

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2006-0002

Waste Discharger Identification No. 3 440300002

Proposed for Consideration at the May 12, 2006 Board Meeting

For

**BUENA VISTA
CLASS III LANDFILL
SANTA CRUZ COUNTY**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board), finds that:

SITE OWNER AND LOCATION

1. The County of Santa Cruz (hereafter "Discharger" or "County") owns and operates the Buena Vista Class III Landfill (hereafter "Landfill" or "Facility").
2. The Landfill is shown on Attachment 1 and is located within one mile of the ocean in Santa Cruz County, approximately one mile west on Buena Vista Drive from Highway 1 at 1231 Buena Vista Drive, Watsonville, California 95076. The Landfill is shown on Attachment 1 and is located in Section 1, Township 12 South, Range 1 East, Mount Diablo Base Meridian, Santa Cruz County.

PURPOSE OF ORDER

3. The purpose of Waste Discharge Requirements Order No. R3-2006-0002 (Hereafter "Order" or "Order No. R3-2006-0002") is the following:
 - Revise, update, and replace existing Waste Discharge Requirements Order No. 94-029, adopted by the Regional Board on April 8, 1994;
 - Incorporate the requirements of 93-84;
 - Require compliance with California Code of Regulations, Title 27 and Code of Federal Regulations, Parts 258 and 259.
4. The Discharger submitted a Joint Technical Document (JTD) on April 5, 2005, to facilitate the review and revision of Order No. 94-029. The Discharger did not propose modifications to the design and operation of the Landfill. The JTD discusses the following:
 - a. General Info
 - b. Waste Classification and Management
 - c. Waste Management Unit Classification and Siting
 - d. Design and Construction Standards
 - e. Operating Criteria
 - f. Cover
 - g. Handling
 - h. Environmental Controls
 - i. Approvals
 - j. Other Requirements
 - k. Preliminary Closure Plans
 - l. Preliminary Post-Closure Plans
 - m. Reviewer Certification

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The JTD also includes the following documents:

- a. CEQA Documentation
- b. Site Development Plans
- c. Waste Acceptance Policies
- d. Federal Aviation Authority/Watsonville Airport Notification of Landfill Operations
- e. Compilation of Safety and Personnel Training Guidelines
- e. Management and Supervisory Flow Chart
- f. Compilation of Approvals and Permits
- g. Financial Assurances Operating Liability Information
- h. Landfill Gas System Master Plan
- i. Water Monitoring Program
- j. Site Life Calculations

5. Order No. R3-2006-0002 includes the following key elements:

- a. A detailed review of the Landfill site.
- b. A revised Monitoring and Reporting Program, which includes groundwater and surface water monitoring.
- c. Updated waste stream information.
- d. Allowance for disposal of treated wood waste.
- e. Language that brings the Landfill into compliance with California Code of Regulations Title 27, Solid Waste, effective July 18, 1997 (CCR Title 27).

LANDFILL SITE DESCRIPTION AND HISTORY

6. The Landfill currently meets all Title 27 criteria for classification as a Class III Landfill and is suitable to receive non-hazardous solid wastes.
7. The Landfill property is shown on Attachment 3, it is approximately 126 acres and consists of the following:
 - the active landfill is on a 69-acre parcel (APN #052-021-33),
 - a closed landfill (1986) on a 37-acre parcel (APN #052-061-01), and
 - a closed landfill (1995) on 20 acres of the neighboring 93-acre parcel (APN #052-061-25), which is shared by the Landfill and Sheriff's detention facilities.
8. The active landfill site is bordered on all sides by public roads with 50-foot wide easements, including Buena Vista Drive, Harkins Slough Road, and Rountree Lane. The landfill footprint is set back from the roadways an additional distance of 50 to 100 feet. The closed landfill area is surrounded by Gallighan Slough to the east and north, and a biotic conservation easement to the southwest. The Southern Pacific Railroad is located west of both the closed and active landfills.
9. Land uses in the surrounding area consists of scattered residential/agricultural uses to the east and north, agricultural/open space, and Public Facilities including:
 - Sheriff's Rehabilitation Facility to the south,
 - seasonal farm workers housing to the southeast, and
 - the City of Watsonville Landfill to the west directly across the Southern Pacific railroad track.
10. The active Landfill consists of six lined modules labeled 1, 2, 3, 4, 5, and 6. Module 4 has since been divided into two smaller modules 4A and 4B. Landfill module 5 has not been constructed. Modules 1, 2, 3, and 6 are filled to interim elevations ranging from 70 to 170 feet above sea level.
11. The Discharger expects future Landfill development to occur in 4 phases. Phase 1 includes filling module 4A to an interim elevation of 130 feet, and construction of module 4B (excavation, liner, LCRS, and drainage).

Phase 2 includes filling module 4B to an interim elevation of 130 feet and construction of module 5 (excavation, liner, LCRS, and drainage). Phase 3 includes filling of module 5 to an interim elevation of 130 feet. Finally, phase 4 modules will be filled to an elevation of approximately 200 feet to create final contours.

12. Wastes are disposed of utilizing the area fill method. Wastes are placed in lifts 15-20 feet high with perimeter slopes of 3:1 or flatter. Waste is spread and compacted in approximately 2-foot thick layers on a slightly sloped working face sloped no steeper than 5%-10% and approximately 150 feet wide by 50 to 75 feet deep. The working face is covered daily with spray applied cementitious material or Posi-Shell, or another Executive Officer approved alternative daily cover (ADC), to conserve landfill capacity.
13. The site is expected to reach capacity at the end of the year 2019. Life projections are based on an average disposal of 0.213 million cubic yards in 2005 with 2% growth per year and an existing refuse capacity of 3.67 million cubic yards based on an aerial survey conducted on January 21, 2004, and supplemented with field measurements by County survey crews in January 2005.

WASTE TYPE & CLASSIFICATION

14. The Landfill accepts non-hazardous residential, commercial and industrial solid waste as classified by CCR Title 27, Section 20220(a), as Class III wastes. Class III wastes are all putrescible and nonputrescible solid, semi-solid, and liquid wastes including: garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid or semi-solid wastes and other discard wastes (whether solid or semi-solid consistency); provided that such wastes do not contain materials that must be managed as hazardous wastes, Class II wastes, or material that contain soluble pollutants in concentrations that exceed applicable water quality objectives or could cause degradation of waters of the state.
15. Wastes containing greater than one percent (>1%) friable asbestos are classified as hazardous under California Code of Regulations, Title 22. Since such wastes do not pose a threat to water quality, Section 25143.7 of the Health and Safety Code permits their disposal in any landfill, providing waste discharge requirements specifically permit the discharge and the wastes are handled and disposed of in accordance with other applicable State and Federal statutes and regulations.
16. The Discharger may choose to accept treated wood waste at the facility. "Treated wood" means wood that has been treated with a chemical preservative for purposes of protecting the wood against attacks from insects, microorganisms, fungi, and other environmental conditions that can lead to decay of the wood and the chemical preservative is registered pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Sec. 136 and following). Existing law regulates the control of hazardous waste, but exempts from the hazardous waste control laws, wood waste that is exempt from regulation under the federal Resource Conservation and Recovery Act of 1976, as amended (RCRA), if the wood waste is disposed of in a municipal landfill that meets certain requirements imposed pursuant to the Porter-Cologne Water Quality Control Act for the classification of disposal sites, and the landfill meets other specified requirements outlined in Sections 25143.1.5 and 25150.7 of the Health and Safety Code. Section 25150.8 of the Health and Safety Code also provides that if treated wood waste is accepted by a solid waste landfill that manages and disposes of the treated wood waste in the manner specified, the treated wood waste shall be deemed to be a solid waste, and not a hazardous or designated waste. The Discharger has indicated that all treated wood waste accepted at the facility will be handled and disposed of in accordance with the provisions outlined in Sections 25143.1.5, 25150.7, and 25150.8 of the Health and Safety Code.
17. The Landfill's recovery and recycling, diversion activities includes diversion of the following wastes:
 - a. Household Hazardous Waste
 - b. Woodwaste
 - c. Tires
 - d. Mattresses and box springs
 - e. Electronic waste.

- f. Clean concrete.
- g. Scrap metal.
- h. Construction and demolition (C&D) debris.
- i. Other inerts such as brick, asphalt, and road base material.
- j. Food waste for a composting pilot project.
- k. Other wastes as programs are developed.

GEOLOGY/HYDROGEOLOGY

18. **Setting** – The site is located in a naturally occurring valley that formed in an uplifted marine terrace. The marine terrace lies within an area of gently rolling hills of the Monterey Bay coastal plain. This gentle terrain has been incised by numerous small streams draining southward to the Pajaro River.
19. **Topography** – Prior to becoming a Landfill the site was excavated by Granite Construction for fill material. No detailed historical topographs are available. Ground surface elevations at the Landfill initially ranged from 10 to 120 feet mean sea level. At closure, final grades are expected to reflect area topography and rise to a maximum height of 200 feet.
20. **Geologic Structure** – The Pajaro Valley is underlain by three distinct structural blocks, separated by the two major fault systems, the San Andreas and the Zayante-Vergeles. The San Andreas Fault zone trends from the southeast to the northwest across the northeastern side of the Pajaro Valley. Northeast of the fault zone, sandstones and shale of Paleocene to mid-Miocene age underlie the Santa Cruz Mountains, which rest on a Franciscan Formation basement rock. A subsiding structural block lies between the San Andreas and Zayante-Vergeles fault zones. A sequence of folded Eocene to Pliocene sediments and some volcanics extend to a depth of about 10,000 feet and lies upon granitic basement rock. Southwest of the Zayante-Vergeles fault zone, where the landfill is located, the same granitic basement is found at depths of 2,000 to 3,000 feet and is overlain by very gently sloping water-bearing deposits of the Pliocene age. A thick sequence of sedimentary deposits, including interbedded clays, silts, and gravel, underlie the site area to depths in excess of 2,500 feet. Distinct hydrogeologic units that have been identified in the Pajaro Valley include the semi-consolidated Tertiary Purisima Formation (Pliocene), and the unconsolidated Aromas Red Sands, terrace deposits, alluvium, and dune sands of the Quaternary age.
21. **Stratigraphy** – The Landfill is underlain by Manresa dune sands, which overlie fluvial terrace deposits made up of interbedded clays, silts, and sands, followed by the Aromas Sands formation. The Aromas sands consist of up to 800 feet of sand and interbedded fluvial sand, gravel, silt, and clay. The above three units are of the Quaternary geologic period. Tertiary Purisima Formations from the mid-Pliocene age underlie the Aromas Formation.
- The permeability of the sediments immediately underlying the Landfill is estimated to be 1.8×10^{-3} cm/sec. Further geologic characterization of materials beneath the site indicates that these sediments do not provide adequate protection for water quality. An engineered liner system is necessary for all proposed disposal areas.
22. **Faulting/Seismicity** – The Landfill lies in the geologically active coastal belt of central California, characterized by periodic seismic activity along the San Andreas and associated faults. The San Andreas fault is approximately six miles northeast and is the dominant fault for seismic analysis. The maximum probable earthquake along the San Andreas Fault, magnitude 7.9, would yield the highest peak horizontal bedrock acceleration of approximately 0.48g at the site.
23. **Hydrogeology** – The principal water-bearing formation near the Landfill is the Aromas Formation. The overlying fluvial terrace deposits contain only thin, localized areas of perched groundwater. The static water table for the Aromas Formation near the Landfill is typically near mean sea level and at or near the fluvial terrace deposits/Aromas Formation interface. Discontinuous clay lenses result in an unconfined or locally semi-confined aquifer in and around the Landfill. Hydrologic continuity exists between the fluvial terrace deposits and the Aromas and between the sloughs; as a result, the sloughs cause local seasonal changes in the direction of groundwater movement.

