

California Regional Water Quality Control Board



Central Coast Region

Linda S. Adams
Agency Secretary

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Governor

December 16, 2008

Mr. Doug Monn
Public Works Administration
City of Paso Robles
1000 Spring Street
Paso Robles, CA 93446

Dear Mr. Monn:

ADOPTION OF WASTE DISCHARGE REQUIREMENTS ORDER NUMBER R3-2008-0050 FOR THE PASO ROBLES LASS III LANDFILL; SAN LUIS OBISPO COUNTY

Enclosed is a signed copy of Waste Discharge Requirements Order No. R3-2008-0050, and Monitoring and Reporting Program No. R3-2008-0050 (collectively, "Order") that were adopted by the Central Coast Water Board at its December 4-5, 2008 meeting.

Water Board staff have also posted a copy of the Order on our Website for other interested parties to view and print should they wish to do so. The Order is available at the following Web address:

http://www.waterboards.ca.gov/centralcoast/board decisions/adopted orders/index.shtml

If you have questions please contact **Dean Thomas at 805-549-3690**.

Sincerely,

Roger W. Briggs Executive Officer

Enclosure:

Order No. R3-2008-0050

S:\Land Disposal\Land Disposal Facilities\PERMITTED SITES\Paso Robles\WDR 2008\WDR R3-2008-0050 Transmittal Letter.doc



cc: (without enclosure)

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STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION 895 Aerovista Place, Suite 101

San Luis Obispo, California 93401-7906

WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2008-0050

Waste Discharger Identification No. 3400302001 Adopted at the December 4 - 5, 2008 Board Meeting

FOR

CITY OF EL PASO DE ROBLES PASO ROBLES CLASS III LANDFILL SAN LUIS OBISPO COUNTY

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

LANDFILL OWNER AND LOCATION

- 1. The City of El Paso de Robles (hereafter "Discharger") owns the Paso Robles Class III Landfill (hereafter "Landfill"). Pacific Waste Services, Inc. is contracted by the Discharger to operate the Landfill.
- 2. The Landfill is located in San Luis Obispo County approximately nine miles east of the City of Paso Robles on Highway 46 (Figures 1 and 2). The Landfill address is 9000 Hwy 46 East at Union Road, Paso Robles, California. The Landfill is located in Township 26 South, Range 13 East, Section 13 and is legally defined by the San Luis Obispo County Assessor as Parcel Number APN 025-491-001.

PURPOSE OF THIS ORDER

- 3. The Discharger is currently regulated by Waste Discharge Requirements Order No. 01-112 (hereafter "Order No. 01-112"). The purpose of Waste Discharge Requirements Order No. R3-2008-0050 (Hereafter "Order" or "Order No. R3-2008-0050") is to revise and update requirements for discharging waste to the Landfill.
- 4. Order No. R3-2008-0050 adopted on December 5, 2008, replaces Order No. 01-112, adopted on October 26, 2001.
- 5. Order No. R3-2008-0050 includes the following key elements:
 - a. Specifications for disposal of treated wood waste.
 - b. Compliance review of the 80-acre landfill facility.
 - c. Description of Landfill operations including waste management unit construction.
 - d. Updated groundwater monitoring information; including a provision requiring Discharger to address monitoring data gaps as a result of dry monitoring wells.

SITE DESCRIPTION AND HISTORY

- 6. Water Board staff prepared this Order using the information presented in the August 2007, "Report of Disposal Site Information/Report of Waste Discharge/Joint Technical Document," April 2008 "Semiannual Detection Monitoring Report," and Landfill correspondence records that provide Water Board staff the current description of the Landfill's operation and design.
- 7. The Landfill serves as the primary municipal solid waste disposal facility for the City of Paso Robles, surrounding unincorporated county areas (San Miguel and Shandon) and nearby State-and Federally-owned facilities, including the California Men's Colony, Hearst Castle State Park, and Camp Roberts.
- 8. The Landfill is approximately 32 miles inland from the Pacific Ocean. The Landfill receives approximately 14.9 inches of rainfall per year, primarily between October and April. A normal year evaporation rate is 49.1 inches. Average maximum temperature is 77°F (maximum temperatures average 93°F during August and minimum temperatures average 32°F during December). Wind speed averages at 12 mph and is commonly from the northwesterly and southwesterly directions.
- 9. Land use surrounding the Landfill is zoned for agriculture (vineyards, row crops and grazing) and open space. Across Highway 46 opposite the Landfill are two wineries (Tobin James and Chumeia). An airport is located approximately five miles west of the Landfill. No permanent structures are located within 1,000 feet of the Landfill.
- 10. The Discharger began operating the Landfill in 1970 using the trench and area fill methods until 1993. In 1993, the Discharger constructed the first Subtitle-D lined unit (Module I) using area fill methods.
- 11. The Landfill's property boundary ("Waste Management Facility," as defined in Title 27) encompasses approximately 82-acres. Existing and proposed future waste management units or modules will cover approximately 65-acres (82-acres less a 50-foot setback from the property line and other non-waste discharge uses), as indicated on Figure 3. The current waste footprint encompasses approximately 31 acres.
- 12. The estimated date that the Landfill will reach capacity (includes planned Modules 3A, 3B, 3C, 4 and 5), is the year 2051, based on current disposal rates and a modest population growth within the Landfill's service area. The Landfill received and disposed of approximately 45,000 tons of municipal solid waste (MSW) in 2007.
- 13. Refuse placement is designed for a maximum elevation of approximately 1,226 feet above mean sea level over the southern "Existing Refuse Fill Area," with a 5% grade on the top deck and a maximum horizontal to vertical side-slope ratio of 3 to 1, as shown on Figure 4.
- 14. Landfill site infrastructure and ancillary facilities include a scale and scalehouse/office building, a permitted household hazardous waste drop-off facility (owned and operated by the San Luis Obispo County Integrated Waste Management Authority), a landfill gas collection and flare system, workshop, water supply from an onsite water supply well, two (2) leachate storage tanks, and two (2) stormwater sediment retention basins. Domestic wastewater from the scale house building is discharged to an onsite septic tank and leach field, located near the Landfill entrance facilities.

15. On June 2, 1988, the Executive Officer issued a letter conditionally allowing the Discharger to stockpile dry sewage sludge at the unused portion of the Landfill and use the sludge as a compost material at the Landfill. Wastewater treatment plant sludge is currently being used as a soil amendment on the Landfill's intermediate side slopes.

WASTE TYPE & CLASSIFICATION

- 16. Classification of a Class III landfill is based on the following site characteristics:
 - Geologic setting is sufficient to ensure no impairment of beneficial uses of surface water or groundwater beneath or adjacent to the landfill. Factors to evaluate include: landfill's size; hydraulic conductivity and transmissivity of underlying soils; depth to groundwater and variations in depth to groundwater; background quality of groundwater; current and anticipated use of groundwater; and, annual precipitation;
 - Not located in a 100-year floodplain or wetland;
 - Adequate separation of groundwater from waste;
 - Not subject to inundation and washout from a 100-year flood;
 - Not located on or within 200-feet of a Holocene fault; and,
 - The waste management unit's containment structure are designed, constructed and maintained to preclude failure due to rapid geologic change.

The Paso Robles Landfill has appropriate site characteristics to be classified as Class III.

- 17. The waste type allowed to be discharged at a Class III landfill, per Title 27 §20220, is generally limited to "Nonhazardous Solid Waste, defined as:
 - "All putrescible and nonputrescible solid, semi-solid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction waste, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded waste (whether of solid or semi-solid consistency); provided that such wastes do not contain waste which must be managed as hazardous wastes, or wastes which contain pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of water of the state (i.e., designated waste)".
- 18. Wastes materials received at the Landfill that the Discharger separates for recycling include: concrete, asphalt, appliances, scrap metal, clean wood waste, and used tires.

GEOLOGY

- 19. The Landfill is located within the Upper Salinas River Basin that is bounded to the northeast by the Diablo and Temblor ranges, to the south by the La Panza Range, and to the west by the Santa Lucia Range. The Landfill is located about 2,000-feet west-southwest of the Estrella River in an elevated area typified by small plains and rolling hills. The Landfill natural land surface ranges in elevation from 990 to 1,120-feet above mean sea level.
- 20. The geology beneath the Landfill area is characterized by gently north to northwest-dipping Plio-Pleistocene age, non-marine Paso Robles Formation overlying the Miocene to early Pliocene, fine-grained sediments of the Pancho Rico Formation of marine origin. The Paso Robles Formation was deposited in alluvial fan, flood plain, and lake depositional environments and consists of relatively thin, generally discontinuous, weakly indurated sand and gravel layers interbedded with thicker layers of silt and clay. In the vicinity of the Landfill, the Paso Robles Formation is approximately 1,400-feet thick. Locally, overlaying the Paso Robles Formation (from

0 to 30 feet thick in thickness), is Quarternary age alluvium deposits consisting of unconsolidated gravel, sand and silt. Boring logs for onsite wells describe the lithology beneath the site as consisting of unconsolidated clayey sand to gravelly sand, sandy clay, and clay to a depth of 355 feet below ground surface.

