changes in temperature, turbidity, or apparent color beyond natural background levels;
iv. Visible, floating, suspended, or deposited oil, or other products of petroleum origin; or
v. Toxic or other deleterious substances to exist in concentrations or quantities that may cause deleterious effects on aquatic biota, wildlife, or waterfowl, or that 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:

i. Degradation of groundwater quality; or
ii. Significant migration of pollutants through subsurface transport.

B. SPECIFICATIONS

1. The Discharger shall conduct monitoring activities according to the SMP attached to this Order, and as may be amended by the Executive Officer, to verify the effectiveness of the Landfill's systems for monitoring, containment, collection, treatment, and removal of leachate and landfill gas.

2. All monitoring wells shall be constructed in a manner that maintains the integrity of the drill hole, prevents cross-contamination of saturated zones, and produces representative groundwater samples from discrete zones within the water-bearing zone each well is intended to monitor.

3. The Discharger shall install new monitoring stations to replace any monitoring wells designated as monitoring stations that are damaged, destroyed, or rendered non-functional during the Landfill's post-closure maintenance period.

4. 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.

5. The Discharger shall install any reasonable additional groundwater and leachate monitoring devices required to fulfill the terms of any future SMP issued by the Executive Officer.

6. All samples collected at the Site shall be analyzed by State-certified laboratories, or laboratories accepted by the Regional Water Board, using approved U.S. EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for

Regional Water Board review. This specification does not apply to analyses that can only be reasonably performed onsite (e.g., pH).

7. The Water Quality Protection Standard (WQPS) for the Landfill shall include constituents of concern, concentration limits, point of compliance and all monitoring points. The WQPS shall establish and comply with all of the following:

   a. Constituents of Concern: Constituents of Concern (COCs) include "all waste constituents, reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the Unit." (Cal. Code Regs., Title 27, § 20395(a).) COCs for the Landfill were established as described in the *Amended Report for Waste Discharge for Oyster Bay Regional Park* (Earth Tech, 2000). COCs include monitoring parameters identified in the SMP attached to this Order or any future amendment thereof.

   b. Monitoring Parameters: 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 other COCs. MPs for the Landfill were established as described in the *Amended Report for Waste Discharge for Oyster Bay Regional Park* (Earth Tech, 2000). The MPs for the site shall include, at a minimum, all constituents identified as such in the SMP attached to this Order or any future amendments thereof. The Discharger may propose modification to the MPs as additional data become available concerning site-specific source characteristics and natural background water quality. However, modifications shall only be made upon written concurrence from the Executive Officer.

   c. Water Standard: The Water Standard for corrective action COCs at the specified points of compliance shall be set at the MCL specified in Title 22 CCR or 40 CFR Parts 141 and 143, whichever is lower. For those VOCs that do not have a regulated MCL (e.g. tetrahydrofuran), the Water Standard shall be set at 10 ug/L, per the *Amended Report for Waste Discharge for Oyster Bay Regional Park* (Earth Tech, 2000).

   d. Point of Compliance (POC): The POC is the "vertical surface located at the hydraulically downgradient limit of the Unit that extends through the uppermost aquifer underlying the Unit." (Cal. Code Regs., Title 27, § 20405(a).)

   e. Background Monitoring Points: A Background Monitoring Point is "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." (Cal. Code Regs., Title 27, § 20164.)

8. The Discharger shall maintain the Landfill so as to prevent a measurably significant increase in water quality parameters at points of compliance.

9. In conjunction with the corrective action measures, the discharger shall establish and implement a water quality monitoring program to demonstrate the effectiveness of the corrective action program [Cal. Code Regs., Title 27 § 20430(d)]. The monitoring program shall be effective in determining compliance with the Water Standard described above (under §20390) and in determining the success of the corrective action measures [pursuant to § 20430(c)].

10. The Discharger may file a written request (including supporting documentation) with the Executive Officer proposing modifications to the attached SMP. If the proposed modifications are acceptable, the Executive Officer may issue a letter of approval that incorporates the proposed revisions into the SMP.

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

12. The Landfill shall be protected from any washout or erosion of wastes from inundation.

13. The Discharger shall notify the Regional Water Board immediately of any failure occurring in the Landfill. Any failure that threatens the integrity of containment or control features or structures at the Landfill shall be promptly corrected after approval of the method and schedule by the Executive Officer.