GROUNDWATER, STORM WATER, AND SURFACE WATER

24. **Groundwater** – Two aquifer zones are located below the landfill site. The Aromas formation is the uppermost and the principal water-bearing formation in the site vicinity. Groundwater in the Aromas Sands formation generally flows southeast with a gradient of approximately 0.002 ft/ft. The deepest aquifer is in the Purisima formation. The use of this aquifer is limited since the Aromas formation yields ample water for area needs. Groundwater in the deeper Purisima flows east toward the valley floor. The Discharger monitors the Aromas Formation with upgradient and downgradient wells surrounding the Landfill, including the closed and active areas.
25. **Groundwater Quality** – Trace volatile organic compounds (VOC) have been detected in groundwater monitoring wells MW-03, 06 and 09. Monitoring wells MW-03, 06, and 09 are located adjacent to Module 2. The Discharger believes these VOC impacts are caused by landfill gas. The landfill gas source is supported by the lack of leachate indicators. To remove landfill gas from the vadose zone the Discharger has added 33 landfill gas collection wells to modules 1, 2, and 3 since 1997. VOC concentrations in monitoring wells MW-03 and MW-06 initially declined following the installation of gas extraction wells. VOC concentrations in MW-09 are decreasing and appear to display a seasonal variation.
- Inorganic monitoring parameters are generally below or similar to concentrations observed in the upgradient well MW-01 and have not indicated a release from the landfill.
26. **Supply Wells** – There is a County water supply well near the water tank and tool shed as shown in Attachment 3. Two nearby off-site wells serve the County sheriff facility and the neighboring seasonal farm worker housing development (Tierra Alta). Supply well Tierra Alta is monitored regularly and is included in Monitoring and Reporting Program R3-2006-0002. The on-site and off-site County wells are screened in the deeper Purisima formation and are monitored bi-annually by the County.
27. **Groundwater Separation** - California Code of Regulations Title 27, Section 20240(c), requires the Discharger to operate the Landfill to ensure that wastes will be a minimum of five feet above highest anticipated groundwater. This operational requirement reduces leachate generation and impairment of beneficial uses. The minimum separation between groundwater and the bottom of the liner system is at least five feet in all-existing modules.
28. **Surface Water** – Gallighan Slough joins Harkin's Slough ½ mile south of the site. Harkin's Slough is a tributary of Watsonville Slough, which discharges to the mouth of the Pajaro River at the Pacific Ocean.
29. **Storm Water** – Surface drainage is diverted around the landfill to Gallighan Slough. The active Landfill is located on a hillside that faces westward within Gallighan Slough watershed. Runoff from the hillside flows westward and south to Gallighan Slough, which abuts the active site on the west.

California Code of Regulations Title 27, Section 21750(e), requires that Class III landfills be designed to handle the runoff from a 100-year, 24-hour storm. Based on Rainfall Intensity Duration Curves in the County of Santa Cruz Design Criteria Manual, the 100-year, 24-hour storm is estimated to be 7.2 inches. In general, surface water runoff from exposed soil areas of the landfill drains to a sedimentation basin while drainage from hydroseeded outer landfill slopes is conveyed to a perimeter ditch, which discharge to roadside drainage ditches. The surface water control facilities are designed to handle peak discharge from a 100-year design storm and the sedimentation basin is designed to contain a 25-year, 24-hour storm. The detention basin and surface water sampling locations are shown in Attachment 3.

30. **Storm Water Permitting** - In addition to this Order, the Discharger is covered under a Statewide General Storm Water Permit. On June 3, 1997, the Discharger submitted a "Notice of Intent" to comply with the General Permit to Discharge Storm Water Associated with Industrial Activity (WQ Order No. 97-03-DWQ). The Discharger performs storm water monitoring in accordance with the General Permit's Monitoring and Reporting Program and required storm water pollution prevention plan. Storm water samples are collected

during scheduled operating hours, twice per year, during the first storm event of the year and a second event, preceded by at least three days without a storm water discharge. Samples are collected at all storm water discharge locations during the first hour of runoff.

31. **Precipitation** – Based on records from the Watsonville Water Works Station, about 90 percent of the annual precipitation occurs from October through April with an average annual rainfall at the site of approximately 22.3 inches. January is the wettest month with an average precipitation of 4.7 inches and July is the driest month with an average precipitation of 0.05 inches.
32. **Floodplain** - The Federal Emergency Management Agency Flood Insurance Rate Map (Panel 0600353 0390 B), shows that the landfill located in Flood Hazard Zone C, which is outside the 100-year flood plain.

CONTROL SYSTEMS/MONITORING PROGRAMS

33. **Leachate Management System** – The leachate collection and removal system (LCRS) at each module includes a high permeability layer, perforated pipes, nonperforated riser pipes, pumps, and leachate storage tanks. Each module's LCRS drains to a separate collection sump. Access to the sumps is through side slope rises. Submersible pumps are lowered to the riser's base and are equipped with automatic pump controllers. The pumped leachate is stored in a double contained storage tank for transfer to a POTW.
34. **Landfill Gas Control** – The current Landfill gas collection system includes 78 collection and perimeter migration wells. A network of gas header pipes interconnect these wells and transport gas to a flaring facility. Since 1997 the Landfill has operated a flare facility with capacity of 1,800 cfm. This flare facility serves both the Buena Vista Landfill (1300 cfm) and the adjacent Watsonville Landfill (500 cfm).

In early 2006, the County expects to bring an electrical cogeneration facility online. Up to 1200 cfm of landfill gas derived from the higher quality internal gas collection wells will be used to generate approximately 3 megawatts of electricity. The flare will remain operational in order to serve the City of Watsonville Landfill and to handle excess landfill gas generated at the Buena Vista Landfill.

35. **Groundwater Monitoring** – The groundwater monitoring well network consists of thirteen monitoring wells (MW-01 through MW-12, and Tierra Alta) screened in the Aromas Sands formation at the locations shown in Attachment 3. Three piezometers (PZ-8, PZ-15, and PZ-16) are also used to supplement groundwater elevation data in the Aromas Sands formation. The Purisima aquifer is not monitored.

Groundwater monitoring well MW-01 is located upgradient of the landfill and serves as a background monitoring point. Groundwater monitoring wells MW-02, MW-03, MW-06, MW-09, MW-10, MW-12, and Tierra Atla monitor downgradient groundwater south, southeast, and east of the active Landfill. Wells MW-04, MW-05, MW-07, MW-08, and MW-11 are located downgradient or crossgradient of the closed landfill area.

36. **Leachate Monitoring** – Leachate and condensate collected from the landfill gas collection system are periodically tested for sulfide, phenols, metals, organochlorine pesticides, PCBs, chlorinated herbicides, VOCs, semi VOCs, and conventional inorganics to ensure compliance with CCR Title 27, and 40 CFR, Part 258.40(a)(2). Leachate and condensate are disposed at the City of Watsonville Wastewater Treatment Plant.
37. **Surface Water Monitoring** - Surface water is monitored at four water-sampling locations, R-1 through R-4, as shown in Attachment 3. Monitoring points R1 and R-4 monitor surface water upstream of the landfill, west of the closed landfill in Gallighan Slough and in the northern drainage channel along Buena Vista Drive, respectively. Point R-1 also monitors drainage from the Watsonville Landfill, which discharges approximately 50 yards upstream. Monitoring points R-2 and R-3 monitor surface water in Gallighan Slough, which runs between the closed and active landfill areas. Storm water is monitored in accordance with the State's NPDES storm water discharge general permit.

38. **Vadose Zone Monitoring** – Vadose zone monitoring is required by Section 20415 (Title 27) unless demonstrated by representative soil suction curves that soil pore liquid cannot be extracted. The Landfill does not have vadose zone monitoring because of site soil conditions. The Discharger has demonstrated that accurate monitoring of the vadose zone is not feasible.
39. **Landfill Gas Monitoring** – Gas probes are located adjacent to onsite and offsite buildings and in locations along the landfill perimeter, as shown in Attachment 3. The gas monitoring system consists of 19 single, double, and triple level probes. All triple level probes are screened at approximately 10' to 25', 30' to 55', and 60' to 85'. Double level probes are screened at approximately 10' to 25' and 30' to 55'. Single level probes are screened at 10' to 25'. The triple and double level probes were sited and installed to measure landfill gas levels from the bottom of the fill to keep surface. Single level probes are designed to provide immediate monitoring near buildings or in areas where depth to refuse is less than 30' at grade.

BASIN PLAN

40. The Water Quality Control Plan, Central Coast Basin (Basin Plan), was adopted by the Central Coast Water Board on September 8, 1994, and approved by the State Water Resources Control Board (State Water Board) on November 17, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters. This Order implements the water quality objectives stated in that Plan.
41. The Basin Plan identifies the following present and anticipated beneficial uses of the Galighan Slough:
- a. Water contact recreation;
 - b. Non-contact water recreation;
 - c. Wildlife habitat;
 - d. Warm fresh-water aquatic habitat;
 - e. Rare, threatened, or endangered species;
 - f. Estuarine habitat;
 - g. Commercial and sport fishing; and
 - h. Shellfish Harvesting.

Galighan Slough discharges to Harkins Slough 0.5 miles southeast of the Landfill. Harkins Slough is a tributary to Watsonville Slough, and both include the present and anticipated beneficial uses listed above and also the following:

- a. Preservation of biological habitats of special significance.
42. Present and anticipated beneficial uses of groundwater in the Landfill vicinity include:
- a. Agricultural supply;
 - b. Municipal and domestic supply; and
 - c. Industrial use.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

43. This Order contains prohibitions, discharge specifications, water quality protection standards, and provisions intended to protect the environment by mitigating or avoiding impacts of the project on water quality. This Order is for an existing facility and therefore is exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Title 14, Chapter 3, and Section 15301.

GENERAL FINDINGS

44. The Landfill is included in the Santa Cruz County Waste Management Plan, dated April 1996 and operates according to the following permits and orders:
- a. Solid Waste Facilities Permit No. 44-AA-004, issued by California Integrated Waste Management Board on April 28, 2000.
 - b. Land Use/Coastal Zone Permit No. 83-1503 (Landfill Expansion), Santa Cruz County Planning Department, May 7, 1985.
 - c. Wastewater Hauler Permits #5085 and 6059, Santa Cruz County Environmental Health Service, March 8, 2005
 - d. Mobile Waste Hauler Disposal Permit #35-03-MWH, City of Watsonville Utilities Department, March 10, 2003.
 - e. Statewide General Industrial Activities Storm Water Discharge Permit, Buena Vista Landfill #3-44S001258, October 1992.
 - f. Title V Permit TV19-02, Monterey Bay Unified Air Pollution Control District, January 15, 2004
 - g. Letter of Approval from CA Department of Forestry and Fire Protection, February 10, 1994.
 - h. Commercial Development Permit No. 90-1010 (HHW Facility Development), Santa Cruz County Planning Department, December 26, 1990
 - i. Authorization to Operate Household Hazardous Waste Collection Facility under Permit-By-Rule, Title 22, Section 66270.60, Department of Toxic Substances Control, August 7, 1996.
 - j. Hazardous Materials Permit No. 88000298, Santa Cruz County Environmental Health Department, March 26, 2004.
 - k. Landfill Deed of Record, filed November 18, 1997.
 - l. Landfill Gas Power Project: Approval Letter, Site Layout and Authorities to Construct, MBUAPCD, December 14, 2004.
 - m. Construction and Demolition (C & D) Operation: Non-Disposal Facility Element Approval Letter, February 15, 2005.
 - n. Food Waste Research and Development Project: Non-Disposal Facility Element Approval Letter, February 15, 2005.
 - o. Odor Impact Management Plan, Vision Recycling, July 17, 2003
 - p. ADC Demonstration Project: Posi-Shell.
 - q. Tire Program Identification Number, CIWMB.
45. Discharge of waste is a privilege, not a right, and authorization to discharge waste is conditioned upon the discharge complying with provisions of Division 7 of the California Water Code and with any more stringent limitations necessary to implement the Basin Plan, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should ensure conditions are met and mitigate any potential changes in water quality caused by the project.
46. Title 27 of the California Code of Regulations (CCR 27) regulates waste discharges to land. The terms used in this permit are defined in CCR Title 27, Section 20164.
47. Pursuant to Title 27, Section 20080(g), landfill areas that were closed, abandoned, or became inactive on or before November 27, 1984, are not specifically required to be closed in accordance with current Title 27 requirements (Section 20950 et seq.). However, the requirements of CCR Title 27 are minimum requirements. The Regional Board may impose more stringent requirements if necessary to accommodate regional or site-specific conditions [Title 27, Section 20080(a)(1)].
48. This Order implements the prescriptive standards and performance goals of CCR Title 27, as promulgated on July 18, 1997, and in conformance with the goals of the Basin Plan.
49. On February 24, 2006, the Regional Board notified the Discharger and interested agencies and persons of its intention to update the Landfill Waste Discharge Requirements and has provided them with a copy of the proposed Order and an opportunity to submit views and comments.

50. After considering all comments pertaining to this discharge during a public hearing on **May 12, 2006**, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED pursuant to authority in Section 13263 of the California Water Code, the County of Santa Cruz, its agents, successors, and assigns may discharge wastes at the Buena Vista Class III Landfill, providing compliance is maintained with the following:

A. COMPLIANCE WITH OTHER REGULATIONS, ORDERS AND STANDARD PROVISIONS

1. Discharge of waste shall comply with all applicable requirements contained in the California Code of Regulations Title 27, Division 2, Solid Waste (CCR Title 27) and Title 40 Code of Federal Regulations Parts 257 and 258 (40 CFR) Solid Waste Facility Disposal Criteria. If any applicable regulation requirements overlap or conflict in any manner, the most water quality protective requirement shall govern in all cases, unless specifically stated otherwise in this Order, or as directed by the Executive Officer.
2. The Buena Vista Landfill is no longer subject to this Regional Board's Order No. 93-84 "Waste Discharge Requirements (WDR) Amendment for All Municipal Solid Waste Landfills in the Central Coast Region" (Super Order). The Super Order updated all Region 3 landfill WDRs to comply with the updated federal landfill regulations, 40 CFR Parts 257 and 258. Through compliance with CCR Title 27 and 40 CFR Parts 257 and 258 as required above in A.1, the Discharger will satisfy requirements identical to those within Order No. 93-84.
3. The Discharger shall monitor potential Landfill releases related to storm water runoff by complying with all requirements contained in the "State Water Resources Control Board Water Quality Order No. 97-03-DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001 Waste Discharge Requirements for Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities."
4. This Landfill is subject to this Regional Board's Cleanup and Abatement Order No. R3-2002-0130 "Moratorium on the Disposal of Decommissioned Materials to Class III and Unclassified Waste Management Units" adopted on October 11, 2002.