21. The Landfill is located between the Rinconada Fault (about 10 miles) to the southwest, and the San Juan Fault system and the San Andreas Fault (about 14 miles) to the east. A 1989 geologic study determined there is no evidence of faults at the Landfill. The maximum probable earthquake is based on a magnitude 8.25 along the San Andreas Fault, which is expected at the Landfill to generate a ground acceleration of 0.272 times the acceleration of gravity (g).

GROUNDWATER, STORMWATER, AND SURFACE WATER

- 22. The Landfill is located within the Paso Robles Subbasin of the Salinas Valley Groundwater Basin. First encountered groundwater beneath the landfill occurs in discontinuous perched zones at approximately 75 to 180 feet below ground surface (approximately 920 to 930 feet above mean sea level). Investigations in 2002-2003 using a down-well neutron probe during the installation of MW-11 in 2006, indicate that perched groundwater does not exist on the west side of the Landfill property boundary. The primary aquifer beneath the Landfill occurs in the Paso Robles Formation, with groundwater encountered at depths ranging between 250 and greater than 320 feet below ground surface (approximately 760 to 820 feet above mean sea level). Groundwater potentiometric surface maps indicate groundwater flows in a west to northwesterly direction beneath the Landfill site. Since 2005, the Discharger has not been able to collect groundwater samples from monitoring wells MW-3 and MW-8 because they have become dry due to declining groundwater levels.
- 23. Within one mile of the Landfill there are 13 water supply wells (primarily for agricultural and industrial use), including the Landfill supply well and eight groundwater monitoring wells related to the Landfill.
- 24. <u>Groundwater quality:</u> groundwater monitoring data from the landfill indicates that the inorganic chernical signature of the groundwater is fairly heterogeneous, with recent total dissolved solid concentrations between 330 and 580 milligrams per liter (mg/L), chloride concentrations between 32 and 160 mg/L, and sulfate concentrations between 8 and 280 mg/L. Sulfate concentrations are bimodal with lower sulfate concentrations corresponding to higher chloride concentrations. Chloride concentrations are generally highest in upgradient monitoring wells, suggesting that the Landfill is not the source of chloride.

With the exception of nitrate, inorganic constituent concentrations are below primary and secondary maximum contaminant levels. Recent nitrate as nitrogen concentrations ranged between less than 0.10 mg/L and 13 mg/L, with no distinct pattern of distribution between upgradient and downgradient monitoring wells. The maximum contaminant level for nitrate as nitrogen is 10 mg/L. During the first quarter 2008, the City reported perchlorate in both upgradient and downgradient monitoring wells at concentrations between non-detect (less than 4.0 μ g/L) and 5.8 μ g/L. The Discharger is currently exploring the source of perchlorate, which appears to be other than the Landfill. The City does not consistently detect typical organic constituents associated with landfill gas in groundwater beneath the Landfill.

25. The Landfill is enrolled in the State Water Resources Control Board's (State Water Board) industrial activities stormwater general permit, under Waste Discharger Identification No. 3-40S000176.

- 26. The Landfill is located about 2,000-feet west-southwest of the Estrella River, as shown on Figure 2. Estrella River trends from the southeast to the northwest and is an intermittent flowing river. The Salinas River is located about eight miles to the west of the Landfill and intermittently flows from south to north.
- 27. The Landfill property is not located within a designated wetland.
- 28. There are four sediment retention basins associated with the Landfill. Two terminal sediment retention basins that ultimately drain offsite are located along the west and east facility boundary, and two internal sediment retention basins located on the east side of the facility (Figure 3).

CONTROL SYSTEMS AND MONITORING PROGRAM

- 29. The Discharger installed and began operating the landfill gas extraction system in 1998. The Discharger enhanced the system in December 2003 by adding five vertical and 10 horizontal gas recovery wells, which improved the landfill gas recovery rate from approximately 117 to 155 standard cubic feet per minute. The landfill gas is burned in an onsite flare per San Luis Obispo Unified Air Pollution Control District requirements. The landfill gas control system is also operated under federal Title V permit requirements.
- 30. Monitoring and Reporting Program (hereafter "MRP") No. R3-2008-0050, issued by the Water Board's Executive Officer, requires monitoring and reporting on: groundwater; vadose zone; leachate collection and removal; landfill gas; storm water drainage; waste intake; rainfall data; and physical site observations. The MRP establishes groundwater monitoring points; monitoring frequency; monitoring parameters; constituents of concern; criteria for sample collection and analyses; methods for analyzing data both statistically and non-statistically; minimum monitoring report content; and, definition of terms.

BASIN PLAN

- 31. The Water Board adopted the Water Quality Control Plan, Central Coast Basin (hereafter "Basin Plan"), on September 8, 1994, and the State Water Board approved the Basin Plan 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. Order No. R3-2008-0050 implements the water quality objectives stated in the Basin Plan.
- 32. Surface water bodies that do not have beneficial uses designated for them in Table 2-1 of the Basin Plan, as is the case for the adjacent Estrella River, have the following designated beneficial uses:
 - a. Municipal and domestic water supply.
 - b. Protection of both recreation and aquatic life.
- 33. Present and anticipated beneficial uses of groundwater in the vicinity of the Landfill include:
 - a. Agricultural supply.
 - b. Municipal and domestic supply.
 - c. Industrial use.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

- 34. On January 5, 1993, the Discharger adopted Resolution 93-03 "A Resolution of the City Council of the City of El Paso de Robles Approving a Negative Declaration for Improvements to the City Landfill." The Discharger prepared a July 13, 2001, letter clarifying that Resolution No. 93-03 was for the construction of liners and leachate collection and removal systems for the entire 80-acre Landfill property.
- 35. On October 17, 2006, the Paso Robles City Council adopted a resolution approving a California Environmental Quality Act (CEQA) Initial Environmental Impact Study and Negative Declaration (State Clearinghouse No. 2006091070) for minor changes to the operating permit, increased throughput capacity and extending daily operating hours. On July 3, 2007, the City Council adopted an addendum to the Negative Declaration recognizing that revised forecasts of remaining disposal capacity and site life would not have any significant effect on the environment. Specific items approved by the City are: 1) Increase the peak daily landfill disposal tonnage from 250 tons per day to 450 tons per day, 2) Increase the annual landfill disposal rate from 69,000 tons MSW to 75,000 tons MSW per year, 3) Operating hours changed to allow the facility to begin receiving waste at 7:00 a.m. rather than 8:00 a.m, and 4) Revised the estimated date that the landfill will reach capacity from year 2034 to year 2051. This revised estimate reflects existing airspace capacity not accounted for by previous surveys.
- 36. This Order is for an existing facility and therefore is exempt from provisions of the California Environmental Quality Act (Public Resources Code, §21000, et seq.) in accordance with Title 14, Chapter 3, §15301.

GENERAL FINDINGS

- 37. On October 8, 1993, the Water Board adopted Order No. 93-84 "Waste Discharge Requirements Amendment for All MSW Landfills in the Central Coast Region, to Implement State Water Board Resolution No. 93-62, Adopted June 17, 1993, as State Policy for Water Quality Control Under §13140 of the Water Code." The Paso Robles Class III Landfill is included as one of the municipal solid waste landfills subject to Order 93-84. Order No. R3-2008-0050 incorporates the requirements of Order No. 93-84, and replaces Order No. 93-84 for this facility.
- 38. The Landfill operates under the California Integrated Waste Management Board's Solid Waste Facilities Permit No. 40-AA-0001, issued on October 3, 1997, and later revised on January 23, 2008.
- 39. The Landfill operates its gas extraction system under San Luis Obispo County Air Pollution Control District permit number 70-3. The Discharger is required to renew this permit annually.
- 40. "Treated wood" means wood that contains 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 United States Code, Sec. 136 and following). This may include but is not limited to waste wood that has been treated with chromated copper arsenate, pentachlorophenol, creosote, acid copper chromate, ammoniacal copper arsenate, ammoniacal copper zinc arsenate, or chromated zinc chloride. 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 (RCRA) of 1976, as amended 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.