14. 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 closure, and post-closure maintenance periods. These monuments shall be installed by a licensed land surveyor or registered civil engineer.

15. Containment, collection, drainage, and monitoring systems for groundwater, surface water, and leachate shall be maintained and operated as long as waste or leachate is present and poses a threat to water quality.

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

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

18. The Discharger shall provide reasonable access to any property it owns or leases at the Landfill to allow for installation, sampling, monitoring, etc., of all

devices and equipment necessary for compliance with the requirements of this Order.

19. All reports submitted pursuant to this Order shall be prepared under the supervision of and signed by appropriately licensed professionals, such as a California registered civil engineer, registered geologist, and/or certified engineering geologist, and acceptable to the Executive Officer.

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

21. The Discharger is required to maintain and operate the LCRS during the closure and post- closure period to provide and maintain hydraulic control of leachate.

22. The operations and maintenance of the Oyster Bay Regional Park portion of the Landfill site shall comply with the PLUDMP. In addition, inspection of perimeter levees for failures that may cause erosion or any other condition that could threaten water quality or expose debris or waste shall be performed at least semi-annually.

23. If a seep from the Landfill is observed coming into contact with any bordering surface water body, the Discharger shall immediately notify the Water Board. Sampling of upstream and downstream locations on that surface water body may be required on a schedule to be determined by Water Board staff.

C. PROVISIONS

1. **Duty to Comply:** 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 Water Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these WDRs by the Regional Water Board.

2. **Authority:** All technical and monitoring reports required by this Order are required pursuant to CWC section 13267. 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 CWC section 13268.

3. **Self-Monitoring Program:** The Discharger shall implement and comply with the SMP attached to this Order and any revisions issued by the Executive Officer. The attached SMP is designed to assess the effectiveness of the corrective action program and demonstrate compliance with the WQPS. The

Discharger shall submit semi-annual monitoring reports, acceptable to the Executive Officer, no later than April 30 and October 31 of each year in accordance with the SMP. Conversely, the Discharger may incorporate both semi-annual monitoring event data into one annual report to be submitted no later than October 31. The report shall include a section detailing repair and maintenance activities needed and performed during each semi-annual monitoring period and a section detailing compliance with maintaining hydraulic control of landfill leachate.

COMPLIANCE DATE: Immediately upon adoption of this Order
REPORT DUE DATE: April 30 and October 31 each year

4. **Post-Closure Material Change in Land Use Reporting:** The Discharger shall submit a technical report, acceptable to the Executive Officer, describing any material change in the proposed land use or post-closure development of the Landfill. The technical report shall describe the project, identify key changes to the design that may impact any portion of the Landfill, and specify components of the design necessary to maintain the integrity of the Landfill cover and prevent water quality impacts. No material changes to any portion of the Landfill shall be made without approval by the Regional Water Board.

   COMPLIANCE DATE: 120 days prior to any proposed material change

5. **Construction-Related Stormwater Permit:** For any proposed grading or development project greater than one acre in size, the Discharger shall submit a Notice of Intent to the State Water Board, submit a SWPPP acceptable to the Executive Officer, and implement Best Management Practices for the control of stormwater in accordance with requirements specified in the State Water Board's General Permit for Storm Water Discharges Associated with Construction Activities (NPDES Permit No. CAS000001). The Discharger will be deemed in compliance with this Provision if another party constructing improvements on property owned by the Discharger has obtained coverage under the General Permit.

   COMPLIANCE DATE: 30 days prior to construction

6. **Well Installation or Destruction Report:** The Discharger shall submit a technical report, acceptable to the Executive Officer, which provides well construction details, geologic boring logs, and well development logs for all new wells installed or destroyed.