B. PROHIBITIONS

1. Discharge of waste to areas outside the Permitted Landfill Boundary, as identified in **Attachment 3**, is prohibited.
2. Discharge of waste (solid or liquid) to areas within the Permitted Landfill Boundary that have not previously received waste is prohibited unless a composite liner system, as described in **Specification C.32**, is installed and accepted by the Executive Officer.
3. Discharge of the following types of wastes is **prohibited**:
 - a. Radioactive wastes.
 - b. Hazardous waste, except waste classified as a special waste in accordance with CCR Title 22, Sections 66261.122 and 66261.124.
 - c. Hazardous waste, except wastes containing greater than one percent (>1%) friable asbestos.
 - d. Chemical and biological warfare agents.
 - e. Waste solvents, dry cleaning fluids, paint sludge, pesticides, phenols, brine, and acid and alkaline solutions.
 - f. Oils or other liquid petroleum products.
 - g. Wastes that have the potential to reduce or impair the integrity of containment structures or which, if commingled with other wastes in the unit, could produce violent reaction, heat or pressure, fire or explosion, toxic by-products, or reaction products.

- h. Wastes that require a higher level of containment than provided by the Landfill.
 - i. Liquid or semi-solid waste containing less than 50 percent solids by weight. This includes dewatered sewage or water treatment sludge, landfill leachate and gas condensate, except as allowed by **Specification C. 21** and **Provision E.14**.
4. Discharge of solid waste, liquid waste or leachate to surface waters, ponded water from any source, surface water drainage courses, or groundwater is prohibited.
 5. Discharge of waste within 50 feet of the property line or within 100 feet of surface waters or domestic supply wells is prohibited. However, the Discharger may submit a request to discharge waste within 50 feet of the property line. The request shall include an irrevocable access and operations easement with the adjacent property owner and shall be approved by the Executive Officer, prior to waste disposal.
 6. Disposal of wastes within five (5) feet of the highest anticipated elevation of underlying groundwater, including the capillary fringe, is prohibited. To maintain the five-foot separation, the Discharger shall install an engineered system, such as an under-drain barrier, approved by the Executive Officer.
 7. Ponding of liquids over solid waste fill areas is prohibited

C. SPECIFICATIONS

General Specifications

1. The Discharger shall implement the attached Monitoring and Reporting Program No. R3-2006-0002, including any addendum thereof, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents, or any unreasonable beneficial use impairment associated with and or caused by the discharge of waste. The Executive Officer may amend the Monitoring and Reporting Program at any time.
2. The discharge shall neither cause nor contribute to any surface water contamination, pollution, or nuisance, including, but not limited to:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam.
 - b. Increases in bottom deposits or aquatic growth.
 - c. An adverse change in temperature, turbidity, or apparent color beyond natural background levels.
 - d. The creation or contribution of visible, floating, suspended, or deposited oil or other products of petroleum origin.
 - e. The introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of beneficial uses of waters of the State.
3. Disposal site operations shall not be a source of odor or pest nuisance.
4. "Treated wood" wastes may be discharged, but only to an area equipped with a composite liner and leachate collection and removal system, as described in Construction Specification C.30, and shall be handled in accordance with California Health and Safety Code Sections 25143.1.5 and 250150.7. "Treated wood" means wood that has been treated with a chemical preservative for purposes of protecting the wood against attacks from insects, microorganisms, fungi, and other environmental conditions that can lead to decay of the wood and the chemical preservative is registered pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Sec. 136 and following). This may include but is not limited to waste wood that has been treated with chromated copper arsenate (CCA), pentachlorophenol, creosote, acid copper chromate (ACC), ammoniacal copper arsenate (ACA), ammoniacal copper zinc arsenate (ACZA), or chromated zinc chloride (CZC).

5. Treated wood must be managed to ensure consistency with Sections 25143.1.5 and 25150.7 of the Health and Safety Code. If a verified release is detected from the waste management unit where treated wood is disposed, the disposal of treated wood shall be terminated at the unit with the verified release until corrective action ceases the release.
6. Discharge Specifications C.4 and C.5, above, apply only to treated wood waste that is a hazardous waste solely due to the presence of a preservative in the wood, and is not subject to regulation as a hazardous waste under 40 CFR Section 264.
7. The discharge shall not cause an increase in concentration of waste constituents in soil-pore gas, soil-pore liquid, perched groundwater, groundwater or geologic materials outside of the Point of Compliance (as defined by CCR Title 27).
8. The Discharger shall conduct intake load checking as specified by this Order and attached monitoring and reporting program, to ensure that "hazardous waste," "designated waste," and "radioactive waste" are not discharged to the landfill.
9. All waste discharged in violation of these requirements shall be removed and relocated.
10. All waste that is wind-blown outside the active Landfill area shall be collected regularly and disposed of in the Landfill. If wind-blown litter becomes a continuing problem, a containment barrier (additional screens and/or fences) shall be constructed to prevent spreading of refuse.
11. The Waste containment system shall be maintained and protected to ensure effectiveness.
12. Refuse shall be covered daily by at least six inches of soil cover material or in accordance with an Executive Officer-accepted alternative daily cover and cover frequency. Daily cover shall promote lateral runoff of rainfall away from the active disposal area and waste.
13. All Landfill waste disposal areas that have not reached final fill elevation, but will remain inactive more than one year, must be provided with an Executive Officer-approved long-term intermediate cover. The thickness and permeability of the long-term intermediate cover shall be based primarily on site-specific conditions, including but not limited to: length of exposure time; volume of underlying material, permeability, thickness and composition of existing cover; amount of yearly rainfall; depth to groundwater; beneficial uses of underlying groundwater; site-specific geologic and hydrogeologic conditions; and effectiveness of existing monitoring system.
14. Water used over unlined Landfill areas shall be limited to the minimum amount necessary for dust control and construction.
15. Collected storm water may be used in minimum amounts necessary for dust control, compaction, or irrigation of cover vegetation provided:
 - a. Water does not infiltrate past the vegetation root zones or past a depth where effective evaporation can occur.
 - b. Water does not contain or carry waste constituents.
16. Surface drainage from tributary areas and internal site drainage from non-landfill surface or subsurface sources shall not contact or percolate through wastes.
17. To prevent erosion and percolation through the waste, permanent drainage ditches crossing over Landfill areas shall be lined with either a synthetic liner, or a one-foot-thick layer of soil having an in-place hydraulic conductivity of 1×10^{-6} cm/sec or less, or an alternative material that restricts infiltration of surface waters into the underlying waste as approved by the Executive Officer.

18. Waste shall not be discharged to a wetland, as defined in 40 CFR Section 232.2(r), or to any portion thereof.
19. Only inert wastes, as defined in Title 27 CCR 20230(a), may be disposed of outside the engineered liner system and within the permitted waste footprint of the Landfill. The discharger shall characterize inert waste in accordance with an Executive Officer-approved Waste Sampling Plan to demonstrate that the waste is inert.
20. The handling and disposal of asbestos containing waste shall be in accordance with all applicable federal, state, and local statutes and regulations.
21. Discharge of condensate or leachate shall comply with the following:
 - a. Liquids shall **only** be returned to a waste management unit equipped with a containment system that meets or exceeds the performance standards of CCR Title 27, 40 CFR, Part 258.40(a)(2), or in this Order, whichever is more protective of water quality.
 - b. Liquids shall be measured by volume and recorded on a monthly basis. These monthly volumes shall be included as a part of monitoring submittals as required in MRP R3- 2006-0001.
 - c. No discharge of leachate shall occur within 48-hours of any forecasted rain event, during any rain event, or 48-hours after any rain event, unless a site specific Leachate Application Plan is submitted and approved by the Executive Officer,
 - d. Have an approved alternate method of leachate disposal (wastewater treatment plant disposal) that is acceptable to the Executive Officer.

Wet Weather

22. By **October 1st of each year**, all necessary runoff diversion and erosion prevention measures shall be implemented. All necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the Landfill and to prevent surface drainage from contacting or percolating through wastes.
23. **Throughout the rainy season of each year**, a minimum one foot thick compacted wet weather soil cover designed and constructed to minimize percolation of precipitation through wastes shall be maintained over all waste disposal areas containing buried waste. The soil cover shall be in place by **October 1st of each year**. The only exception to this specification is the working face. The working face shall be confined to the smallest area practicable based on the anticipated quantity of waste discharged and required Landfill facility operations. Based on site-specific conditions, the Executive Officer may require a more stringent cover for any portion of the Landfill prior to the rainy season.
24. By **October 1st of each year**, vegetation shall be planted and maintained as necessary to minimize erosion on intermediate cover slopes and on slopes at final elevation. Vegetation shall be selected to require a minimum of irrigation and maintenance. Upon written Executive Officer acceptance, non-hazardous sewage sludge may be utilized as a soil amendment to promote vegetation. Soil amendments and fertilizers (including wastewater sludge) used to establish vegetation shall not exceed the vegetation's agronomic rates (i.e., annual nutrient needs), unless approved by the Executive Officer.
25. If adequate soil cover material is not accessible during inclement weather, such material shall be stockpiled during favorable weather to ensure year-round compliance.
26. All Landfill surfaces and working faces shall be graded and operated to minimize rainfall infiltration into wastes, to prevent ponding of water, and to resist erosion.
27. Rills in the cover (final or interim) exceeding six inches in depth shall be backfilled throughout the entire year. If areas containing rills or erosion damage are too wet to access with equipment and repair, temporary protective measures such as hay, tarps, or other hand-applied erosion control measure shall be used.

28. Drainage facilities shall be designed, constructed, and maintained to accommodate anticipated precipitation and peak surface runoff flows from a 100-year, 24-hour rain event.
29. Storage facilities associated with precipitation and drainage control systems shall be emptied immediately following each storm or otherwise managed to maintain the design capacity of the system. A minimum of two feet of freeboard shall be maintained in all storm water/sediment containment or percolation ponds.

Design Criteria

30. All waste disposal areas, containment structures and drainage facilities shall be designed and constructed under the direct supervision of a California Registered Civil Engineer or a Certified Engineering Geologist, and shall be certified by that individual as meeting the prescriptive standards and performance goals of all state and federal landfill regulations including, but not limited to, CCR Title 27 and 40 CFR parts 257 and 258. For containment structures (liners), certification of standards consistent with CCR Title 27, Sections 20324 and 20310 (e), shall be obtained prior to waste discharge.
31. Waste management units, containment structures, and drainage facilities shall be designed, constructed and maintained to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, overtopping, and damage due to natural disasters (e.g., floods with a predicted frequency of once in 100 years, and severe wind storms).
32. Wastes shall not be discharged to new areas (i.e., permitted areas that have not previously received wastes) unless equipped with a containment system, which meets either a. or b. below:
 - a. A composite liner and a leachate collection and removal system consisting of the following components:
 - A well-prepared subgrade, engineered to support the Landfill and associated structures.
 - Lower Component: a minimum two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.
 - Upper Component: a minimum 60-mil high-density polyethylene (HDPE). The upper component must be installed in direct and uniform contact with the lower component.
 - A Leachate Collection and Removal System (LCRS), designed so that leachate drains by gravity to a collection point/sump and is removed through gravity or pumping to a holding tank or sanitary sewer for volume measurement, testing and disposal.
 - A protective soil layer or operations layer shall be placed above the LCRS and liner system. This layer shall be a minimum of 12 inches thick
 - b. An engineered alternative liner design, approved by the Executive Officer. Engineered alternative designs must satisfy the performance criteria in 40 CFR Section 258.40(a)(1) and (c), and satisfy the criteria for an engineered alternative to the above prescriptive design, as provided by CCR Title 27, Section 20080(b). Performance of the alternative composite liners' components, in combination, shall equal or exceed the waste containment capability of the prescriptive design outlined above.
33. All Landfill facilities shall be designed and constructed to prevent damage during the maximum probable earthquake.
34. The integrity of final slopes shall be maintained to handle design static and dynamic conditions to protect public health and safety and prevent damage to post-closure land uses, roads, structures, utilities, gas monitoring and control systems, leachate collection and control systems to prevent public contact with leachate, and prevent exposure of waste. Slope stability analyses shall be conducted and reported pursuant to the requirements of Division 2, Subdivision 1, Chapter 4, Subchapter 3, Article 4 Section 21750(f)(5). A minimum factor of safety of 1.5 is required for permanent and interim slopes under static slope stability analyses. For permanent seismic deformation analyses, an acceptable limit for permanent slope displacement is 6 inches for bottom liners and slopes and 12 inches for final cover system slopes.