- 41. In accordance with Water Code section 13263(g), no discharge into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to discharge. All discharges of waste into waters of the state are privileges, not rights.
- 42. The Landfill meets the criteria of Title 27 and 40 CFR for a Class III landfill suitable to receive non-hazardous solid waste. Order No. R3-2008-0050 implements, but is not limited to, the prescriptive standards and performance goals of Title 27 and 40 CFR.
- 43. Antidegradation: State Water Board Resolution No. 68-16 Statement of Policy with Respect to Maintaining High Quality of Waters in California (Resolution No. 68-16) requires Regional Water Boards, in regulating the discharge of waste, to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in a Regional Water Board's policies (e.g., quality that exceeds applicable water quality standards). Resolution No. 68-16 also states, in part:

"Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in best practicable treatment and control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained".

The discharges regulated by this Order are required to comply with the land disposal regulations contained in Title 27, which are intended to prevent discharges of waste to waters of the state, preventing degradation of waters of the state. The discharge is subject to waste discharge requirements which will result in best practicable treatment or control.

- 44. On June 13, 2008, the Discharger and interested agencies and persons were notified by the Water Board of its intention to update the waste discharge requirements for the discharge from the Landfill, and were provided a copy of proposed Order No. R3-2008-0050 and an opportunity to submit written views and comments.
- 45. As of November 2008, the Water Board has not received notice from the California Integrated Waste Management Board that the Discharger has demonstrated availability of financial resources to conduct closure and post-closure maintenance activities, based on the Discharger's 2007 revised cost estimates. In addition, the Discharger is reestablishing a Financial Assurance Instrument for corrective action for a reasonably foreseeable release at the Landfill. Once established, the financial instruments for closure, post-closure maintenance, and corrective action are annually adjusted for inflation.

- 46. Effective January 1, 2009, the Department of Toxic Substances Control (DTSC) repealed conditional authorization letters that allow automobile shredder waste, that is subjected to certain treatment requirements, to be classified as non-hazardous waste because DTSC's testing and analyses has shown increasing levels of hazardous constituents in the treated shredder waste.
- 47. After considering all comments pertaining to this discharge during a public hearing on December 5, 2008, Order No. R3-2008-0050 was found consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in §13263 and §13267 of the California Water Code, that the City of El Paso de Robles, its agents, successors, and assigns, may discharge wastes at the Paso Robles Class III Landfill, providing compliance is maintained with the following:

A.COMPLIANCE WITH OTHER REGULATIONS AND ORDERS

- 1. Discharge of waste shall comply with all applicable requirements contained in California Code of Regulations Title 27, Solid Waste; and, Code of Federal Regulations Title 40 Parts 257 and 258 Solid Waste Facility Disposal Criteria, Final Rule (hereafter "40 CFR"). If any applicable 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. This Landfill is no longer subject to Water Board's Order No. 93-84 "Waste Discharge Requirements (WDR) Amendment for All MSW Landfills in the Central Coast Region" (Super Order). The Super Order updated all Water Board 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 releases from the Landfill related to surface 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 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 Water 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 Waste Management Unit Area illustrated in Figure 5 is prohibited.
- 2. Discharge of waste within the Permitted Waste Management Unit Area is prohibited accept as provided in **Specification C.3**.
- 3. Discharge of hazardous waste or hazardous constituents, except for treated wood waste or waste that is hazardous due only to its asbestos content, is prohibited. Wastes that are prohibited include but are not limited to:
 - a. Radioactive wastes.
 - b. Designated waste.

- c. Hazard waste, except waste that is hazardous due only to its asbestos content. Asbestos containing greater than one percent friable material is considered hazardous.
- 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 landfill leachate and gas condensate, except as allowed by **Specification C. 5**.
- 4. Discharge of waste or leachate to ponded water, drainage way(s) or waters of the State, including groundwater, is prohibited.
- 5. Discharge of liquid waste, meaning any waste materials that are determined to contain free liquids through visual inspection, or as defined by Method 9095 (Paint Filter Liquids Test), is prohibited.
- 6. Discharge of waste within 50 feet of the property line, 100 feet of surface waters, or 100 feet of domestic water supply wells is prohibited.
- 7. Disposal site operations shall not be a source of odor nuisance.
- 8. Disposal of wastes within five (5) feet of the highest anticipated elevation of underlying groundwater, including the capillary fringe, is prohibited unless an Executive Officer–approved, engineered alternative in accordance with CCR Title 27, §20080 (b) is in place.
- 9. Discharge of automobile shredder waste (Finding No. 47), with the exception of shredded tires, is prohibited.

C. SPECIFICATIONS

- 1. Discharge of waste shall not cause a condition of pollution or contamination to occur through a statistically significant release of pollutants, contaminants and/or waste constituents, as indicated by the most appropriate statistical [or non-statistical] data analysis method and retest method listed in MRP No. R3-2008-0050.
- 2. Discharge, collection, and treatment of waste shall not create nuisance, as defined by California Water Code §13050(m).
- 3. The Discharger shall not discharge waste to areas outside the footprint area which did not receive waste as of April 9, 1994, unless the discharge is to an area equipped with a containment system consisting of a composite liner and a leachate collection and removal system. The liner must consist of the following three components, pursuant to 40 CFR §258 and CCR Title 27 §20340:
 - (i) Lower Component: 2-foot thick compacted clay having a permeability less than or equal to 10⁻⁷ centimeter per second;
 - (ii) Upper Component: A minimum 40-thousandths of an inch (mil) synthetic flexible membrane liner or a minimum 60-mils high-density polyethylene. The Discharger must install the middle component in direct and uniform contact with the lower component;

- (iii) Leachate Collection and Removal System (LCRS): The LCRS system must be capable of minimizing head buildup over the liner to less than 30 centimeters in depth. LCRSs must consist of a permeable subdrain layer which covers the bottom of the module and extends as far up the sides as possible, (i.e., blanket type). The LCRS must be of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment and must be designed and operated to function without clogging through the scheduled closure and post-closure maintenance period; or,
- (iv) An engineered alternative design, as approved by the Executive Officer: Engineered alternative designs must satisfy the performance criteria in 40 CFR §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 §20080 (b), where the performance of the alternative composite liner's components, in combination, equal or exceed the waste containment capability of the Prescriptive Design.

In the August 2007 Report of Disposal Site Information/Report of Waste Discharge, CCR Title 27, Joint Technical Document for City of Paso Robles Sanitary Landfill, the Discharger proposes an engineered alternative design concept for future bottom liner systems. This Order does not approve the Discharger's proposed engineered alternative concept; rather, proposed alternative bottom liner designs will be addressed on a module by module basis by the Executive Officer after review of design submittals.

- 4. Discharge of waste shall neither cause nor contribute to any surface water impacts.
- 5. Discharge of condensate or leachate shall comply with the following:
 - a. The Discharger may only return liquids to a waste management unit equipped with a containment system that meets or exceeds the performance standard of Title 27, CFR, Part 258.40(a)(2), or the standards set in this Order, whichever is more protective of water quality;
 - b. The Discharger must measure liquids by volume and record the volume on a monthly basis. The Discharger shall include the monthly volume records in the monitoring submittals required in MRP No. R3-2008-0050:
 - c. A second containment system sized to hold 100% of the primary containment system holding capacity;
 - d. The Discharger may discharge liquids in compliance with this Order.
 - e. The Discharger may not discharge leachate within 48 hours of any forecasted rain event, during any rain event, or 48-hours after any rain event; and,
 - f. An approved alternate method of leachate disposal (e.g., wastewater treatment plant), that is acceptable to the Executive Officer.
- 6. The Discharger shall prevent formation of a habitat for carriers of pathogenic microorganisms.
- 7. Wastes containing greater than one percent (>1%) friable asbestos are classified as hazardous under CCR, 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. Asbestos may be discharged in the Landfill only if it is handled and disposed of in accordance with Section 25143.7 of the Health and Safety Code, CCR, Title 14, Section 17897 "Standards for Handling and Disposal of Asbestos-Containing Waste," and all other applicable Federal, State, and local statutes and regulations.