   REPORT DUE DATE: 60 days following well installation or destruction

7. **Long-Term Flood Protection Report:** The Discharger shall submit a report consistent with State of California Sea-Level Rise Guidance and BCDC's Bay Plan, acceptable to the Executive Officer, which proposes strategies for the long-term protection of the [site or landfill] from flooding and inundation due to sea level rise (SLR) and extreme climate/weather events. This report shall be

prepared by a qualified engineer and be based on providing protection from the estimated 100-year total water level (TWL) on top of [0.6 to 1.1 feet (low risk) or 1.9 feet (medium to high risk)] of SLR by 2050. The 100-year TWL shall take into account astronomical tides and storm surge as well as Pacific swell, wind waves, and wave run-up. The report shall propose an adaptive management strategy that provides for protection from [2.4 to 3.4 feet (low risk) or 5.7 to 6.9 feet (medium to high risk)] of SLR by 2100, or the most recent 0.5% probability scenario as determined by the official state of California sea level rise guidance (e.g. 2018 State of California Sea Level Rise Guidance). This report shall provide technical justification for the selection of both the 2050 and 2100 protective strategies. The report shall be updated and submitted every five years throughout the operational life of the site with the most recently available and credible information and climate change adaptation guidance at the time of the update.

REPORT DUE DATE: August 31, 2020, and update every five years thereafter

8. **Earthquake Inspection:** The Discharger shall submit a detailed Post-Earthquake Inspection Report, acceptable to the Executive Officer, 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, groundwater monitoring, and control facilities potentially impacted by seismic deformations of the Landfill. Damage to any waste containment facility that may impact waters of the State must be reported immediately to the Executive Officer.

   COMPLIANCE DATE: Within 6 weeks of earthquake

9. **Change in Site Conditions:** The Discharger shall immediately notify the Regional Water Board of any flooding, ponding, settlement, equipment failure, slope failure, exposure of waste, liner leakage, or other change in site conditions that could impair the integrity of the Landfill's 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

10. **Availability:** A copy of these WDRs shall be maintained by the Discharger and shall be made available by the Discharger to all employees or contractors performing work (maintenance, monitoring, repair, construction, etc.) at the Landfill.

11. **Change in Ownership:** The Discharger must notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of ownership or management of the Landfill or Park. The notice shall include the contact information of the succeeding owner or manager. The Discharger must notify any proposed new owner or manager that the Landfill is subject to this Order, and the new owner or manager must comply with any requirements of this Order related to the day-to-day management of the property. The new owner then must apply for an amendment to this order for the Water Board to acknowledge the transfer of ownership and responsibilities under the order. The District and Waste Management of Alameda shall remain responsible for compliance with this Order unless and until the Order is amended to transfer responsibilities to another entity.

12. **Information Correction:** When a Discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge (ROWD) or submitted incorrect information in a ROWD or in any report to the Regional Water Board, it shall promptly submit such facts or information.

13. **Revision:** This Order is subject to review and revision by the Regional Water Board.

14. **Vested Rights:** 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 liability under federal, State or local laws, nor do they create a vested right for the Discharger to continue the waste discharge.

15. **Severability:** Provisions of this Order are severable. If any provision of these WDRs is determined to be invalid by the State Water Resources Control Board or a court, the remainder of these requirements shall not be affected.

16. **Operation and Maintenance:** The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that 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.

17. **Reporting of Hazardous Substance Release:** If any hazardous substance is 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, the Discharger shall report such discharge to the Regional Water Board by calling (510) 622-2369. A written report shall be mailed or submitted electronically to the Regional Water Board within five business days. The report shall describe:

the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

18. **Entry and Inspection**: The Discharger shall allow the Regional Water Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

    a. Enter upon a Discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;

    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

    d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

19. **Analytical Methods:** Unless otherwise permitted by the Regional Water Board Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board, Division of Drinking Water. The Executive Officer may allow use of an uncertified laboratory under exceptional circumstances, such as when the closest laboratory to the monitoring location is outside the State boundaries and therefore not subject to certification. All analyses shall be required to be conducted in accordance with the latest edition of U.S. EPA SW-846 or other equivalent U.S. EPA Method.

20. **Discharges to Navigable Waters:** Any person discharging or proposing to discharge to navigable waters from a point source (except for discharge of dredged or fill material subject to section 404 of the Clean Water Act and discharges subject to a general NPDES permit) must file an NPDES permit application with the Regional Water Board.

21. **Endangerment of Health or the Environment:** The Discharger shall report any event of noncompliance that may endanger human health or the environment. Any such information shall be provided orally to the Regional Water Board within 24 hours from the time the Discharger becomes aware of the circumstances by calling (510) 622-2369. A written submission to the Regional Water Board shall also be provided within five days of the time a 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 his or her delegate, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

22. **Document Distribution**: Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the following agencies:

    a. Regional Water Board and

    b. Alameda County Health Care Services Agency (Local Enforcement Agency)

    The Executive Officer may modify this distribution list as needed.