35. The leachate collection and removal system shall:
- a. Be designed and constructed to prevent more than 12 inches of static hydraulic head on the liner.
 - b. Be designed and operated to function without clogging through the scheduled closure of the waste management unit and during the post-closure maintenance period.
 - c. Convey to a sump, or other appropriate collection area, all leachate that reaches the liner. The depth of fluid in any collection sump shall be kept at the minimum needed to ensure efficient pump operation.
 - d. Be designed so that short and long term system performance can be monitored and evaluated [CCR Title 27, Section 20340 (d)].
 - e. Above ground storage facilities shall have a secondary containment system sized to hold 100 percent of the primary containment system capacity.
 - f. Sumps shall be constructed with double liners with leak detection capability.

Closure

36. Final Landfill configuration shall conform to the contours delineated in Figure 7 and Attachment 2, Site Development Plans, of the March 2005 JTD.
37. The Discharger shall implement final closure activities as the site operation progresses, in accordance with requirements consistent with the closure of the entire site as approved by the Executive Officer and the California Integrated Waste Management Board in accordance with the most recently approved closure plan.
38. Partial closure shall be accomplished by implementing closure activities, including but not limited to: placement of final cover, final grading, maintenance, revegetation, and installation of environmental monitoring control systems consistent with the closure the entire site. Units closed in accordance with a Closure Plan approved by the Executive Officer and the California Integrated Waste Management Board, are not subject to future regulatory changes unless monitoring data indicates impairment of beneficial uses of groundwater.
39. All Landfill waste disposal areas at final elevations shall receive final cover pursuant to CCR Title 27, Section 21090, which meets either a. or b. below:
- a. A final cover system consisting of the following components:
 - Minimum two-foot foundation layer placed over waste, compacted to maximum density obtainable at optimum moisture conditions [CCR Title 27, Section 21090 (a)(1)].
 - For units that have not been equipped with a Subtitle D composite liner system, a low hydraulic conductivity layer, consisting of compacted clay with a hydraulic conductivity of 1×10^{-6} cm/sec or less. Compacted clay may not be suitable for sites with VOC detections in point of compliance wells. In such cases a geosynthetic clay layer or geomembrane may be more appropriate.
 - For units that have been equipped with a Subtitle D composite liner system, a low hydraulic conductivity layer equal to or less than the hydraulic conductivity of the bottom liner system.
 - At least one foot of soil capable of supporting vegetation, resisting erosion, and protecting the underlying low hydraulic conductivity layer.
 - b. An engineered alternative design, approved by the Executive Officer, will be considered for final cover areas. Engineered alternative designs must satisfy the performance criteria in 40 CFR Parts 257 and 258, and satisfy the criteria for an engineered alternative to the above prescriptive design, as provided by CCR Title 27. Performance of the alternative composite cover's components, in combination, shall equal or exceed the waste containment capability of the prescriptive design outlined above.

40. All closed Landfill waste management units shall be provided with at least two permanent monuments, installed by a licensed land surveyor, from which the location and elevation of all wastes, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period. Cumulative waste subsidence and settlement of areas where final cover is installed shall be documented in the annual report.
41. Vectors shall be controlled to minimize and prevent, to the extent feasible, on and off-site impacts to water quality.
42. Leachate shall be removed from LCRS to the maximum extent feasible. Leachate removal and disposal shall be in accordance with an Executive Officer-approved Leachate Reduction and Removal Plan.
43. Landfill gas shall be adequately vented, removed from the Landfill, or otherwise controlled to prevent the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration through the vadose zone.

D. WATER QUALITY PROTECTION STANDARDS

1. Discharge of waste shall not cause the concentration of any Constituents of Concern (COC) or Monitoring Parameter to exceed its respective background value in any monitored media (i.e., soil or groundwater) at any Monitoring Point pursuant to MRP No. R3-2006-0002.
2. Constituents of Concern and Monitoring Parameters for groundwater and surface water are listed in MRP No. R3-2006-0002. Monitoring points and background monitoring points for detection monitoring and corrective action monitoring shall be those specified in MRP No. R3-2006-0002.
3. The discharge of waste shall not cause a statistically significant difference in water quality over background concentrations or Concentration Limit for each COC or Monitoring Parameter (per MRP No. R3-2006-0002) at the Point of Compliance. The Concentration Limits shall be maintained for as long as the waste poses a threat to water quality. Discharge of waste shall not adversely impact the quality of State waters.
4. Discharge of waste shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board.
5. The Point of Compliance is the vertical surface located at the downgradient edge of the waste footprint as shown on **Attachment 3**, and extends vertically down through the uppermost aquifer.
6. Discharge of waste shall not cause radionuclides in groundwater down-gradient of the Point of Compliance to exceed the State Department of Health Services latest recommended Drinking Water Action Levels or Maximum Contaminant Levels of the CCR Title 22, Division 4, Chapter 15, Article 5.5.
7. The Central Coast Water Board considers the Discharger to have a continuing responsibility for waste containment, monitoring, and correcting any problems that may arise in the future as a result of this waste discharge. This responsibility continues as long as the waste poses a threat to water quality.
8. Monitoring results are subject to the most appropriate statistical or non-statistical test, as required by the attached MRP No. R3-2006-0002. Monitoring Parameters will be subjected to the most appropriate statistical or non-statistical test, as required by the attached MRP.
9. The Discharger shall, in a timely fashion, install any additional groundwater, soil pore liquid, soil pore gas, surface water, and leachate monitoring devices as required by the Executive Officer.

E. PROVISIONS**General Provisions**

1. Order No. 94-029, "*Waste Discharge Requirements for Buena Vista, Class III Landfill, Santa Cruz County*", adopted by the Board on April 8, 1994, is hereby rescinded.
2. The Discharger shall comply with "Monitoring and Reporting Program No. R3-2006-0002," as specified by the Executive Officer.
3. A Construction Quality Assurance Plan, acceptable to the Executive Officer, must be implemented by a third party (i.e., unrelated to the Discharger, Landfill operator, project designer, contractor) prior to initiating construction of the Landfill's final cover system or constructing a new lined waste management units.
4. Two weeks prior to and during construction of each module (e.g., preparing foundation, installing liner, installing leachate collection and removal system, placing operations layer, etc.), the Discharger shall provide a schedule of construction activities. Schedules shall be updated and provided to Regional Board staff on a weekly basis.
5. Prior to beginning discharge of waste into any newly constructed waste management unit, the Discharger must receive a final site inspection, submit a final Construction Quality Assurance report, and receive written permission to discharge waste, from the Executive Officer [CCR Title 27, Section 20324(d)(1)(C)].
6. The Discharger shall maintain a copy of this Order at the facility and make it available at all times to regulatory agency personnel and to facility operating personnel (who shall be familiar with its contents).
7. The Discharger shall maintain legible records of the volume and type of all waste discharged at the Landfill and the manner and location of discharge. Such records shall be maintained at the facility until the beginning of the post-closure maintenance period. These records shall be available for review by representatives of the Central Coast Water Board and of the State Water Resources Control Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Board.
8. The Discharger shall be responsible for accurate waste characterization, including determinations of whether or not wastes will be compatible with containment features or other wastes, whether or not wastes are required to be managed as hazardous wastes or lead based paint debris, whether waste is liquid, and whether waste is inert.
9. A list of the general types of the more widely used names of hazardous-type wastes prohibited at this site shall be posted on a legible roadway sign at the Landfill's entrance. The sign shall also state the locations of the nearest hazardous waste disposal sites and shall list penalties for illegal dumping. A specific list of hazardous wastes and other types of materials prohibited at this Landfill shall be provided to commercial waste haulers that use this Landfill and shall be available to all other site users upon request.
10. The Discharger shall comply with all other applicable provisions of CCR Title 27 and 40 CFR Parts 257 and 258 that are not specifically referred to in this Order. If any applicable requirements overlap or conflict in any manner, the requirement most protective of water quality shall govern in all cases, unless specifically stated otherwise in this Order, or as directed by the Executive Officer.
11. The Discharger shall have a continuing responsibility to ensure protection of usable waters from discharged wastes and from gases and leachate generated by discharged waste during the Landfill's active life, closure, and post-closure maintenance periods and during subsequent use of the property for other purposes.
12. The Discharger shall maintain waste containment facilities and precipitation and drainage controls, and shall continue to monitor, as appropriate, groundwater, vadose zone, liquid and gas, surface waters, and leachate from waste management units throughout the post-closure monitoring and maintenance period.

13. The Regional Board will review this Order periodically and will revise these requirements when necessary.
14. Sewage sludge or water treatment sludge with greater than 50 percent moisture content may be discharged to the waste management unit **only** if **all** the following criteria are met:
 - a. Sludge shall be discharged only to lined modules that have a LCRS, designed so that leachate drains by gravity to a collection point/sump and is removed through gravity or pumping to a holding tank or sanitary sewer for volume measurement, testing and disposal.
 - b. A daily minimum solids-to-sludge ratio of 5 to 1, based on weight, shall be maintained when co-disposing sludge with solid waste.
 - c. Primary and mixtures of primary and secondary sewage sludge shall contain at least 20 percent solids by weight.
 - d. Secondary sewage sludge and water treatment sludge shall contain at least 15 percent solids by weight.
15. The Central Coast Water Board considers the Discharger to have a continuing responsibility for correcting any problems that may arise in the future as a result of this waste discharge. This responsibility continues as long as the waste poses a threat to water quality.
16. For the protection of water quality, the Executive Officer may require partial or final closure of any Waste Management Unit or Landfill area regardless of whether the unit or area has reached final capacity. Such a requirement will be requested in writing and in accordance with CCR Title 27, Section 22190.
17. Any person who violates Waste Discharge Requirements and/or who intentionally or negligently discharges waste or causes or permits waste to be deposited where it is discharged into waters of the State is liable for civil and/or criminal remedies, as appropriate, pursuant to Section 13350, 13385, and 13387 of the California Water Code.
18. As provided by CWC Section 13350(a), any person may be civilly liable if that person in violation of a waiver condition or waste discharge requirements, discharges waste, or causes waste to be deposited where it is discharged, into the waters of the State.
19. Provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
20. This Order does not authorize commission of any act causing injury to the property of another, does not convey any property rights of any sort, does not remove liability under federal, state, or local laws, and does not guarantee a capacity right.
21. The Discharger must 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].

Reporting Provisions

22. All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order and attachments to 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.
23. Discharger shall notify Regional Board staff, within 24 hours by telephone and within seven days in writing, of any noncompliance potentially or actually endangering health or the environment. Any noncompliance

that threatens the Landfill's containment integrity shall be promptly corrected. Correction schedules are subject to the approval of the Executive Officer, except when delays will threaten the environment or the Landfill's integrity (i.e., emergency corrective measures). Corrections initiated prior to Executive Officer approval shall be so stated in the written report. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. This provision includes, but is not limited to:

- a. Violation of a discharge prohibition.
 - b. Violation of any Water Quality Protection Standard.
 - c. Slope failure.
 - d. Liner damage.
 - e. Leachate seep(s) occurring on, or in proximity to, the Landfill.
24. Reports of compliance or noncompliance, or any progress reports on interim and final requirements contained in any compliance schedule, shall be submitted within 14 days following each scheduled date unless otherwise specified within the Order. A report shall be submitted within 14 days of achieving full compliance.
25. Design reports shall be submitted 180 days in advance of any planned changes in the permitted facility or any activity that could potentially or actually result in noncompliance.
26. The Discharger shall report all changes in usage of daily cover and performance standards within 10 days following the change.
27. The Discharger shall implement all necessary wet weather preparedness measures to ensure discharges to surface waters or groundwater do not occur during the impending rainy season, and ensure all other relevant CCR Title 27 and 40 CFR criteria have been implemented. To ensure the appropriate wet weather measures have been implemented, the Discharger shall submit a report of Wet Weather Preparedness. The report shall detail all preparedness actions taken to comply with this requirement. The report shall also address noncompliance or deficiencies in wet weather preparedness during previous years and steps taken to ensure future compliance. **REPORT DUE DATE: October 15th** of each year.
28. The Discharger shall obtain and maintain Financial Assurance Instruments (Instruments), which comply with CCR Title 27 (Sections 22207 [Closure Fund], 22212 [Post-Closure Fund], and 22220 et seq. [Corrective Action Fund]), and 40 CFR parts 257 and 258. The Discharger shall evaluate the cost of Financial Assurance to cover the estimated costs of the worse case reasonably foreseeable release. Upon request, the Discharger shall submit a report on financial assurance for corrective action for the Regional Water Board Executive Officer's review and approval. Every five years after submittal of the initial financial assurance report, or earlier if requested by the Executive Officer, the Discharger shall submit a report that either validates the Instruments' ongoing viability or proposes and substantiates any needed changes. The Discharger may combine the three components (Closure, Post Closure, Corrective Action) of the Instruments into one report to comply with this requirement. The Discharger shall also submit evidence (e.g., an acceptance letter from the California Integrated Waste Management Board - Financial Assurance Division) that a financial assurance instrument(s) is in place for closure, post-closure, and corrective action. This can be included in the Landfills Annual Report to the Executive Officer. **REPORT DUE DATE: December 31, 2008**, or sooner if requested, and every five years thereafter.
29. The Discharger shall submit a Joint Technical Document (JTD) pursuant to CCR Title 27, Section 21710, to the Executive Officer. The JTD shall contain, but is not limited to, the following:
- a. Information on waste characteristics, geologic and climatologic characteristics of the Landfill and the surrounding region, installed features, operation plans for waste containment, precipitation and drainage controls, and closure and post closure maintenance plans, in accordance with CCR Title 27 Sections 21740, 21750, 21760, and 21769.