- 8. Daily cover shall prevent nuisance and excess leachate generation, and promote lateral runoff of precipitation/surface water away from the active disposal area. Upon Executive Officer approval, alternative daily cover materials may be utilized.
- 9. New landfill units and lateral expansions shall not be located in wetlands, as defined in 40 CFR §232.2(r), unless the owner or operator can make demonstrations pursuant to 40 CFR §258.12(a) and to the Executive Officer that the discharge of waste will not cause or contribute to significant degradation of wetlands and associated ecological resources.
- 10. The Discharger shall remove and relocate waste discharged in violation of this Order.
- 11. The Discharger shall operate the Landfill and configure the final Landfill contours, in conformance with the most recent Executive Officer-approved Operations Plan, and/or Report of Waste Discharge/Joint Technical Document (collectively Plan) except where the Plan conflicts with this Order. In the event of conflict, this Order shall govern in cases where it is more protective of water quality. Any change to the Plan that may affect compliance with this Order shall be approved in writing by the Executive Officer prior to the Discharger implementing the change.
- 12. If adequate daily cover material is not accessible during inclement weather, such material shall be stockpiled during favorable weather to ensure year-round compliance.
- 13. The Discharger shall grade and operate all Landfill surfaces and working faces to minimize precipitation/surface water from infiltrating into waste, to prevent ponding of water, and to resist erosion. Erosion rills greater than six inches in depth must be repaired. The Discharger shall provide positive drainage to divert precipitation/surface water runoff from areas containing waste.
- 14. 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.
- 15.A minimum of two feet of freeboard shall be maintained in all stormwater/sediment containment ponds.
- 16. The Discharger shall design, construct, and maintain to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, overtopping, and damage to waste management units, containment structures, and drainage facilities resulting from natural disasters (e.g., floods with a predicted frequency of once in 100 years, the maximum probable earthquake, and severe wind storms).
- 17. The Discharger shall provide all Landfill areas that have not reached final fill elevation, but will remain inactive over one-year, with an Executive Officer-approved, long-term interim 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 systems.
- 18. "Treated wood" wastes may be discharged, but only to an area equipped with a composite liner and LCRS, and shall be handled in accordance with California Health and Safety Code Sections 25143.1.5 and 250150.7.

D. WATER QUALITY PROTECTION STANDARDS

- 1. Discharge of waste shall not cause the concentration of any Constituents of Concern (hereafter 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. R3-2008-0050.
- COC for groundwater and surface water are listed in MRP No. R3-2008-0050. Monitoring Parameters for groundwater and surface water are listed in MRP No. R3-2008-0050. Monitoring Points and Background Monitoring Points for Detection Monitoring shall be those specified in MRP No. R3-2008-0050.
- 3. Point of Compliance is the lesser of the edge of the "Permitted Waste Management Unit Area," as identified in this Order; or, no more than 150 meters (492 feet) from the waste management unit boundary (unless otherwise allowed by the Executive Officer), and is located on land owned by the Discharger. The Point of Compliance extends vertically down through the uppermost aquifer.
- 4. At the Point of Compliance, the Concentration Limit for each COC or Monitoring Parameter shall not exceed a measurably significant (per MRP No. R3-2008-0050) increase over background as obtained during that Reporting Period, as defined in MRP No. R3-2008-0050. The Discharger shall maintain Concentration Limits over the Compliance Period.
- 5. Discharge of waste shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Water Board or the State Water Resources Control Board.
- 6. The estimated compliance period, pursuant to Title 27 §20410, for the Landfill is to the year 2081 [based on the Landfill's estimated closure date of 2051 plus 30-years "post-closure care," pursuant to 40 CFR 258.61(a)], or until such time as waste in the unit no longer poses a threat to water quality, whichever period of time is more protective of water quality.
- 7. Discharge of waste shall not cause groundwater to exceed the State Department of Public Health's latest recommended Drinking Water Action Levels or Maximum Contaminant Levels of the California Code of Regulations Title 22, Division 4, Chapter 15, Article 5.5.

E. PROVISIONS

- 1. Order No. 01-112 "Waste Discharge Requirements for City of El Paso de Robles, Paso Robles Class III Solid Waste Disposal Site", adopted by the Water Board on October 26, 2001, is hereby rescinded.
- 2. The Water Board's Order No. 93-84 "Waste Discharge Requirements (WDR) Amendment for All MSW Landfills in the Central Coast Region" (Super Order) is hereby rescinded.
- 3. The Discharger shall have a continuing responsibility for correcting any problems, which may arise in the future as a result of waste discharge. This responsibility continues as long as the waste poses a threat to water quality.
- 4. If the Discharger or the Water Board determines, pursuant to Title 27, §20420, that there is evidence of a release or a new release from any portion of the Landfill, the Discharger shall immediately implement the procedures outlined in Title 27 §20380, 20385, 20430 and MRP No. R3-2008-0050.

- 5. Should additional data become available through monitoring or investigation that indicates compliance with this Order is not adequately protecting groundwater, the Water Board will review and revise this Order as appropriate.
- 6. The Water Board shall be allowed, at any time and without prior notification:
 - a. Entry upon the Waste Management Facility or where records must be kept under the conditions of this Order and MRP No. R3-2008-0050;
 - b. Access to copy any records that must be kept under the conditions of this Order and MRP No. R3-2008-0050:
 - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order and MRP No. R3-2008-0050; and,
 - d. To photograph, sample, and monitor for the purpose of showing compliance with this Order.
- 7. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts;
 - c. A change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; and,
 - d. A material change in character, location, or volume of the waste being discharge to land.
- 8. 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, and does not guarantee a capacity right.
- 9. The Discharger shall take all reasonable steps to minimize or correct adverse impacts on the environment resulting from non-compliance with this Order.
- 10. Provisions of this Order are severable, and if any provision is found invalid, the remainder shall not be affected.
- 11. By **October 1 of each year**, the Discharger shall complete all necessary runoff diversion and erosion prevention measures. The Discharger shall complete all necessary construction, maintenance, or repairs of precipitation and drainage control facilities to prevent erosion or Landfill flooding and to prevent surface drainage from contacting or percolating through waste. The Discharger shall repair erosion rills greater than six-inches deep immediately after storm events that cause the erosion, if it is safe to do so.
- 12. By **October 1 of each year** and throughout the rainy season of each year, a compacted soil cover designed and constructed to minimize percolation of precipitation through waste shall be maintained over the entire active Landfill area. 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 waste management facility operations. Based on site-specific conditions, the Executive Officer may require a specified thickness of soil cover for any portion of the Landfill's active waste management unit prior to the rainy season.
- 13. By **October 1 of each year**, vegetation shall be planted and maintained over all slopes within the entire Landfill area to prevent erosion. The Discharger shall select vegetation that requires a minimum of irrigation and maintenance and a rooting depth not to exceed the vegetative layer thickness. Upon Executive Officer approval, non-hazardous 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.

- 14. **Two-weeks** prior to constructing each phase of a waste management unit (e.g., preparing foundation, installing liner, install leachate collection and removal system, placing operations layer, etc.), the Discharger must arrange for a Water Board staff inspection.
- 15. Prior to liner or cover construction, a third party (e.g., unrelated to the Discharger, Landfill operator, project designer, contractor) must prepare a Construction Quality Assurance (CQA) Plan. The third party and CQA Plan must be approved by the Executive Officer prior to initiating construction; the third party must also implement the CQA Plan and provide regular construction progress reports to the Executive Officer.
- 16. Prior to beginning discharge of waste into any newly constructed waste management unit, the Discharger must receive written construction certification by the third party CQA and a final inspection and written approval from the Executive Officer.
- 17. As presented in Finding No. 22, two groundwater monitoring wells located on the west (downgradient) side of the Landfill have been dry since 2005. This represents a void in the detection monitoring program. Therefore, by **August 31, 2009**, the Discharger must address this void to the satisfaction of the Executive Officer.
- 18. The Discharger shall obtain and maintain Financial Assurance 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. Pursuant to CCR Title 27 §20380(b), the Discharger shall obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases that name the Water Board as beneficiary. As landfill conditions change, and upon the Water Board's request, the Discharger shall submit a report proposing the amount of financial assurance necessary for corrective action for the Water Board Executive Officer's review and approval. The Discharger shall demonstrate compliance with all financial instruments to the Water Board at a minimum of A) every five years, or B) when the discharger submits a revised cost estimate to the CIWMB, or C) when the discharger submits a revised Joint Technical Document.

REPORTING REQUIREMENTS

- 19. All reports shall be signed as follows:
 - a. For a corporation: a principal executive officer of at least the level of vice president;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
 - c. For a public agency; by either a principal executive officer or ranking elected official; or,
 - d. their "duly authorized representative."
 - e. A California Registered Civil Engineer or Certified Engineering Geologist must sign engineering reports.
- 20. Any person signing a report makes the following certification, whether its 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."