23. **Reporting Requirements:** All reports submitted pursuant to this Order must be in accordance with the State Water Board-adopted regulations requiring electronic report and data submittal to the State's GeoTracker database (CCR §§ 3890-3895). Email notification should be provided to Regional Water Board staff whenever a file is uploaded to GeoTracker. In addition, the Discharger shall submit hard copies of reports to Regional Water Board staff upon request.

    The Discharger is responsible for submitting the following via GeoTracker:

    a. All chemical analytical results for water samples;

    b. The latitude and longitude of any sampling point for which data is reported, accurate to within 1 meter and referenced to a minimum of two reference points from the California Spatial Reference System, if available, unless specified in the SMP;

    c. The surveyed elevation relative to a geodetic datum of any permanent sampling point for which data is reported;

    d. The elevation of groundwater in any permanent monitoring well relative to the surveyed elevations for which data is reported;

    e. A site map or maps showing the location of all sampling points for which data is reported;

    f. The depth of the sampling point or depth and length of screened interval for any permanent monitoring well for which data is reported;

    g. PDF copies of boring logs; and

h. PDF copies of all reports, workplans, and other documents (the document, in its entirety [signature pages, text, figures, tables, etc.] must be saved to a single PDF file) including the signed transmittal letter and professional certification by a California professional civil engineer or a professional geologist.

Upon request, monitoring results shall also be provided electronically in Microsoft Excel® to allow for ease of review of site data and to facilitate data computations and/or plotting that Water Board staff may undertake during the review process. Such electronic tables shall include the following information unless directed otherwise by Water Board staff:

a. Well designations;

b. Well location coordinates (latitude and longitude);

c. Well construction (including top of well casing elevation, total well depth, screen interval depth below ground surface, screen interval elevation, and a characterization of geology of subsurface the well is located in);

d. Groundwater depths and elevations (water levels);

e. Current analytical results by constituent of concern (including detection limits for each constituent);

f. Historical analytical results (including the past five years unless otherwise requested); and

g. Measurement dates.

24. This Order supersedes and rescinds Order No. 94-187.

I, Michael Montgomery, 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 December 11, 2019.

_____

Michael Montgomery
Executive Officer

Attachments:

Figure 1 – Oyster Bay Regional Park Site Location

Figure 2 – Oyster Bay Regional Park Monitoring Points

Self-Monitoring Program

Figure 1

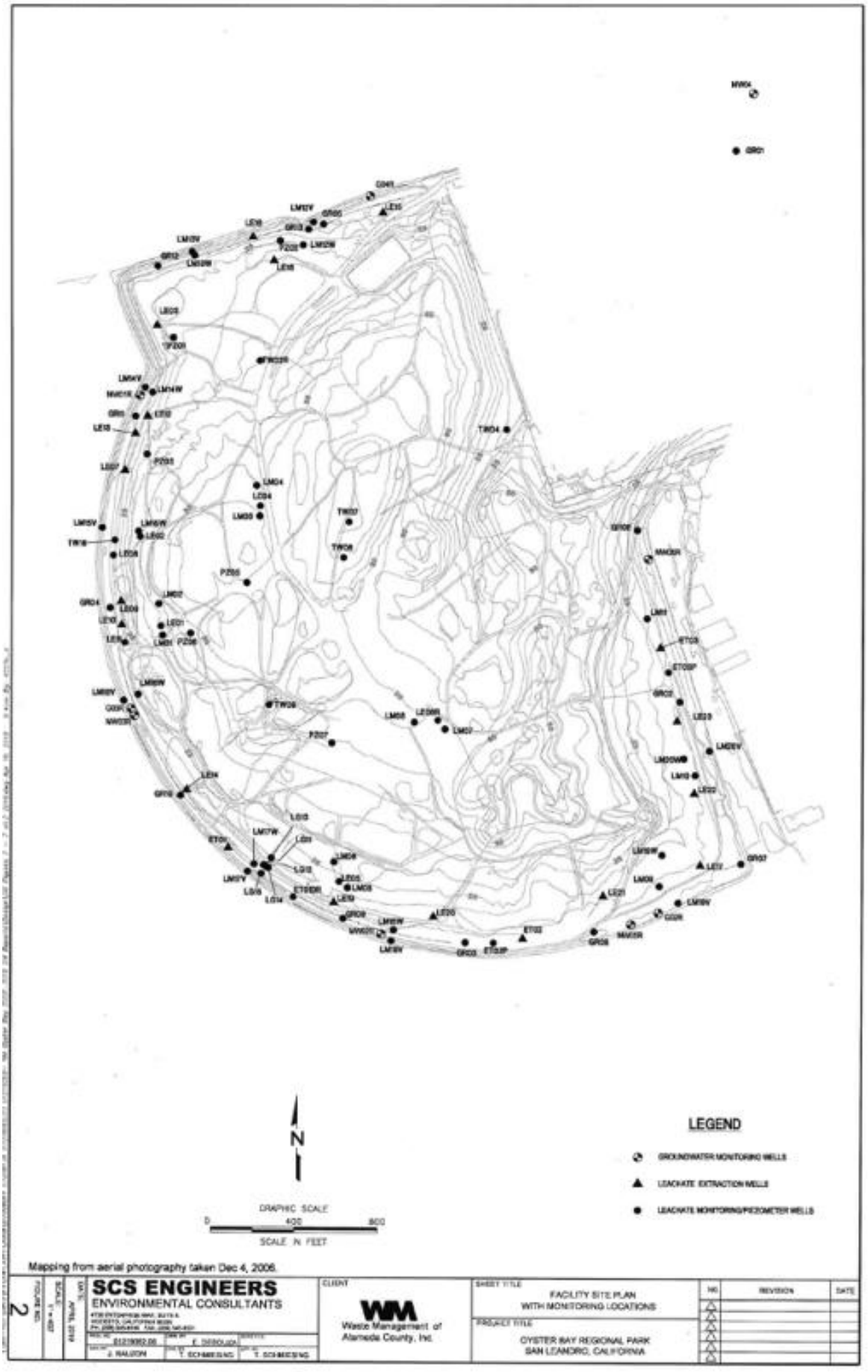
LEGEND
GROUNDWATER MONITORING WELLS
LEACHATE EXTRACTION WELLS
LEACHATE MONITORING/PIEZOMETER WELLS
N
GRAPHIC SCALE
0
400
800
SCALE IN FEET
Mapping from aerial photography taken Dec 4, 2006.
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
Waste Management of Alameda County, Inc.
FACILITY SITE PLAN
WITH MONITORING LOCATIONS
OYSTER BAY REGIONAL PARK
SAN LEANDRO, CALIFORNIA
REVISION
DATE

Figure 2

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR

WASTE MANAGEMENT OF ALAMEDA COUNTY
EAST BAY REGIONAL PARK DISTRICT
OYSTER BAY REGIONAL PARK

ALAMEDA COUNTY

ORDER NO. R2-2019-xxxx

CONSISTS OF PART A AND PART B

PART A

This Self-Monitoring Program (SMP) specifies monitoring and reporting requirements, including:

a. General monitoring requirements for Landfills and waste management units (Part A);
b. Self-monitoring report content and format (Part A);
c. Self-monitoring report submittal frequency and schedule (Part B);
d. Monitoring locations and frequency (Part B); and
e. Monitoring parameters and analytes (Part B).

A. AUTHORITY AND PURPOSE

For discharges of waste to land, water quality monitoring is required pursuant to the California Code of Regulations (CCR), Title 27, sections 20380 through 20435. The principal purposes of an SMP are: (1) to document compliance with waste discharge requirements (WDRs) and prohibitions established by the Regional Water Board; (2) to facilitate self-policing by waste dischargers in the prevention and abatement of pollution arising from the waste discharge; (3) to develop or assist in the development of effluent standards of performance and toxicity standards; and (4) to assist dischargers in complying with the requirements of Title 27.

B. MONITORING REQUIREMENTS

Monitoring refers to the observation, inspection, measurement, and/or sampling of environmental media, the Landfill containment and control facilities, and waste disposed in the Landfill. The following defines the types of monitoring that may be required.

Monitoring of Environmental Media

The Regional Water Board may require monitoring of groundwater, surface water, leachate, landfill gas, and any other environmental media that may pose a threat to water quality or provide an indication of a water quality threat at the Landfill.