- b. A completed SWRCB JTD Index, in accordance with CCR Title 27, Section 21585(b), with your JTD addendum.
- c. A Discussion of whether, in the Discharger's opinion, there is any portion of this Order that is incorrect, obsolete, or otherwise in need of revision.
- d. Any technical documents needed to demonstrate continued compliance with this Order and all pertinent State and Federal requirements.
- e. Detailed information regarding regulatory considerations; design, construction and operating provisions; environmental monitoring; and closure and post-closure.
- f. A Fill Sequencing Plan that includes detailed maps. The Fill Sequencing Plan should describe in detail the overall development of the entire Landfill.
- g. A detailed description of the lateral and vertical extent of refuse within all existing Landfill Units. It must include an accurate estimate of waste volumes within each existing Landfill fill area (i.e., phases) and an approximation of the remaining volume and years of capacity for each existing phase and all new proposed fill area within currently "Permitted Landfill Boundary." It must also describe all existing available space within currently permitted Landfill areas (i.e., areas where refuse has been placed in the past, but have not reached final permitted elevation and Landfill Units or portions of Landfill Units where refuse has never been placed).
- h. A discussion of any plans or proposals to close or partially close any Landfill Units or portions of Landfill Units, any proposed liner systems and respective design components, any proposed plans for long-term intermediate cover for Landfill areas which may remain inactive for long periods of time (over one year).

REPORT DUE DATE: September 30, 2015, or as specified by the Executive Officer.

30. The Discharger shall submit to the Regional Board an updated closure and post-closure maintenance plan (Closure Plan). The Closure Plan shall describe the methods and controls to be used to ensure protection of the quality of surface and groundwater during partial and final closure operations and during any proposed subsequent use of the land. The Closure Plan shall include:
 - a. A description of the final cover, designed in accordance with all applicable State and Federal regulations and the methods and procedures to be used to install the cover.
 - b. An estimate of the largest waste disposal area (Waste Management Unit) requiring a final cover at any time during the Landfill's active life.
 - c. An estimate of the maximum inventory of wastes at the site over the active life of the Landfill.
 - d. A schedule for completing all activities necessary to satisfy all closure criteria as required by CCR Title 27 and 40 CFR Parts 257 and 258 regulations.
 - e. An estimate of closure and post closure maintenance costs.
 - f. A proposal for a trust fund or equivalent financial arrangement to provide sufficient funding for closure and post-closure maintenance.
 - g. The amount to be deposited in the trust fund or equivalent financial arrangement each year.

The Closure Plan shall be prepared by or under the supervision of a California Registered Civil Engineer or Certified Engineering Geologist. Updates of the plan are required whenever substantial changes occur or five years has elapsed since the last major revision. The method identified for each WMU closure and protection of the quality of surface and groundwater shall comply with this Order. The Closure Plan report shall be consistent with all applicable state and federal regulations, including CCR Title 27 and 40 CFR Parts 257 and 258. **REPORT DUE DATE: July 31, 2008**, and every five years thereafter.

31. After suspending Corrective Action Program measures, the Discharger shall remain in corrective action monitoring until an approved Detection Monitoring Program is established in accordance with CCR Title 27 and has been incorporated into Waste Discharge Requirements. Any time the Executive Officer determines that the Corrective Action Program does not satisfy the requirements of CCR Title 27, the Discharger shall, within 90 days of receiving written notification of such determination, submit an amended Corrective Action Program with needed changes pursuant to Water Code section 13267.

32. The leachate collection and removal system shall be tested annually to demonstrate proper operation. The results of the test shall be compared with previous tests and included in the Annual Monitoring Report.
33. The Discharger shall notify the Regional Board in writing of any proposed change in ownership or responsibility for construction or operation of the Landfill in accordance with CCR Title 27, Section 21710 (c)(1). Failure to submit the notice in writing shall be considered a violation of Section 13264 of the Water Code. The written notice shall be given at least **90 days** prior to the effective date of change in ownership or responsibility and shall:
 - a. Be accompanied by an amended Report of Waste Discharge and any technical documents that are needed to demonstrate continued compliance with these Waste Discharge Requirements.
 - b. Contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Regional Board.
 - c. Contain a statement indicating that the new owner or operator assumes full responsibility for compliance with this Order.

Request for change in ownership or responsibility may be approved or disapproved in writing by the Executive Officer. In the event of any change in ownership of this Landfill, the Discharger shall notify the succeeding owner or operator, in writing, of the existence of this Order. A copy of that notification shall be sent to the Executive Officer.

34. At any time, the Discharger may file a written request (including appropriate supporting documents) with the Regional Board Executive Officer, proposing appropriate modifications to the monitoring and reporting program. The Executive Officer either shall reject the proposal for reasons listed, or shall incorporate it into a revised monitoring and reporting program. The Discharger shall implement any changes in the monitoring and reporting program proposed by the Executive Officer upon receipt of a revised monitoring and reporting program.
35. The Discharger shall notify the Executive Officer at least 180 days prior to beginning any partial or final Landfill closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved Closure Plan and that the Plan provides for closure in compliance with all applicable State and Federal regulations. If there is no approved Closure Plan, the Discharger must submit a complete Closure Plan at least 240 days prior to beginning any Landfill closure activities.
36. The Regional Board shall be allowed, at any time, and without prior notification:
 - a. Entry upon the Landfill or where records must be kept under the conditions of this Order and MRP No. R3-2006-0002.
 - b. Access to copy any records that must be kept under the conditions of this Order and MRP No. R3-2006-0002.
 - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order and MRP No. R3-2006-0002.
 - d. To photograph, sample, and monitor for the purpose of showing compliance with this Order.
37. Except for data determined to be confidential under Section 13267 (b) of the California Water Code, all reports prepared in accordance with this Order are considered public record and shall be sent to the appropriate contact at the California Integrated Waste Management Board. All reports shall be signed as follows:
 - a. For a public agency - by either a principal executive officer or ranking elected official*.
 - b. For a partnership or sole proprietorship - by a general partner or the proprietor, respectively*.

- c. For a corporation - by a principal executive officer of at least the level of vice president*.
- d. For technical, engineering and monitoring reports- by a California Registered Civil Engineer or Certified Engineering Geologist.

*or their "duly authorized representative."

38. Any person signing a report makes the following certification, whether it is expressed or implied:

"I certify under penalty of perjury I have personally examined and am familiar with the information submitted in this document and all attachments and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

39. The Discharger shall comply with the following submittal and implementation schedule for all tasks and reports required by this Order:

REPORT AND TASK IMPLEMENTATION DATE SUMMARY

TASK	IMPLEMENTATION DATE
Runoff diversion and erosion prevention. [Specification C.22]	October 1, of each year
Minimum one foot cover over entire active WMU. [Specification C.23]	October 1, of each year
Vegetation placement on interim cover slopes and slopes at final elevation. [Specification C.24]	October 1, of each year
Wet Weather Preparedness Report [Provision E.27]	October 15, 2006, and yearly thereafter
Financial Assurance Report [Provision E.28]	December 31, 2008, and every five years thereafter
Closure Plan [Provision E.30]	July 31, 2008, and every five years thereafter.
Joint Technical Document [Provision E.29]	September 30, 2015

I, Roger W. Briggs, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on May 12, 2006.

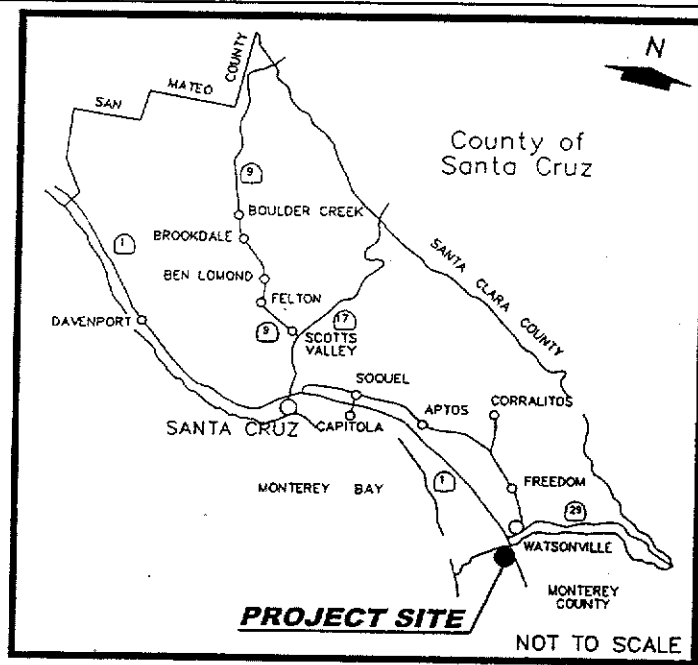
Executive Officer

Attachments: Attachment 1 - Location Map
Attachment 2 - Vicinity Map
Attachment 3 - Site Map
Monitoring and Reporting Program No. R3-2006-0002