- 21. Except for data determined to be confidential under §13267 (b) of the California Water Code, all reports prepared in accordance with this Order shall be available for public inspection at the Water Board office.
- 22. By **October 1** of each year, the Discharger shall submit a "Wet Weather Preparedness Report." The report shall address, in detail, compliance with all previously stated wet weather preparedness specifications of this Order, and all other relevant Title 27 and 40 CFR 258 criteria.
- 23. At least **180-days** prior to constructing a waste management unit the Discharger must submit design plans and a CQA report. The Executive Officer will provide comments on the design plans and CQA report to the Discharger no later than 90-days after receiving the documents. Prior to beginning construction, the Discharger must receive Executive Officer approval on the waste management unit's design and CQA report.
- 24. By **November 15, 2012**, the Discharger must submit a Report of Waste Discharge (hereafter "ROWD") pursuant to Title 27 §21710, to the Executive Officer. The ROWD shall contain, but is not limited to, the following:
 - a. Information on waste characteristics, geologic and climatologic characteristics of the unit 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 Title 27 §21740, §21750, §21760, and §21769.
 - b. The ROWD is to be submitted in the form of a Joint Technical Document, in accordance with Title 27 §21585 et al.
 - c. A completed State Water Board JTD Index, in accordance with Title 27 §21585(b), with your JTD addendum.
 - d. Discusses whether, in the Discharger's opinion, there is any portion of this Order that is incorrect, obsolete, or otherwise in need of revision; and,
 - e. Any other technical documents needed to demonstrate continued compliance with this Order and all pertinent State and Federal requirements.
 - f. Detailed information regarding regulatory considerations; design, construction and operating provisions; environmental monitoring; and closure and post closure.
 - g. A Fill Sequencing Plan, including detailed maps. The Fill Sequencing Plan should describe in detail the overall development of the entire Landfill.
 - h. A detailed description of the lateral and vertical extent of refuse within all existing modules. It must include an accurate estimate of waste volumes within each Landfill module and an approximation of the remaining volume and years of capacity for each existing module and all new proposed modules within currently permitted Landfill boundaries. It must also describe all existing available space within currently permitted Landfill areas (i.e., modules where the Discharger placed refuse in the past, but have not reached final permitted elevation and modules or portions of modules where the Discharger has never placed refuse);
 - Discusses any plans/proposals to close or partially close any modules or portions of modules, any proposed liner systems and respective design components, any proposed plans for longterm intermediate cover for Landfill areas which may remain inactive for long periods of time; and
 - j. Demonstrate financial assurance instruments for closure, post closure maintenance, and corrective action for a reasonably foreseeable release that are acceptable to the California Integrated Waste Board (CIWMB).
- 25. The Discharger shall notify the Water Board with a written request of any proposed change in ownership or responsibility for construction or operation of the Landfill in accordance with Title 27,

§21710 (c)(1). Failure to submit the written request shall be considered a violation of §13264 of the California Water Code. The written request 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 ROWD and any technical documents that are needed to demonstrate continued compliance with this Order;
- 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 Water Board; and,
- c. Contain a statement indicating that the new owner or operator assumes full responsibility for compliance with this Order.

The Executive Officer may approve or disapprove in writing the request for change in ownership or responsibility. 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.

- 26. The Discharger shall furnish, within a reasonable time, any information the Executive Officer may request to determine compliance with this Order or to determine whether cause exists for modifying or terminating this Order.
- 27. The Discharger shall submit reports in advance of any planned changes in the permitted Landfill or in an activity, which could potentially or actually result in noncompliance.
- 28. The Discharger shall promptly correct any noncompliance issue that threatens the Landfill's containment integrity. Correction schedules are subject to the approval of the Executive Officer, except when delays will threaten the environment and/or the Landfill's integrity (i.e., emergency corrective measures). For emergency corrective measures, the Discharger shall report details of the corrections made in a written report submitted within seven (7) days of initiating correction.
- 29. Discharger shall notify the Executive Officer, within 24 hours by telephone and within 14 days, with a written report, of:
 - a. Any noncompliance that potentially or actually endangers health or the environment. Reports of noncompliance shall include a description of;
 - i. The reason for non-compliance;
 - ii. A description of the non-compliance, including photo documentation;
 - iii. Schedule of tasks necessary to achieve compliance; and,
 - iv. An estimated date for achieving full compliance.
 - b. Any flooding, equipment failure, slope failure, or other change in Landfill conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures;
 - c. Leachate seep(s) occurring on or in proximity to the Landfill;
 - d. Violation of a discharge prohibition; and,
 - e. Violation of any treatment system's discharge limitation.
- 30.The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources, and San Luis Obispo County with concurrence of the Executive Officer regarding the construction, alteration, destruction, or abandonment of all monitoring wells used to comply with this Order or with MRP No. R3-2008-0050, as required by Title 27 §13750.5 through §13755 and §13267 of the California Water Code.

- 31. The Discharger shall notify the Executive Officer at least 180 days prior to beginning 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.
- 32. The Discharger shall file with the Water Board a ROWD (in accordance with Provision E. 24 of this Order) or secure a waiver from the Executive Officer at least <u>120-days</u> before making any material change or proposed change in the character, location, or volume of the waste being discharged to land.
- 33. Should the Discharger discover that it failed to submit any relevant facts or that it submitted incorrect information in a report, it shall promptly submit the missing or corrected information.

ENFORCEMENT

- 34. Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of §13267 of the California Water Code, or falsifying any information provided therein, is guilty of a misdemeanor.
- 35. The Discharger and 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 may be liable for civil and/or criminal remedies, as appropriate, pursuant to §13350, §13385, and §13387 of the California Water Code.
- 36. The Water Board requires all technical and monitoring reports pursuant to this Order in accordance with §13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order, attachments to this Order, or failure to submit a report of sufficient technical quality acceptable to the Executive Officer may subject the Discharger to enforcement action pursuant to §13268 of the California Water Code.
- 37. No provision or requirement of Order No. R3-2008-0050 or MRP No. R3-2008-0050 is a limit on the Discharger's responsibility to comply with other federal, state and local laws, regulations, or ordinances.
- 38. The Discharger must comply with all conditions of these Waste Discharge Requirements. Violations may result in enforcement actions, including Water Board orders or court orders requiring corrective action or imposing monetary civil liability, or in modification or revocation of these waste discharge requirements by the Water Board. [California Water Code §13261, §13267, §13263, §13265, §13268, §13300, §13301, §13304, §13340, §13350).
- 39. The Discharger shall comply with the following submittal and implementation schedule for all tasks and/or reports required by this Order:

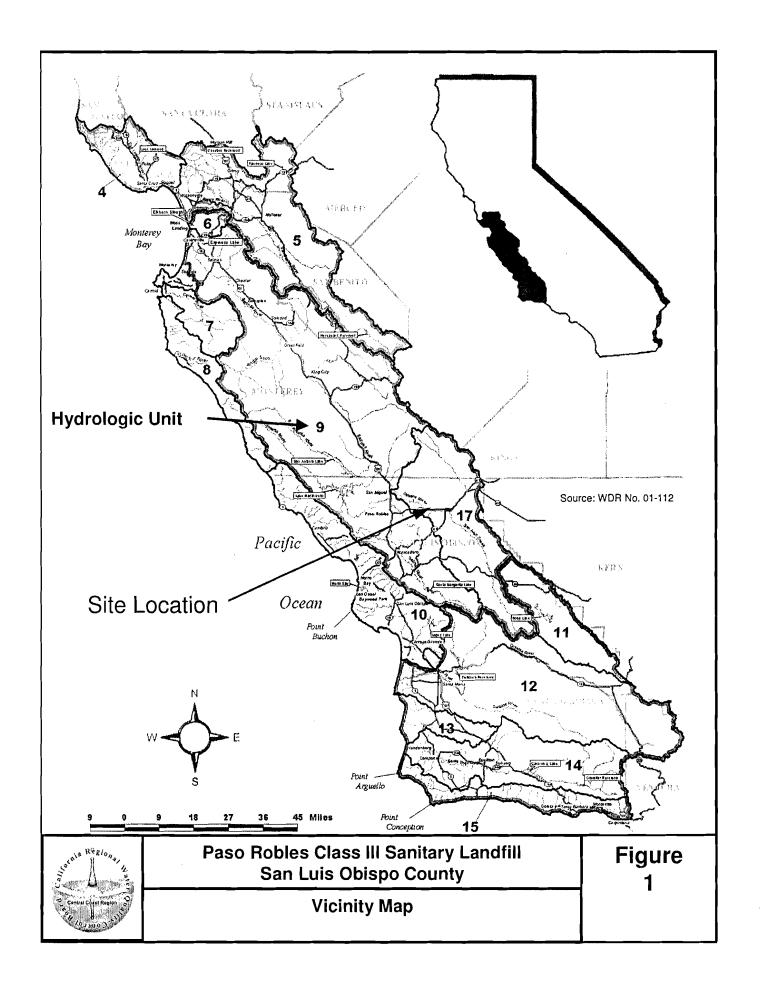
REPORT AND IMPLEMENTATION DATE SUMMARY

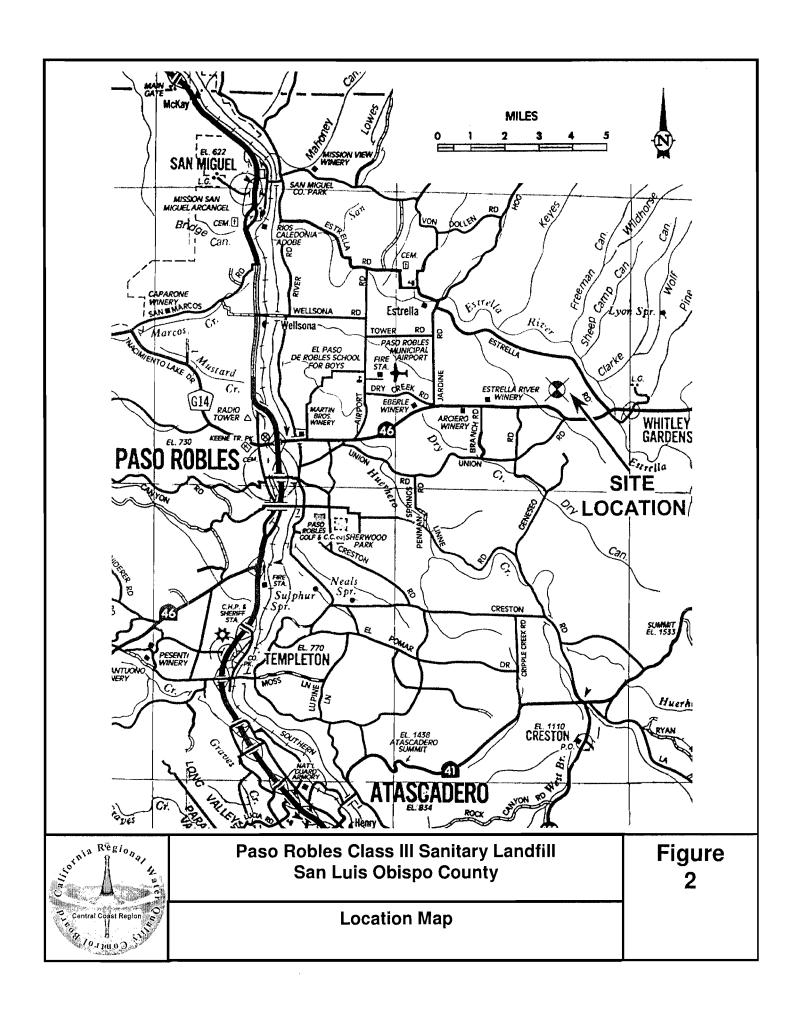
TASK	IMPLEMENTATION DATE
Runoff diversion and erosion prevention [Provisions No. E.11]	October 1, of each year
Compacted cover over entire active Waste Management Unit [Provisions No. E.12]	October 1, of each year
Vegetation placement over entire Landfill area [Provisions No. E.13]	October 1, of each year
Request inspection during construction of unit [Provisions No. E.14]	Two-weeks prior to beginning each phase
REPORT	DUE DATE
Wet Weather Preparedness Report [Provisions No. E.22]	October 1, of each year
Design Plans and CQA [Provisions No. E.23]	180-days prior to construction
ROWD/JTD [Provisions No. E.24 and E.32]	November 15, 2012, or 120-days before making a change, whichever is sooner
Address Groundwater Monitoring Data Gap(s) [Provision E.17]	August 31, 2009
Landfill Final Cover Activity [Provisions No. E.31]	180-days prior to beginning closure

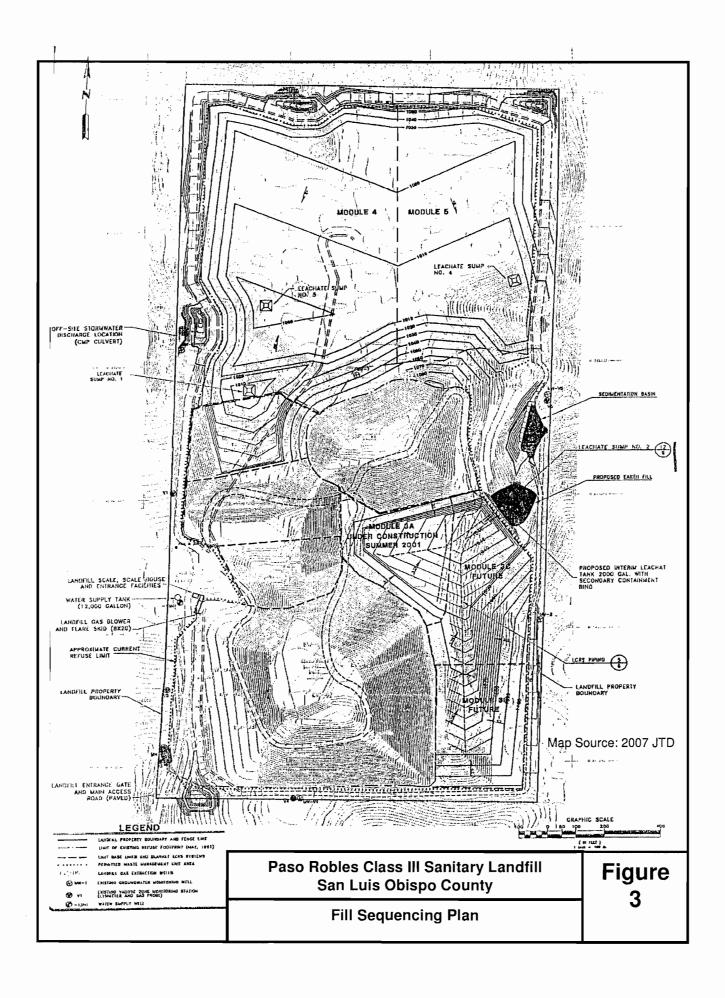
I, **Roger W. Briggs, Executive Officer**, do hereby certify the foregoing is full, true, and correct copy of an order adopted by the Regional Water Quality Control Board, Central Coast Region, on December 5, 2008.