Sample collection, storage, and analyses shall be performed according to the most recent version of U.S. EPA-approved methods or in accordance with a sampling and analysis plan approved by Regional Water Board staff. Analytical testing of environmental media required by this SMP shall be performed by a State-approved laboratory for the required analyses. The director of the laboratory whose name appears on the certification shall be responsible for supervising all analytical work in his/her laboratory and shall have signing authority for all reports or may designate signing of all such work submitted to the Regional Water Board.

All monitoring instruments and devices used to conduct monitoring in accordance with this SMP shall be maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once every two years.

“Receiving waters” refers to any surface water that actually or potentially receives surface or groundwater that passes over, through, or under waste materials or impacted soils. In this case, the groundwater beneath and adjacent to the Landfill and the surface runoff from the Site are considered “receiving waters.”

Standard Observations

"Standard observations" refers to observations within the limits of the Landfill, at the Landfill perimeter, and of the receiving waters. Standard observations to be performed and recorded include:

1. The Landfill:
    a. Evidence of ponded water on the Landfill, including a map of approximate locations, and an estimate of the size of the area affected and the volume of water;
    b. Evidence of odors, including presence or absence, characterization, source, and distance of travel from source; and
    c. Evidence of erosion and/or exposed waste, including a map of the approximate location and an assessment of the likelihood that soil or waste was discharged to the waters of the State.

2. Perimeter of the Landfill:
    a. Evidence of liquid leaving or entering the Landfill, estimated size of affected area and flow rate (show affected area on map);
    b. Evidence of odors, including presence or absence, characterization, source, and distance of travel from source;
    c. Evidence of erosion and/or exposed waste;
    d. Vegetation concerns; and
    e. Measurement of groundwater elevations.

3. Receiving Waters:
    a. Floating and suspended materials of waste originating from the Landfill, including their presence or absence, source, and size of affected area;
    b. Discoloration and turbidity: description of color, source, and size of affected area;
    c. Evidence of odors, including presence or absence, characterization, source, and distance of travel from source;
    d. Evidence of beneficial use, such as presence of water associated with wildlife;
    e. Estimated flow rate; and
    f. Weather conditions, such as estimated wind direction and velocity, total precipitation.

Facilities Inspections

"Facilities inspections" refers to the inspection of all containment and control structures and devices associated with the Landfill. Containment and control facilities may include the following:

1. Final cover;
2. Stormwater management system elements such as perimeter drainage and diversion channels, ditches and down-chutes, and detention and sedimentation ponds or collection tanks;
3. Landfill gas collection and control system; and
4. Leachate extraction system elements such as leachate storage tanks or sumps, piping, pumps and control equipment.

Quality Assurance/Quality Control Sample Monitoring

The Discharger shall collect duplicate, field blank, equipment blank (if appropriate) and trip blank samples for each semiannual monitoring event at the following frequencies:

1. Duplicate sample – one sample per 20 regular samples;
2. Field blank – one per semiannual monitoring event;
3. Equipment blank – one sample per 10 monitoring stations (except where dedicated equipment is used); and
4. Trip blank – one sample per cooler.

C. REPORTING REQUIREMENTS

Reporting responsibilities of waste dischargers are specified in Water Code sections 13260, 13267 subdivision (b), and 13383, and this Regional Water Board's Resolution No.73-16 and Order No. 93-113. At a minimum, each Self-Monitoring Report (SMR) shall include the following information:

1. Transmittal Letter: A cover letter transmitting the essential points of the monitoring report shall be included with each monitoring report. The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall also certify the completion of all monitoring requirements. The letter shall be signed by the Discharger's principal executive officer, or his/her duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

2. Graphic Presentation: The following maps, figures, and graphs (if applicable) shall be included in each SMR to visually present data collected pursuant to this SMP:
    a. Plan-view maps showing all monitoring and sampling locations, waste management units, containment and control structures, treatment facilities, surface water bodies, and site/property boundaries;
    b. Leachate and groundwater level/piezometric surface contour maps for each groundwater-bearing zone of interest showing inferred groundwater gradients and flow directions under/around the Landfill based upon the past and present water level elevations and pertinent visual observations; and
    c. Any other maps, figures, photographs, cross-sections, graphs, and charts necessary to visually demonstrate the appropriateness and effectiveness of sampling, monitoring, characterization, investigation, or remediation activities relative to the goals of this SMP.