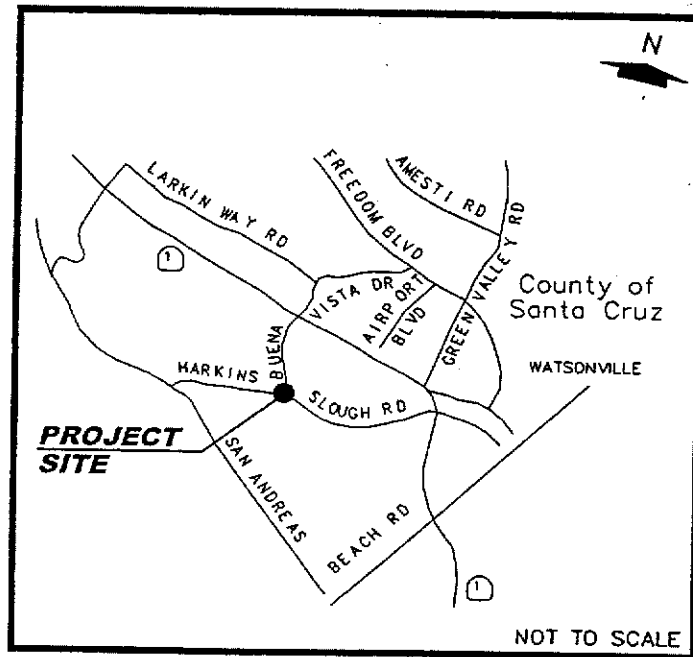


Buena Vista Landfill Order No. R3-2006-0002

Location Map



VICINITY MAP



SITE LOCATION

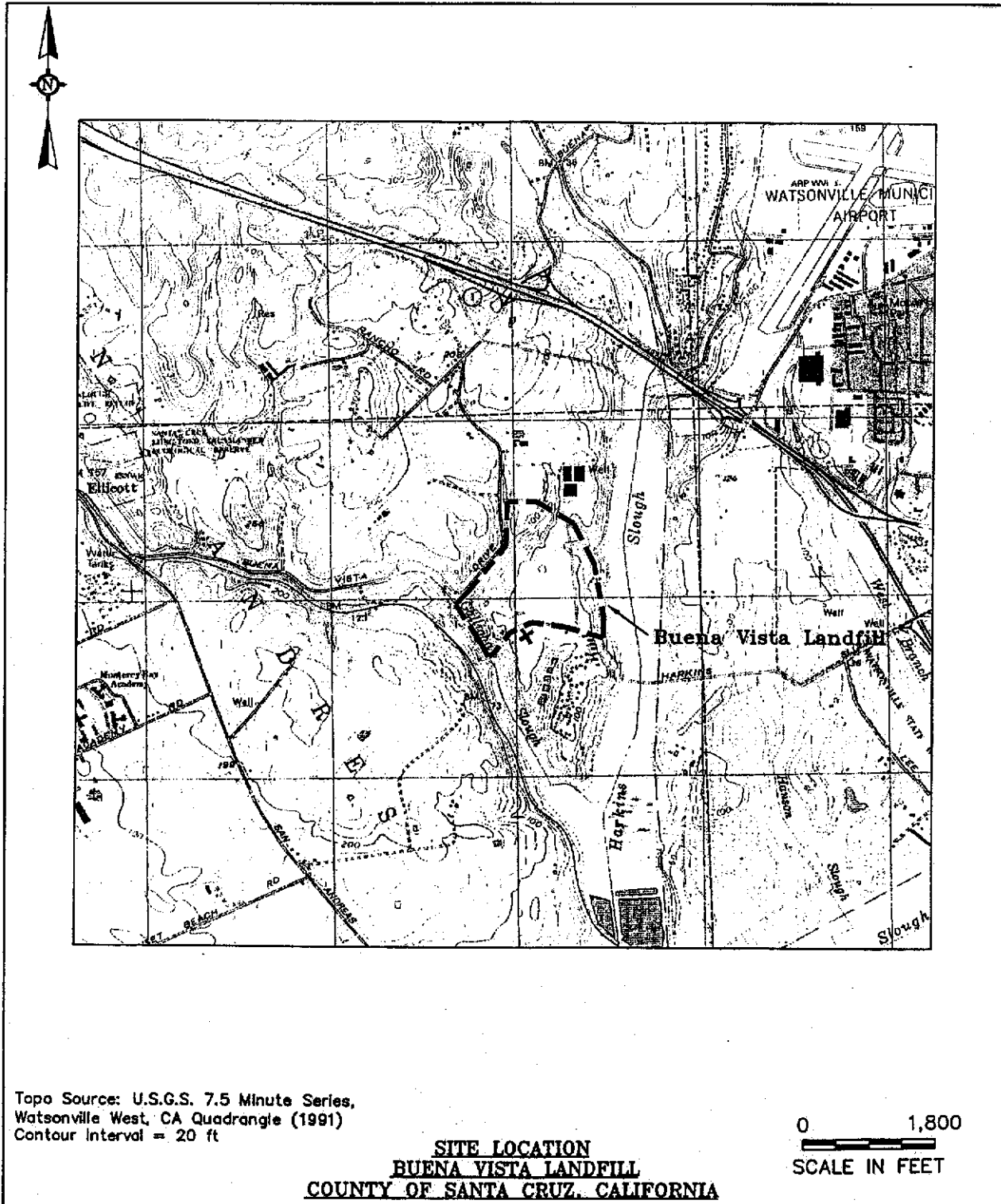
1231 BUENA VISTA DRIVE, WATSONVILLE
COUNTY OF SANTA CRUZ, CALIFORNIA



Buena Vista Landfill

Order No. R3-2006-0002

Vicinity Map





Buena Vista Landfill Order No. R3-2006-0002 Site Map



LEGEND

- MW-3 GROUNDWATER MONITORING WELL/
PNEUMETER LOCATION WITH
WATER LEVEL (FEET, MSL)
- 1.5 — ESTIMATED GROUNDWATER POTENTIOMETRIC
SURFACE ELEVATION CONTOUR (FEET, MSL)
(NOVEMBER 2004)
- ⇨ APPROXIMATE GROUNDWATER FLOW
DIRECTION
- NOT INCLUDED IN DETERMINING
GROUNDWATER CONTOURS
- GP-11 LANDFILL GAS MONITORING PROBE
- CLOSED LANDFILL AREA
- SURFACE WATER SAMPLE LOCATION
- ▲ SW-2 STORMWATER SAMPLE LOCATION
- NSW-1 LANDFILL'S WATER SUPPLY WELL
- NSW-2 SHERIFF'S WATER SUPPLY WELL
- APPROXIMATE PROPERTY LINE

NOTES

1. EXISTING TOPOGRAPHY BY AERO-GEOMETIC CORPORATION. PHOTOGRAPHY, 14 OCTOBER 2003. DATE OF AERIAL PHOTOGRAPHY AND ELEVATIONS BASED ON ASSUMED LOCAL SYSTEM PROVIDED BY COUNTY OF SANTA CRUZ (APRIL 2004).
2. P2-15/GP-15 AND P2-16/GP-16 SHARE SAME WELL BOX.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

MONITORING AND REPORTING PROGRAM NO. R3-2006-0002

Waste Discharger Identification No. 3 440300002

Proposed for Consideration at the May 12, 2006 Board Meeting

For

**BUENA VISTA
CLASS III LANDFILL
SANTA CRUZ COUNTY**

PART I: MONITORING AND OBSERVATION SCHEDULE

A. SITE INSPECTIONS

The Discharger shall inspect the Buena Vista Landfill (Landfill), according to the following schedule, recording, at a minimum, the following Standard Observations.

1. Site Inspection Schedule:

- a. At least monthly during the wet season (**October 1 through April 30**), and following each storm event producing a minimum of 1-inch of rain within a 24-hour period.
- b. During the dry season a minimum of one inspection every three months.

2. Standard Observations:

a. **For Receiving Waters:**

- i. Floating and suspended materials of waste origin; presence or absence, source, and size of affected area.
- ii. Discoloration and turbidity - description of color, source, and size of affected area.
- iii. Evidence of odors - presence or absence, characterization, source, and distance of travel from source.
- iv. Evidence of beneficial use - presence of water-associated wildlife.
- v. Estimated flow rate to the receiving water.
- vi. Weather conditions - wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

b. **Along the perimeter of the Landfill:**

- i. Evidence of liquid leaving or entering the Landfill, estimated size of affected area, and estimated flow rate (show affected area on map).
- ii. Evidence of odors; presence or absence, characterization, source, and distance of travel from source.
- iii. Evidence of erosion or of exposed waste.
- iv. Inspection of all storm water discharge locations for evidence of non-storm water discharges during dry seasons, and integrity during wet seasons.

c. **For the Landfill:**

- i. Evidence of ponded water at any point on the Landfill site (show affected area on map).

- ii. Evidence of odors; presence or absence, characterization, source, and distance of travel from source.
- iii. Evidence of erosion or of daylighted waste.
- iv. Compliance with Storm Water Pollution Prevention Plan, insuring that the terms of the general permit is properly complied with.

B. INTAKE MONITORING

The Discharger shall maintain a daily record of the waste stream. The record shall include the following information:

1. Weight (in tons) of waste received.
2. Running totals of weight received, remaining capacity (in tons) for waste placement, and Landfill life expectancy (in years).
3. Current fill area (in acres).
4. Waste type and diversion quantities. Log of random load checking program. Site personnel shall advise waste haulers of the types of wastes prohibited at the site and shall make periodic detailed compliance checks of wastes discharged by all site users. These detailed periodic checks shall be of variable frequency, but average once per working week. The log shall contain a record of refused loads, including the type of waste refused, date, name, address, and phone number of the party attempting to dispose of the waste.

The intake daily records are not to be submitted to this Regional Board, but are to be maintained at the Discharger's offices in accordance with Part II.C, and are to be made available to Regional Board staff upon request to review or copy.

C. DRAINAGE SYSTEMS INSPECTIONS

The Discharger shall inspect drainage control systems following each storm event that results in rainfall runoff and at least monthly, and record the following information:

1. Condition of facilities and liners, whether storm water storage basins and drainage ditches contain liquids;
2. Any apparent seepage from storage basins or the Landfill site;
3. Steps taken to correct any problems found during inspection and date(s) when taken; and
4. Maintain a photo log of corrections made to the drainage control systems.

D. RAINFALL DATA

The Discharger shall record the following information:

1. Total precipitation (in inches) during each three month period.
2. Number of Storms (≥ 1 -inch in 24-hours) received during the three month period.
3. Return interval of most intense 24-hour storm (e.g. 25 year, 100 year, and so on).

E. POLLUTION CONTROL SYSTEMS INSPECTIONS

The Discharger shall inspect all pollution control systems and record the following information as appropriate:

1. **Leachate Collection and Removal System (LCRS):**
 - a. Bi-weekly - inspect LCRS for containment and collection system integrity. Include bi-weekly inspection check-off sheet with monitoring reports. During storm events the LCRS will be inspected for containment and collection system integrity after each significant storm;

- b. Monthly - pumping system operational check. Perform routine preventive maintenance focused on keeping the system at design operation. All scheduled and un-scheduled maintenance shall be summarized and reported;
- c. Monthly - record volume of leachate extracted (in gallons). Compute semiannual and annual running totals of leachate removed and report in Semiannual monitoring report. Report disposal method utilized. When more than one disposal method is used, be volume specific for each method;
- d. Annually - LCRS testing as required by the California Code of Regulations, Title 27 (CCR Title 27), Section 20340 (d). The absence or presence of clogging shall be addressed in the inspection report.
- e. Annually - leachate collection sumps must be sampled annually for analysis of Monitoring Parameters, and every five years for Constituents of Concern (COCs); and
- f. Annually - Using most recent leachate contaminant concentration data and collection volume, compute contaminant mass removed on a semiannual basis.
- g. If leachate is used as dust control, analytical testing must be performed and submitted annually to demonstrate that the leachate is non-hazardous.

2. Landfill Gas Extraction System

- a. Monthly - inspect entire landfill gas extraction system for system integrity. Include monthly inspection, maintenance and testing demonstrations in Semiannual monitoring reports;
- b. Monthly - Record volume of landfill gas extracted. Report monthly volume and annual sub-totals. Indicate how volume measurement is made;
- c. Monthly - Record volume of landfill gas condensate. Report monthly, semiannual and annual sub-totals in Semiannual reports and report disposal method utilized. When more than one disposal method is used, be volume specific for each method;
- d. Annually - submit an annual operational summary for the landfill gas extraction system;
- e. Annually - Sample landfill gas in the collection header and analyze for volatile organic compounds (VOCs).
- f. Annually - Sample landfill gas condensate and analyze for VOCs; and
- g. Semiannually - Using most recent landfill gas and condensate contaminant concentration data and collection volume, compute contaminant mass removed on a semiannual basis.
- h. Perform routine preventive maintenance focused on keeping the system at design operation. All scheduled and unscheduled maintenance shall be summarized and reported annually.

F. GROUNDWATER MONITORING

Unless otherwise authorized by the Executive Officer, all new groundwater-monitoring wells shall be incorporated into this monitoring and reporting program, and shall be sampled on a quarterly basis for a minimum of four consecutive quarters. Changes to the monitoring frequency, Monitoring Parameters or Constituents of Concern may be made upon receiving prior written approval from the Executive Officer. The Groundwater Monitoring Points shall include those shown in Table 1 below, locations are shown on R3-2006-0002, Attachment 3. For each monitored groundwater body, the water level in each well and piezometer shall be measured, at least quarterly, including the times of expected highest and lowest elevations of the water level. Horizontal and vertical gradients, groundwater flow rate, and direction for the respective groundwater body shall also be determined. Groundwater elevations for all wells in a given groundwater body shall be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow rate and direction. The observed groundwater characteristics shall be compared with those of previous determinations, noting the appearance of any trends, and of any indications that a change in the hydrogeologic conditions beneath the site has occurred. This information shall be reported in the Semiannual Monitoring Reports.

G. STORM WATER MONITORING

Unless required more frequently due to an indication of a release, the storm water discharge point(s) shall be monitored in accordance with the facility's National Pollutant Discharge Elimination System permit (NPDES). Storm water is sampled at the detention basin drainage outlet, which is the last accessible point before the storm water is discharged offsite. Samples are collected for two storm events per year, and within the first hour of discharge. Analytical analysis of the storm water samples includes pH, total suspended solids, specific conductance, oil and grease, and iron. Storm water discharge point(s) shall be monitored in accordance with the facility's National Pollutant Discharge Elimination System permit (NPDES).

H. SURFACE WATER MONITORING

The Discharger shall inspect surface water locations R-1 through R-4, as shown on Attachment 3, quarterly and note whether flowing.

I. ANALYTICAL MONITORING

The Discharger shall monitor the Landfill monitoring points in accordance with the following schedule(s). Monitoring locations are shown on R3-2006-0002, Attachment 3 and include groundwater monitoring wells, leachate collection sumps and wells, gas collection headers, and surface water locations. Locations shall be sampled for Parameters shown in Table 2, and Constituents of Concern shown in Table 3.