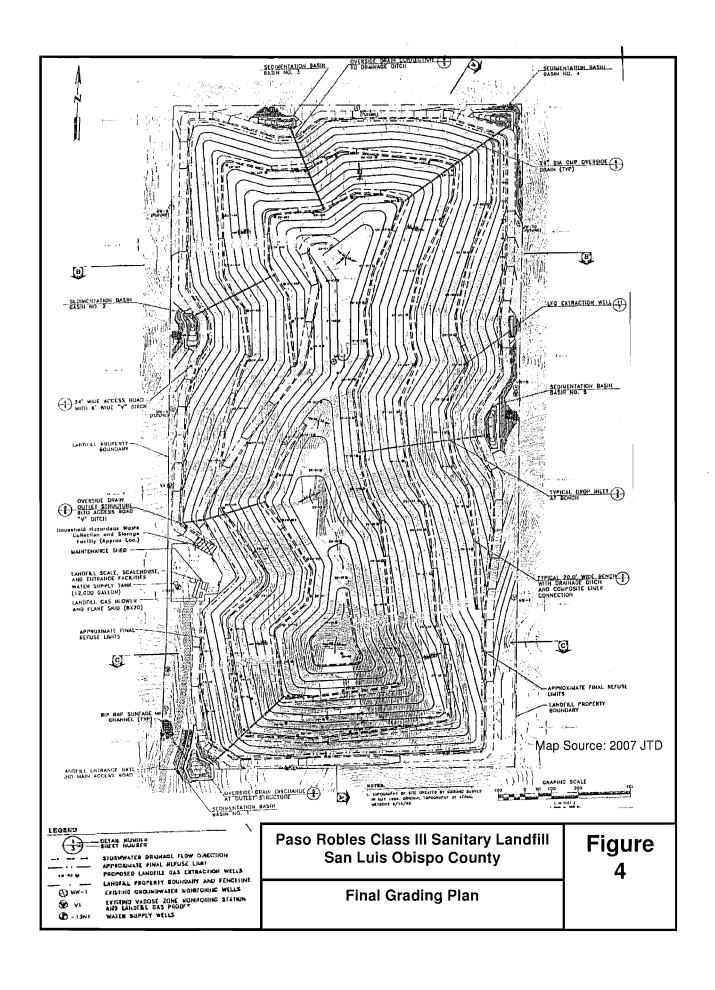
Executive Officer

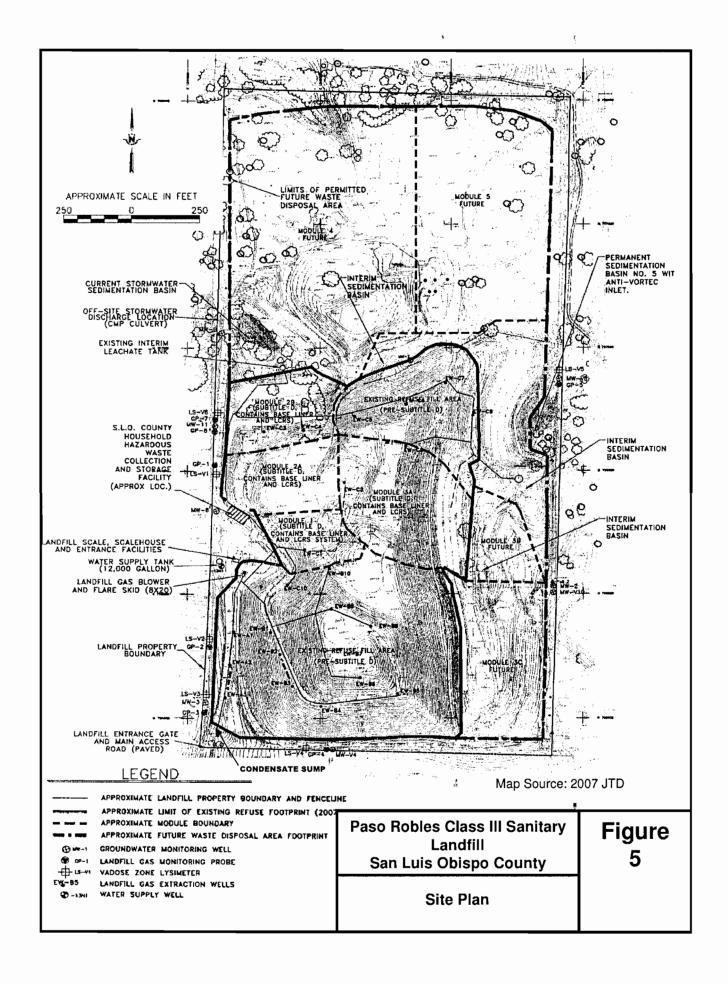
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STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

895 Aerovista Place, Suite 101 San Luis Obispo, California 93401-7906

MONITORING AND REPORTING PROGRAM NO. R3-2008-0050 Waste Discharge Identification No. 3400302001 Adopted at the December 5, 2008 Board Meeting

FOR CITY OF EL PASO DE ROBLES PASO ROBLES CLASS III LANDFILL SAN LUIS OBISPO COUNTY

PART I: MONITORING AND OBSERVATION SCHEDULE

Unless otherwise indicated, all monitoring and observations shall be reported as outlined in Part IV.

A. SITE INSPECTIONS

The Discharger shall inspect the Paso Robles Class III Landfill (Landfill), in accordance with the following schedule, and record (including photographs, when appropriate) at a minimum, the Standard Observations listed below:

1. Site Inspection Schedule:

- a. During the wet season (October 1 through April 30), following each storm that produces onsite stormwater runoff, with inspections performed at least monthly. For purposes of this MRP, onsite runoff is defined as: 1) surface water flow that produces a discharge to a sediment retention basin or 2) surface water flow that results from a minimum of 1-inch of rain within a 24-hour period.
- b. During the dry season (May 1 through September 30), a minimum of one inspection each three month period.

2. Standard Observations

- a. For the Landfill this includes inspections at the Waste Management Units (WMUs), along the perimeter of the WMUs, and the Recycle Area.
 - i. Whether stormwater drainage ditches and stormwater sediment basins contain liquids.
 - ii. Evidence of liquid leaving or entering the Landfill, estimated size of affected area, and estimated flow rate (show affected area on map).
 - iii. Presence of odors; characterization, source and distance from source.
 - iv. Evidence of ponding over the WMUs (show affected area on map).
 - v. Evidence of erosion or of exposed waste.
 - vi. Evidence of waste in the drainage system (e.g., ditches and stormwater sediment basins).
 - vii. Inspection of stormwater discharge locations for evidence of non-stormwater discharges during dry season.
 - viii. Integrity of drainage systems during wet season.

b. 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.
- Evidence of odors presence, 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. ADDITIONAL DRAINAGE SYSTEMS INSPECTIONS

- 1. The Discharger shall inspect all drainage control systems following each onsite runoff-producing storm event and record the following:
 - a. General conditions of the stormwater facilities; and
 - b. Any apparent seepage from the stormwater sediment basins;
 - c. To insure that the terms of the State Water Resources Control Board (State Water Board) Order No. 97-03-DWQ, General Permit No. CAS000001 are properly implemented, document compliance with Storm Water Pollution Prevention Plan;
 - d. Steps taken to correct any problems found during the inspections, as required under Part I of this Monitoring and Reporting Program, and date(s) when corrective action was taken. Include photographic documentation.

C. LEACHATE COLLECTION AND REMOVAL SYSTEMS INSPECTIONS

The Discharger shall inspect all leachate collection and removal systems and record the following information:

- 1. **Bi-weekly (between October 1 and April 30 of each year)** leachate containment and collection system integrity, volume of leachate collected (in gallons) and disposal method used.
- Monthly (between May 1 and September 30 of each year) after emptying the leachate tanks by <u>May 1 of each year</u>, leachate containment and collection system integrity, record volume of leachate collected (in gallons) and disposal method used.
- 3. Monthly (between October 1 and April 30 of each year) pumping system operational check.
- 4. Annually leachate collection and removal system testing and demonstration, as required by Title 27 20340(d). Report results in the Annual Summary Report required by this Monitoring and Reporting Program, Part IV.B. The Discharger shall develop results of annual testing in a manner that makes one year's test comparable to previous and subsequent test. The absence or presence of biofouling shall be specifically addressed in the Annual Summary Report.
- 5. All lined Modules will have the location of their respective liners surveyed and markers placed at readily observable locations.

D. RAINFALL DATA

The Discharger shall record the following information from the nearest monitoring station:

1. Total precipitation, in inches, during each three month period (October through December, January through March, April through June, and July through September);

- 2. Precipitation, in inches, during the most intense twenty-four hour rainfall event occurring within each contiguous **three-month period**; and
- 3. Number and date of storms (greater than or equal to one inch in 24-hours) received during the **three month period**.

E. DEWATERED SLUDGE MONITORING

The Discharger shall record the following information for all dewatered sewage and water treatment sludge discharged at the Landfill:

- 1. Source and type of sludge [e.g., primary (at least 20% solids by weight) or secondary (at least 15% solids by weight) wastewater, water treatment].
- 2. Volume and weight.
- 3. Percent moisture.
- 4. Location where sludge was discharged at the Landfill and the waste solids to sludge ratio (at least 5 to 1 waste to sludge) by weight.

F. ANALYTICAL MONITORING AND MONITORING LOCATIONS

The Discharger shall monitor the Landfill in accordance with the following schedule(s). Monitoring locations are shown on Figure A-1. Discharger shall comply with the sampling, analyses, and reporting requirements discussed in Parts II, III, and IV of this Monitoring and Reporting Program.

1. Semiannual monitoring periods

Samples are to be collected semiannually from the landfill monitoring points during the first quarter (January 1- March 31) and third quarter (July 1 - September 30) of each year. The Discharger shall include the results of the first quarter monitoring event with the first semiannual monitoring report due April 30; include results of the third quarter monitoring event in the second semiannual monitoring report due October 31. The Annual Report is due April 30. See "Monitoring Period" defined under "Definition of Terms."

2. Monitoring Parameters

The Discharger shall analyze all samples from the Monitoring Points specified in this Monitoring and Reporting Program for the Monitoring Parameters listed in **Table 1**, except as footnoted and noted in Section 3 below.

Table 1 Monitoring Parameters

Parameter	USEPA Method ¹	Units		
Chloride	300.0	mg/L		
Total Alkalinity	SM 2320B	mg/L		
Dissolved Oxygen	Field	mg/L		
Electrical Conductivity ²	Field	µmhos/cm		
Manganese ³	6010B	mg/L		
Nitrate as Nitrogen	300.0	mg/L		
Perchlorate ⁴	314.0	μg/L		

pH ²	Field	pH Units
Sodium ³	6010B	mg/L
Sulfate	300.0	mg/L
Temperature ²	Field	°F/C
Total Dissolved Solids	160.1	mg/L
Total Petroleum Hydrocarbon (using diesel)	8015 CA Modified	mg/L
Turbidity ²	Field	NTU
VOC _{water} ⁵	8260B	μg/L

Footnotes:

¹ Upon receiving prior acceptance by the Central Coast Water Board Executive Officer, equivalent analytical method can be used.

² These are field parameters as defined by CCR Title 27 §20415(e) 13. These must be tracked in a summary table in the monitoring report but development of concentration limits per CCR Title 27 §20390 and 20400 et al is not necessary.

³ Field filter before conducting metal analysis.

⁴ Discharger may request discontinuing analysis if this parameter is not detected in at least three consecutive monitoring events.

⁵ The VOC_{water} Monitoring Parameter includes all volatile organic compounds (VOCs) detectable using USEPA Method 8260B, including at least all 47 organic constituents listed in Appendix I to 40 CFR, 258 (Subtitle D), methyl tertiary butyl ether (MTBE), and all unidentified peaks.