3. Tabular Presentation: The following data (if applicable) shall be presented in tabular form and included in each SMR to show a chronological history and allow easy reference:
    a. Well designation;
    b. Well location coordinates (latitude and longitude);
    c. Well construction (including top of well casing elevation, total well depth, screen interval depth below ground surface, and screen interval elevation);
    d. Groundwater depths;
    e. Groundwater elevations;

f. Current analytical results (including analytical method and detection limits for each constituent);
g. Historical analytical results (including at least the past five years unless otherwise requested); and
h. Measurement dates.

4. Compliance Evaluation Summary and Discussion:

   a. A summary and certification of completion of all environmental media monitoring, standard observations, and facilities inspections;
   b. The signature of the laboratory director or his/her designee indicating that he/she has supervised all analytical work in his/her laboratory; and
   c. A discussion of the field and laboratory results that includes the following information:

      i. Data interpretations
      ii. Conclusions
      iii. Recommendations
      iv. Newly implemented or planned investigations and remedial measures
      v. Data anomalies
      vi. Variations from protocols
      vii. Condition of wells, and
      viii. Effectiveness of leachate monitoring and control facilities.

5. Appendices: The following information shall be provided as appendices in electronic format only unless requested otherwise by Regional Water Board staff and unless the information is already contained in a sampling and analysis plan approved by Regional Water Board staff:

   a. New boring and well logs;
   b. Method and time of water level measurements;
   c. Purging methods and results, including:

      i. The type of pump used, pump placement in the well, and pumping rate;
      ii. The equipment and methods used to monitor field pH, temperature, and electrical conductivity;
      iii. The calibration of the field equipment used to measure pH, temperature, conductivity, and turbidity (as necessary); and
      iv. The method of disposing of the purge water.

   d. Sampling procedures, field, equipment, and travel blanks, number and description of duplicate samples, type of sample containers and preservatives used, the date and time of sampling, the name of the person actually taking the samples, and any other relevant observations; and
   e. Documentation of laboratory results, analytical methods, and reporting limits (RLs), and Quality Assurance/Quality Control (QA/QC) procedures for the required sampling.

D. CONTINGENCY REPORTING

1. The Discharger shall report to the Regional Water Board by telephone (510-622-2369) any measurably significant discharge from the Landfill immediately after it is discovered. The Discharger shall submit a written report with the Regional Water Board within five days of discovery of any discharge. The written report shall contain the following information:

    a. A map showing the location(s) of discharge;
    b. Approximate flow rate;
    c. Nature of effects (e.g., all pertinent observations and analyses); and
    d. Corrective measures underway or proposed.

2. If the Discharger determines that the corrective action measures are not effective, the Discharger shall, within 90 days of making the determination, submit an amended report of waste discharge to the Regional Water Board. The amended report of waste discharge shall identify appropriate changes to the program. If the Regional Water Board determines that the corrective action program is not effective, the Discharger shall, within 90 days of receiving written notification of such determination by the Regional Water Board, submit an amended report of waste discharge to make appropriate changes to the program.

E. REPORTING REQUIREMENTS

The Discharger shall submit SMRs to Regional Water Board staff in accordance with the schedule indicated in Table B-1. Reports due at the same time may be combined into one report for convenience, as long as monitoring activities and results pertaining to each monitoring period are clearly distinguishable. Reports shall be submitted in accordance with Provision C.24 of the WDR.

F. MAINTENANCE OF WRITTEN RECORDS

The Discharger shall maintain information required pursuant to this SMP for at least five years. The five-year period of retention shall be extended during the course of any unresolved litigation regarding a discharge or when requested by the Regional Water Board.

PART B

A. MONITORING LOCATIONS AND FREQUENCY

Monitoring locations, frequencies, parameters, and analytes are specified in Table B-1 of this SMP and as indicated below. Monitoring locations are shown in Figure 2.

1. **Environmental Media**

   a. Groundwater: Groundwater shall be monitored at the locations specified in Table B-1 and shown on Figure 2. Monitoring frequencies, parameters, and analytes shall be in accordance with Table B-1.
   b. Leachate: Leachate elevations shall be monitored at the locations specified in Table B-1 and leachate chemistry shall be monitored prior to treatment and discharge to the POTW. Monitoring frequencies, parameters, and analytes shall be in accordance with Table B-1.
   c. Stormwater: As outlined in Provision C.5 of the WDR.