1. **Groundwater and Surface Water Monitoring Parameters:** Monitoring Points shall be analyzed semiannually for the Monitoring Parameters listed in Table 2. The groundwater and surface water monitoring point locations are shown in R3-2006-0002, Attachment 3.
2. **Landfill Gas Migration Monitoring:**
Gas probes and on-site structures adjacent to the waste deposit areas shall be monitored quarterly for the monitoring parameters in Table 4 except for VOCs. Monitoring results shall be submitted to the Board in Semiannual reports and include information specified in Title 27, Section 20934.
3. **Leachate Collection System Performance:**
Leachate shall be analyzed for the Monitoring Parameters (Table 2) annually, and for COCs (Table 3) every five years.
4. **Constituents of Concern:** The Constituents of Concern (COC) includes constituents listed in **Table 3**, below. Monitoring for COC shall encompass only those COCs that do not also serve as Monitoring Parameters. Analysis of COCs shall be carried out once every five years, at each of the site's groundwater and surface water monitoring points, unless required more frequently due to an indication of a release. Wells that have not previously been sampled for COCs shall be sampled and analyzed for all COCs within three months of this program becoming effective.
5. **Sample Procurement Limitation:** For any given monitored medium, the samples taken from Monitoring Points to satisfy the data analysis requirements for a given Monitoring Period shall be taken within a span not exceeding 30 days, and shall be taken in a manner that ensures sample independence to the greatest extent feasible [CCR Title 27, Section 20415(e)(12)(B)]. Sampling for successive monitoring periods shall occur at least 30 days apart.

**TABLE 1
MONITORING POINTS**

MW-1	Aromas Sands Aquifer (Background)	X		Table 2	Table 3	Semiannually
MW-2	Aromas Sands Aquifer	X		Table 2	Table 3	Semiannually
MW-3	Aromas Sands Aquifer		X	Table 2	Table 3	Quarterly
MW-4	Aromas Sands Aquifer	X		Table 2	Table 3	Semiannually
MW-5	Aromas Sands Aquifer	X		Table 2	Table 3	Semiannually
MW-6	Aromas Sands Aquifer		X	Table 2	Table 3	Quarterly
MW-7	Aromas Sands Aquifer	X		Table 2	Table 3	Semiannually
MW-8	Aromas Sands Aquifer	X		Table 2	Table 3	Semiannually
MW-9	Aromas Sands Aquifer		X	Table 2	Table 3	Quarterly
MW-10	Aromas Sands Aquifer	X		Table 2	Table 3	Semiannually
MW-11	Aromas Sands Aquifer	X		Table 2	Table 3	Semiannually
MW-12	Aromas Sands Aquifer	X		Table 2	Table 3	Semiannually
Tierra Alta	Aromas Sands Aquifer	X		Table 2	Table 3	Semiannually
R1 - R4	Surface Water	X		Table 2	Table 3	Quarterly (when flowing)
Leachate	Collection System		X	Table 2	Table 3	Annually
Gas Probes & Adjacent Structures	Gas Migration	X		Table 4 (w/o VOCs)		Quarterly
Gas Collection Header	Collection System		X	Table 4		Annually
Gas Condensate	Collection System		X	VOCs		Annually

⁽¹⁾ Designated background monitoring points.

⁽²⁾ Sample once every five years for full suite of analytes listed in Table 3. Next sampling event August 2008

⁽³⁾ Quarterly monitoring shall be performed each February, May, August, and November and includes water levels for all wells and piezometers. Semiannual monitoring shall be performed in February and August.

**TABLE 2
MONITORING PARAMETERS**

Ground Water Monitoring Well Water Elevation and Depth ⁽¹⁾	Sounder	0.01 feet
Electrical Conductivity	Field	µmhos/cm
pH	Field	pH Units
EC	Field	milliVolts
Temperature	Field	°F/°C
Turbidity	Field	NTU
Dissolved Oxygen	Field	Varies
Chemical Oxygen Demand ⁽²⁾		mg/L
Chloride ⁽²⁾	300.0/9253	mg/L
Manganese (dissolved) ⁽²⁾	200.8/3015/6020A/6010B	mg/L
Lead (dissolved) ⁽²⁾	200.8/3015/6020A/6010B	mg/L
Sodium ⁽²⁾	200.7/3015/6010B	mg/L
Total Dissolved Solids (TDS) ⁽²⁾	160.1	mg/L
Sulfate ⁽²⁾	300.0	mg/L
Nitrate (as Nitrogen) ⁽²⁾	300.0/353.2	mg/L
VOCs ⁽³⁾ (including oxygenates).	8260B	µg/L
<p>⁽¹⁾ Water elevation shall be recorded from all monitoring wells and piezometers QUARTERLY and in which measurements are readily accessible</p> <p>⁽²⁾ Chloride, manganese (dissolved), sodium (dissolved), sulfate, and TDS will be subjected to the statistical evaluation method described in Part II.D. of the Sample and Collection and Analysis Section, herein.</p> <p>⁽³⁾ The VOCs include all Volatile Organic Compounds (VOCs) detectable using USEPA Method 8260B including at a minimum all 47 VOCs listed in Appendix I to 40 CFR 258, and all unidentified peaks. Oxygenates include methyl tertiary-butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tertiary-amyl methyl ether (TAME), and tertiary-butyl alcohol (TBA). VOCs will be subjected to the non-statistical evaluation method described in Part II.E. of the Sample Collection and Analysis Section, herein.</p> <p>⁽⁴⁾ Or most recently approved EPA method that provides the lowest practicable detection limits.</p> <p>Note: mg/l = milligrams per liter; °F/°C = degrees Fahrenheit and Celsius; NTU = natural turbidity units; µmhos/cm = micro-mhos per centimeter; and µg/l = micrograms per liter.</p>		

**TABLE 3
CONSTITUENTS OF CONCERN**

Antimony	6010B	mg/L
Arsenic	7060A	mg/L
Barium	6010B	mg/L
Beryllium	6010B	mg/L
Cadmium	6010B	mg/L
Chromium	6010B/7196A	mg/L
Cobalt	6010B	mg/L
Copper	6010B	mg/L
Cyanide	9010 or 335.2	mg/L
Lead	7421	mg/L
Magnesium	6010B	mg/L
Mercury	7470A	mg/L
Nickel	6010B	mg/L
Selenium	7740	mg/L
Silver	6010B	mg/L
Sulfide	9030B or 376.1	mg/L
Thallium	7841	mg/L
Tin	6010B	mg/L
Vanadium	6010B	mg/L
Zinc	6010B	mg/L
Chlorophenoxy Herbicides	8151A	µg/L
Organochlorine Pesticides	8081A	µg/L
PCBs	8082	µg/L
Phthalate Esters	8060	µg/L
Phenols	8040	µg/L
Nonhalogenated Volatiles	8015M	µg/L
Semi-Volatile Organic Compounds	8270C	µg/L
Volatile Organic Compounds, Appendix II ⁽³⁾	8260B	µg/L
⁽¹⁾ The Discharger shall analyze for all parameters using the USEPA analytical methods indicated above (or updated method), including all constituents listed in Appendix II to 40 CFR, Part 258. Wells that are normally monitored for COCs in Table 2 do not need to be re-sampled for same constituents in Table 3, during COC sampling events. The Quarterly, Semiannual, and COC monitoring event shall be conducted simultaneously.		
⁽²⁾ Or most recently approved EPA method that provides the lowest practicable detection limits.		
⁽³⁾ Includes MTBE (EPA Method 8260B), 1,4 dioxane, TBA		

**TABLE 4
LANDFILL GAS MONITORING PARAMETERS**

Methane	Field	ppm
Carbon Dioxide	Field	ppm
Oxygen	Field	ppm
VOCs	TO-14	

PART II: SAMPLE COLLECTION AND ANALYSIS**A. SAMPLING AND ANALYTICAL METHODS**

Sample collection, storage, and analysis specified in this monitoring and reporting program shall be performed according to the most recent version of Standard USEPA Methods (USEPA publication "SW-846"), and in accordance with an Executive Officer approved Sampling and Analysis Plan (SAP). A laboratory certified for these analyses by the State Department of Health Services shall perform analyses. Specific methods of analysis must be identified. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Executive Officer prior to use. 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. Calibration and maintenance records shall be kept and made available upon request by the Regional Board. Sampling shall occur at a date that allows timely submittal of monitoring reports according to the schedule required by this monitoring and reporting program. In addition, the Discharger is responsible for seeing that the laboratory analysis of all samples from all Monitoring Points meet the following restrictions:

1. **Method Selection:** The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., "trace") in historical data for that medium, the SW-846 analytical method having the lowest Method Detection Limit (MDL) shall be selected from among those methods which would provide valid results in light of any Matrix Effects involved.
2. **Trace Results:** Results falling between the MDL and the Practical Quantitation Limit (PQL) shall be reported as "trace", and shall be accompanied by both the (nominal or estimated) MDL and PQL values for that analytical run.
3. **Nominal or Estimated MDL and PQL:** The nominal MDL and PQL shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. Both limits shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab. If the lab suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly and an estimate of the detection limit and/or quantitation limit actually achieved shall be included.
4. **Quality Assurance/Quality Control (QA/QC) Data:** All QA/QC data shall be reported along with the sample results to which it applies. Sample results shall be reported unadjusted for blank results or spike recovery. The QA/QC data submittal shall include the following information:
 - a. Method, equipment, and analytical detection limits.
 - b. Recovery rates and an explanation for any recovery rate that is outside the USEPA-specified recovery rate.
 - c. Results of equipment and method blanks.
 - d. Results of spiked and surrogate samples.
 - e. Frequency of quality control analysis.
 - f. Chain of custody logs.
 - g. Name and qualifications of the person(s) performing the analysis.
5. **Common Laboratory Contaminant:** Upon receiving written approval from the Executive Officer, a statistical or non-statistical procedure can be used for determining the significance of analytical results

for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, 2-Butanone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given Monitoring Period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any background or downgradient sample shall be reported and flagged for easy reference by Regional Board staff.

6. **Unknowns:** Unknown chromatographic peaks shall be identified, quantified, and reported to a reasonable extent. When unknown peaks are encountered, second column or second method confirmation procedures shall be performed to attempt to identify and more accurately quantify the unknown analyte.
7. In cases where contaminants are detected in QA/QC samples (i.e., field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged for easy reference.

B. CONCENTRATION LIMITS

1. The concentration limit for Monitoring Parameters and Constituents of Concern shall be determined as follows:
 - a. In cases where the constituent's Method Detection Limit is exceeded in less than ten percent of the historical samples, the MDL is the Concentration Limit.
 - b. In cases where the constituent's MDL is exceeded in ten percent or more of the historical sample, a statistically based Concentration Limit must be defined and regularly updated as follows:
 - i. Statistically analyze existing monitoring data, and propose, to the Executive Officer, statistically derived Concentration Limits for each Constituent of Concern and each Monitoring Parameter at each Monitoring Point for which sufficient data exists.
 - ii. In cases where sufficient data for statistically determining Concentration Limits does not exist the Discharger shall collect samples and analyze for Constituent(s) of Concern and Monitoring Parameter(s) which require additional data. Once sufficient data is obtained, the Discharger shall submit proposed Concentration Limit(s) to the Executive Officer for approval. This procedure shall take no longer than two calendar years.
 - iii. Sample and analyze new Monitoring Points, including any added by this monitoring and reporting program, until sufficient data is available to establish a proposed Concentration Limit for all COC and Monitoring Parameters. Once sufficient data is obtained the Discharger shall submit the proposed Concentration Limit(s) to the Executive Officer for approval. This procedure shall take no longer than two calendar years.
2. The Discharger shall review Concentration Limits annually. The past years data will be reviewed for application to revision of Concentration Limits. When appropriate, new Concentration Limits shall be proposed along with technical rationale for proposing the change.

C. RECORDS TO BE MAINTAINED

Water quality records shall be maintained by the Discharger, and retained for no less than a 30-year period. The period of retention shall be extended during the course of any unresolved litigation or when requested by the Executive Officer. Such records shall show the following for each sample:

1. Identity of sample and of the actual monitoring point designation from which it was taken, along with the identity of the individual who obtained the sample.
2. Date and time of sampling.
3. Date and time that analyses were started and completed, and the name of the personnel performing each analysis.

4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.
5. Chromatographs and calculation of results.
6. A complete chain of custody logs.
7. Results of analyses, and the Method Detection Limit and Practical Quantitation Limit for each analysis.

D. STATISTICAL ANALYSIS

For Detection Monitoring during a COC event, the Discharger shall use statistical methods to analyze COCs that exhibit concentrations that equal or exceed their respective MDL in at least ten percent of applicable historical samples. For routine (i.e., semiannual) detection monitoring, the Discharger shall apply statistical methods for those Detection Monitoring Parameters defined in Table 2 of Part I.G. The Discharger may propose and use any statistical method that meets the requirements of California Code of Regulations, Title 27, Section 20414(e)(7). All statistical methods and programs proposed by the Discharger are subject to Executive Officer approval.

E. NON-STATISTICAL METHOD

The Discharger shall use the following non-statistical method for analyzing constituents, which are detected in less than ten percent of applicable historical samples. This method involves a two-step process:

1. From constituents to which the method applies, compile a specific list of those constituents, which exceed their respective MDL. The list shall be compiled based on either data from the single sample or in cases of multiple independent samples, from the sample, which contains the largest number of constituents.
2. Evaluate whether the listed constituents meet either of two possible triggering conditions. Either the list from a single well contains two or more constituents, or contains one constituent, which equals or exceeds its PQL. If either condition is met, the Discharger shall conclude that a release is tentatively indicated and shall immediately implement the appropriate re-test procedure as described in Section F. below.