2. **Standard Observations**

   Standard observations (described in Part A) shall be made within the Landfill, along the perimeter of the Landfill, and of the water courses and receiving waters beyond their limits. Standard observations shall be conducted at the frequency specified in Table B-1.

3. **Facilities Inspections**

   The Discharger shall inspect all containment and control structures and devices associated with the Landfill in accordance with the PLUDMP, to ensure proper and safe operation.

4. **Quality Assurance/Quality Control Samples**

   The QA/QC samples shall be analyzed for VOCs (field blank, equipment blank and trip blank) or for the same tests as a regular sample (duplicate sample).

B. REPORTING SCHEDULE

The Discharger shall submit SMRs to Regional Water Board staff in accordance with the schedule indicated in Table B-1. Reports due at the same time may be combined into one report for convenience, as long as monitoring activities and results pertaining to each monitoring period are clearly distinguishable.

Attachment: Self-Monitoring Program Table B-1

Table B-1 Self-Monitoring Program:

Groundwater (POC) Wells: 9 in number – G02R, G03R, G04R, MW01R, MW02R, MW03R, MW04, MW05R and MW06R

Monitoring Event	**Frequency**	**Parameters[1]**
Constituents of Concern (POC Wells)	Once every five years Last COC event was conducted in 2014 (Next event 2019)	Volatile Organic Compounds[2] Semi-Volatile Organic Compounds[3] Dissolved Metals[4] Organophosphorous Pesticides and PCBs[5] Chlorinated Herbicides[6] Cyanide Field Parameters – pH, electrical conductivity, temperature, turbidity, and dissolved oxygen
Monitoring Parameters (MPs) (POC Wells)	Semi-Annual 1st Report due April 30 2nd Report due October 31	Volatile Organic Compounds[7] 1,4-Dioxane Field Parameters – pH, electrical conductivity, temperature, turbidity, and dissolved oxygen
Groundwater and Leachate Levels[8]	Semi-Annual	As detailed in Part A
Standard Observations	Semi Annual	As detailed in Part A

Table B-1: Self-Monitoring Program:

Leachate Sampling Prior to Discharge to POTW

Monitoring Event	Frequency	Parameters[1]
Constituents of Concern	Once every five years Last COC event was conducted in 2014 (Next event 2019)	Same as Groundwater Constituents of Concern
Monitoring Parameters (MPs)	Annual	Volatile Organic Compounds[7] 1,4-Dioxane Field Parameters – pH, electrical conductivity, temperature, turbidity, and dissolved oxygen

1. Source of parameters: Amended Report of Waste Discharge for Oyster Bay Regional Park (Earth Tech, 2000).

2. List of VOCs includes: 1,4-dioxane, 2-butanone, acetone, benzene, chlorobenzene, chloromethane, ethylbenzene, styrene, tetrahydrofuran, toluene, trichlorofluoromethane, vinyl chloride, and xylene.

3. List of SVOCs includes: 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, naphthalene, 4,6-dinitro-2-methylphenol, 2,4-dimethylphenol, p-cresol (4-methylphenol), o-cresol (4-methylphenol), acenaphthene, fluorene, phenanthrene, n-nitrosodipropylamine, n-nitrosodiphenylamine, nitrobenzene, 2,4,6-trichlorophenol, 2,4-dichlorophenol, 2,4-dinitrophenol, 2-chlorophenol, 2-nitrophenol, 4-nitrophenol, and pentachlorophenol.

4. List of metals includes: As, Ba, Cd, Cr, Co, Cu, Hg, Ni, Pb, Se, Sb, V, and Zn.

5. List of pesticides/PCBs includes: 4,4'-DDE, 4,4'-DDT, aldrin, dieldrin, heptachlor, methoxychlor, beta-BHC, delta-BHC, gamma-BHC (lindane), endosulfan sulfate, PCB-1016, PCB-1242, PCB-1254, and PCB-1260.

6. List of herbicides includes: silvex, 2,4,5 T, and 2,4 D

7. List of VOCs includes: 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, chlorobenzene, cis-1,2-dichloroethene, ethylbenzene, tetrahydrofuran, toluene, trichloroethene, and xylene.

8. Water levels in 9 groundwater monitoring wells and approximately 80 leachate wells.