F. RE-TEST PROCEDURE

1. In the event the Discharger concludes that a release has been tentatively indicated, the Discharger shall carry out the appropriate reporting requirements and, within 30 days of receipt of analytical results, collect two new suites of samples for the indicated COC or Monitoring Parameter(s) at each indicating Monitoring Point, collecting at least as many samples per Monitoring Point as were used for the initial test.
2. Analyze each of the two suites of re-test analytical results using the same statistical method (or non-statistical comparison) that provided the tentative indication of a release. If the test results of either (or both) of the re-tested data suites confirm the original indication, the Discharger shall conclude that a release has been discovered and shall carry out the appropriate requirements.
3. Re-tests shall be carried out only for the Monitoring Point(s) for which a release is tentatively indicated, and only for the COC or Monitoring Parameter(s) which triggered the indication. When a VOC analyte is re-tested the results of the entire VOC test method analyzed shall be reported.

PART III: REPORTING**A. MONITORING AND REPORTING SCHEDULE**

A written Monitoring Report shall be submitted **Semiannually** by **July 31st** and **January 31st** of each year. The report shall address all facets of the Landfill's monitoring. Reports shall include, at a minimum, the following:

1. Letter of Transmittal

A letter transmitting the essential points shall accompany each report. The letter shall include a discussion of violations that occurred since the last such report was submitted. If no new violations have been discovered since the last submittal, this shall be stated in the transmittal letter. Both the monitoring report and the transmittal letter shall be signed by a principal executive officer at the level of vice president. Upon Regional Board Executive Officer approval, the cited signature can be by a California Registered Civil Engineer or Certified Engineering Geologist who has been given signing authority by the cited signatories. The transmittal 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.

2. Compliance Summary

The update shall contain at least:

- a. Discussion of compliance with concentration limits. Release indications and actions taken.
- b. For each monitored groundwater body, calculate groundwater velocity and, based upon water level elevations taken during the Monitoring Period, graphically present groundwater flow direction under and around the Unit.

3. Graphical Presentation of Analytical Data

For each Monitoring Point in each medium, submit, in graphical format, the complete history of laboratory analytical data. Graphs shall effectively illustrate trends and/or variations in the laboratory analytical data (e.g., proper scale). Each graph shall plot a single constituent concentration over time at one (for intra-well comparison) or more (for inter-well comparisons) monitoring points in a single medium. Maximum contaminant levels (MCL) and/or concentration limits shall be graphed along with constituent concentrations where applicable. When multiple samples are taken, graphs shall plot each datum, rather than plotting mean values.

4. Corrective Action Summary

Discuss significant aspects of any corrective action measures conducted during the monitoring period. Calculate pollutant load removed from the sites impacted media by mass (water, gas, leachate) removal system(s). Mass removal calculations shall be based on actual analytical data as required by Part I.E. Present discussion and indications, relating mass removal data to the violation the corrective action is addressing.

5. Laboratory Results

Laboratory results and statements demonstrating compliance with Part II (Sample Collection and Analysis) and results of analyses performed at the Landfill, outside the requirements of this MRP, shall be summarized and reported.

6. Sampling Summary

- a. For each Monitoring Point addressed by the report, a description of: 1) the method and time of water level measurement; 2) the method of purging and purge rate and well recovery time; and 3) field parameter readings.

- b. For each Monitoring Point addressed by the report, a description of the type of sampling device used, its placement for sampling, and a description of the sampling procedure (number of samples, field blanks, travel blanks, and duplicate samples taken; the date and time of sampling; the name and qualification of the person actually taking the samples; description of any anomalies).

7. **Leachate Collection and Removal System (LCRS)**

A summary of the total volume of leachate collected each quarter since the previous monitoring report.

8. **Standard Observations**

A summary of Standard Observations made during the Monitoring Period as described in Part I.A.2.

9. **Map(s)**

A map or an aerial photograph showing Monitoring Points, relative physical features, and with groundwater contours overlaid on the map or the aerial photograph to the greatest degree of accuracy possible.

B. ANNUAL SUMMARY REPORT

The Discharger shall submit an annual report to the Regional Board covering the previous monitoring year. The annual Monitoring Period ends on December 31st each year. This report may be combined with the Second Semiannual Monitoring Report of the year and shall be submitted no later than **January 31st** each year. The annual report must include the information outlined in Part III.A., above, and the following:

1. **Discussion**

Include a comprehensive discussion of the compliance record, a review of the past year's significant monitoring system and operational changes, a summary of corrective action results and milestones, and a review of construction projects, with water quality significance, completed or commenced in the past year or planned for the upcoming year.

2. **Statistical Limit Review**

Statistically derived concentration limits shall be reviewed annually and revised as necessary. Data collected during the past year shall be discussed and considered for inclusion in, and determination of, proposed limits for the coming year. For statistical limits that are changed from the previous year, include a comprehensive discussion of the proposed limit for Executive Officer review and consideration.

3. **Analytical Data**

Complete historical analytical data presented in a tabular form and on 3.5" diskettes or CD-ROM, and ExcelTM format or in another file format acceptable to the Executive Officer.

4. **Graphical Presentation of Data**

All monitoring analytical data obtained during the previous year, presented in tabular and graphical form as well as on **CDROM**, in MS-EXCEL format or in another file format acceptable to the Executive Officer. Additionally complete data histories of each well shall be submitted on **CDROM**.

5. **Leachate Collection System**

Results of annual leachate system testing as required by Part I.E. Where leachate is used for dust control, testing that shows the leachate is non-hazardous shall be submitted annually.

6. Map(s)

A map, or set of maps, that indicate(s) the type of cover material in place (final, long-term intermediate, or intermediate) over inactive and completed areas.

C. CONTINGENCY RESPONSE

1. Leachate Seep: The Discharger shall, within 24 hours, report by telephone or electronic mail concerning the discovery of any previously unreported seepage from the Landfill disposal area. A written report shall be filed with the Regional Board within **seven days**, containing at least the following information:

- a. **Map** - a map showing the location(s) of seepage.
- b. **Flow rate** - an estimate of the flow rate.
- c. **Description** - a description of the nature of the discharge (e.g., all pertinent observations and analysis).
- d. **Location** - Location of sample(s) collected for laboratory analysis, as appropriate.
- e. **Corrective measures** - A summary of corrective measures both taken and proposed.

2. Physical Evidence of a Release: If either the Discharger or the Regional Board Executive Officer determines that there is significant physical evidence of a release pursuant to Title 27, Section 20385(a)(3), the Discharger shall conclude that a release has been discovered and shall:

- a. Within seven days notify the Regional Board of this fact by certified mail (or acknowledge the Regional Water Board's determination).
- b. Carry out the appropriate Release Discovery Response for all potentially-affected monitored media.
- c. Carry out any additional investigations stipulated in writing by the Regional Board Executive Officer for the purpose of identifying the cause of the indication.

3. Responses to an Initial Indication of a Release

Should the initial statistical or non-statistical comparison (under Part II.D.) indicate that a new release is tentatively identified, the Discharger shall:

- a. Within 24 hours, notify the Board verbally or via electronic mail as to the Monitoring Point(s) and constituent(s) or parameter(s) involved;
- b. Provide written notification by certified mail within seven days of such determination; and,
- c. Either of the following:
 - i. Shall carry out a discrete re-test in accordance with Part II.F. If the re-test confirms the existence of a release or the Discharger fails to perform the re-test, the Discharger shall carry out the requirements of Part III.C.4. In any case, the Discharger shall inform the Board of the re-test outcome within 24 hours of results becoming available, following up with written results submitted by certified mail within seven days, or;
 - ii. Make a determination, in accordance with Title 27, Section 20420(k)(7), that a source other than the waste management unit caused the release or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation or by natural variation in the groundwater, surface water, or the unsaturated zone.

4. Release Discovery Response

If the Discharger concludes that a new release has been discovered the following steps shall be carried out:

- a. If this conclusion is not based upon monitoring for COC, the Discharger shall sample for COC at Monitoring Points in the affected medium. Within seven days of receiving the laboratory analytical results, the Discharger shall notify the Executive Officer, by certified mail, of the

- concentration of COC at each Monitoring Point. This notification shall include a synopsis showing, for each Monitoring Point, those constituents that exhibit an unusually high concentration;
- b. The Discharger shall, within 90 days of discovering the release, submit to the Executive Officer a Revised Report of Waste Discharge proposing an Evaluation Monitoring and Reporting Program that:
 - i. meets the requirements of Title 27, Sections 20420 and 20425; and
 - ii. satisfies the requirements of 40 CFR Section 258.55(g)(1)(ii) by committing to install at least one monitoring well directly down-gradient of the center of the release;
 - c. The Discharger shall, within 180 days of discovering the release, submit to the Executive Officer a preliminary engineering feasibility study meeting the requirements of Title 27, Section 20420; and
 - d. The Discharger shall immediately begin delineating the nature and extent of the release by installing and monitoring assessment wells as necessary to assure that the Discharger can meet the requirements of Title 27, §20425 to submit a delineation report within 90 days of when the Executive Officer directs the Discharger to begin the Evaluation Monitoring Program.
5. **Release Beyond Facility Boundary**
- Any time the Discharger or the Executive Officer concludes that a release from the Unit has migrated beyond the facility boundary, the Discharger shall so notify persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons).
- a. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the Discharger's current knowledge of the nature and extent of the release.
 - b. Subsequent to initial notification, the Discharger shall provide updates to Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been any material change in the nature or extent of the release.
 - c. Each time the Discharger sends a notification to Affected Persons (under a. or b. above), the Discharger shall, within seven days of sending such notification, provide the Executive Officer with both a copy of the notification and a current mailing list of Affected Persons.

PART IV: DEFINITION OF TERMS

A. AFFECTED PERSONS

Individuals who either own or reside upon the land which directly overlies any part of that portion of a gas or liquid phase release that may have migrated beyond the facility boundary.

B. CONCENTRATION LIMITS

The Concentration Limit for any given COC or Monitoring Parameter in a given monitored medium shall be either:

1. The constituent's statistically determined background value or interval limit, established using an Executive Officer approved method (Parts II.D. and II.E.); or
2. In cases where the constituent's MDL is exceeded in less than 10% of historical samples, the MDL is the concentration limit defined in Part II.A.1.

C. CONSTITUENTS OF CONCERN (COC)

A broad list of constituents, which are likely to be present in a typical municipal solid waste landfill. The COC parameters include all constituents listed in the Code of Federal Regulations, Title 40, Part 258, Appendix II. The COCs for this Landfill are listed in **Table 3**.

D. MATRIX EFFECT

Any increase in the MDL or PQL for a given constituent as a result of the presence of other constituents, either of natural origin or introduced through a release, that are present in the sample being analyzed.

E. METHOD DETECTION LIMIT (MDL)

The lowest concentration at which a given laboratory, using a given analytical method to detect a given constituent, can differentiate with 99% reliability, between a sample which contains the constituent and one which does not. The MDL shall reflect the detection capabilities of the specific analytical procedure and equipment used by the laboratory.

F. MONITORED MEDIUM

Those media that are monitored pursuant to this MRP (groundwater, surface water, leachate, landfill gas condensate, and other as specified).

G. MONITORING PARAMETERS

A short list of constituents and parameters used for the majority of monitoring activities. The Monitoring Parameters for this Unit are listed in **Table 2** of this MRP.

H. MONITORING PERIOD (frequency)

The duration of time during which a sampling event must occur. The Monitoring Period for the various media and programs is specified in Part I.F.4. and in **Table 1**. The due date for any given report will be 30 days after the end of its Monitoring Period, unless otherwise stated.

I. POINT OF COMPLIANCE (POC)

The Point of Compliance is as defined in CCR Title 27. For the purposes of this Landfill, the POC follows the edge of the Landfill's "Subtitle D Footprint".

J. PRACTICAL QUANTITATION LIMIT (PQL)

The lowest acceptable calibration standard (acceptable as defined for a linear response or by actual curve fitting) times the sample extract dilution factor times any additional factors to account for Matrix Effect. The PQL shall reflect the quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. The PQLs reported by the laboratory shall not simply be restated from USEPA analytical method manuals. Laboratory derived PQLs are expected to closely agree with published USEPA estimated quantitation limits (EQL).

K. RECEIVING WATERS

Any surface water, which actually or potentially receives surface or groundwater, which pass over, through, or under waste materials or contaminated soils.

L. VOLATILE ORGANIC COMPOUND (VOC) COMPOSITE MONITORING PARAMETER (VOC composite)

VOC composite is a composite parameter that encompasses a variety of VOCs. The constituents addressed by the VOC composite Monitoring Parameter include all VOCs detectable using USEPA Methods 8260B (water) and TO-14 (gas).

All reports required in this MRP are required pursuant to California Water Code Section 13267. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action in accordance with section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Water Resources Control Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

ORDERED BY: _____
Executive Officer

DATE: _____