For purposes of evaluating landfill hydrogeologic conditions, monitoring locations must have samples collected from a minimum of two seasonally different monitoring events analyzed for general minerals and metals (to include, at a minimum: chloride, total alkalinity, sulfate, nitrate, sodium, potassium, magnesium, and calcium).

3. <u>Description of Monitoring Points</u>

- a. **Groundwater:** Groundwater Detection Monitoring Points (hereafter "DMP") for this Landfill are described as follows (see Figure A-1):
 - Well MW-3, MW-9, and MW-11 shall serve as DMPs. Wells MW-3 and MW-8 have been dry since 2005 such that there is a data gap on the west side of the Landfill where these wells are located. However, MW-11 serves to replace the data gap at MW-8.
 - Well MW-2 shall serve as a background Monitoring Point.
 - Monitoring Point MW-7 has been dry since constructed, so is not included as a Monitoring Point.
 - Monitoring wells MW-V4, MW-V5, and MW-V10 are screened in first encountered perched groundwater and are included as Monitoring Points.
- b. **Vadose Zone:** The Discharger shall monitor the vadose zone using lysimeters LS-V1 through LS-V6 (see Figure A-1 for locations). Because lysimeters typically yield a limited volume, sample analysis will have the following priority: VOCs, chloride, total dissolved solids, alkalinity, with the remainder of COCs in no particular order.
- c. **Surface Water**: Collect samples from a location prior to discharge into the unnamed tributaries (see Figure A-1) from the stormwater sediment basins. See Provision F.6 below for description of Monitoring Parameters.
- d. Landfill Gas: Landfill gas monitoring is to be done from gas monitoring probes GP-1 through GP-5 and GP-7 and GP-8. See Provision F.7 below for landfill gas monitoring

period and Monitoring Parameters. Annually, the Discharger shall collect a sample of gas condensate from the collection tank and analyze the sample for VOCs using EPA Method 8260B.

e. Landfill Leachate: Annually, the discharger shall collect samples from each leachate collection tank.

4. Monitoring Frequency

Conduct sampling and analyses of all DMP and monitoring wells at least once during each monitoring period listed in **Table 2**.

Table 2 Monitoring Points and Monitoring Periods (a)

Detection Monitoring Point	Monitoring Purpose			Monitoring Periods ^(d)	
DMP No.	Monitoring Parameters	Water Levels ^(b)	COCs	Frequency	Five Year
MW-2	X	Х	X	Semiannual	Х
MW-3	X	X	Х	Semiannual	Χ
MW-V4	X	X	Х	Semiannual	Χ
MW-V5	X	X	X	Semiannual	Χ
MW-8	X	X	X	Semiannual	Χ
MW-9	X	X	X	Semiannual	Χ
MW-V10	X	X	Х	Semiannual	Χ
MW-11	X	X	Х	Semiannual	Χ
Landfill Production Well (e)	X	X	Х	Semiannual	Χ
LS-V1	X		Х	Semiannual	Χ
LS-V2	X		X	Semiannual	Χ
LS-V3	X		X	Semiannual	Χ
LS-V4	X		Х	Semiannual	Χ
LS-V5	X		Х	Semiannual	Χ
LS-V6	X		Х	Semiannual	Χ
Leachate	X		Х	Annual	Χ
Stormwater ^(f)				Annual	

Footnotes for Table 2:

- a. For all <u>new</u> Monitoring Points, quarterly monitoring shall be performed for four consecutive quarters starting from the date first sampled. After completing the initial quarterly samples, monitor semiannually, except as provided under Part III C.
- b. Water levels must be measured semiannually as follows: Winter (January 1 to March 31) and Summer (July 1 to September 30). Include the water level measurements in the immediately subsequent semiannual report.
- c. COCs are sampled once every five years as discussed in Part I F.5, except as provided under Part III C.
- d. See "Monitoring Period" under Part V-Definition of Terms, except as provided under Part III C.
- e. Monitor only if there is a detection of any Monitoring Parameters or COCs in excess of the background or Concentration Limits in any of the other Monitoring Points.
- f. Collect and analyze samples as specified in Part I F.6 of this Monitoring and Reporting Program.

5. Constituents of Concern Monitoring

Constituents of Concern (COC) are listed in **Table 3**, and either directly include or include by reference all constituents listed in Appendix II in 40 CFR, Part 258. The Discharger shall collect

and analyze samples for COCs **once every five years** at each of the site's DMPs. If there is an indication of release (**Part IV.C.4**), then the Discharger is also required to monitor for COCs. The Discharger shall monitor for COCs every five years, alternating between sampling in the spring of one year and the fall of the fifth year. The next COC sampling event is **due spring of 2013**. Within three months of installing a DMP, the Discharger shall collect and analyze samples for COCs from that DMP.

Table 3 Constituents of Concern (1)

CONSTITUENTS	USEPA METHOD	UNITS
Antimony	6010B	µg/L
Arsenic	6010B	μg/L
Barium	6010B	μg/L
Beryllium	6010B	μg/L
Cadmium	6010B	μg/L
Chromium	6010B	μg/L
Cobalt	6010B	µg/L
Copper	6010B	μg/L
Cyanide	335.4	μg/L
Lead	6010B	µg/L
Mercury	7470A	μg/L
Nickel	6010B	μg/L
Selenium	6010B	μg/L
Silver	6010B	μg/L
Sulfide	376.2	μg/L
Thallium	6010B	μg/L
Tin	6010B	μg/L
Vanadium	6010B	μg/L
Zinc	6010B	μg/L
Chlorophenoxy Herbicides	8150	μg/L
Nonhalogenated Volatiles	8015	μg/L
Organochlorine Pesticides and PCBs	8080	μg/L
Organophosphorous Pesticides	8041A	μg/L
Chlorinated Herbicides	8151A	μg/L
Phthalate Esters	8060	μg/L
Phenols	8040	μg/L
Semi-Volatile Organic Compounds	8270C	μg/L
Volatile Organic Compounds	8260B	μg/L

The Discharger shall analyze for all constituents using the USEPA analytical methods indicated above, including MTBE and all constituents listed in Appendix II to 40 CFR, Part 258 (Subtitle D). Metals shall be field filtered before laboratory analysis.

6. Surface Water Monitoring

Annually, collect two stormwater samples pursuant to State Water Board Order No. 97-03-DWQ, General Permit No. CAS000001, as follows:

- Within one hour of the first storm event of the wet season (October 1 through April 30).
- During at least one other wet-season storm event, following a minimum of three working days without a stormwater discharge from the first storm event.

A storm event is an event that produces discharge from the sediment retention basin(s) to waters of the state. Collect (unfiltered) samples when there is a discharge from the stormwater sediment basins at the locations specified under Part I F.3.c of this Monitoring and Reporting Program. Collect samples within the first hour specified using automatic stormwater sampling devices located at each point of discharge from the stormwater sediment basins into the unnamed tributary (Figure A-1). The Discharger shall retrieve the sample collected by the stormwater sampling device:

- Within 30-days of the first storm event that causes a discharge from the stormwater sediment basins; or,
- Within the laboratory holding times necessary to analyze the constituents specified under Table 4 of this Monitoring and Reporting Program, whichever is sooner.

Table 4 Stormwater Monitoring Parameters ¹

Parameter	USEPA Method	Units
Specific Conductance	120.1	μS/cm
Nitrate & Nitrite as Nitrogen (30-day holding time)	300.0	mg/L
pH	Field	pH Units
Total Dissolved Solids	160.1	mg/L
Total Organic Carbon	9060	mg/L
Total Suspended Solids	160.2	mg/L
Nickel (unfiltered)	6010B	mg/L
Iron (unfiltered)	6010B	mg/L
Zinc (unfiltered)	6010B	mg/L
Cadmium (unfiltered)	6010B	mg/L

¹ Autosampler chamber must be stirred immediately before filling sample bottles.

Annually, collect a sediment sample from within each of the stormwater sediment basins, and analyze for the metals listed in §64431, CCR Title 22, Division 4, Chapter 15, Article 4. Sediment sampling is not required if each basins' accumulated sediments are removed prior to October 1 of each year and discharged into the Landfill's lined Waste Management Units.

7. Landfill Gas Collection System

Monitor gas monitoring probes GP-1 through GP-5, GP-7, and GP-8 (all screen intervals) semiannually for methane, carbon dioxide, oxygen, and volatile organic constituents. Test for volatile organic compounds annually using method TO-14 (or equivalent). Submit monitoring results to the Central Coast Water Board in semiannual reports and include information specified in Title 27, §20934.

8. Groundwater Flow Rate and Direction

The Discharger shall measure the water level in each DMP well at least semiannually as indicated in Table 2, including the times of expected highest and lowest elevations of the water level. The Discharger shall also determine horizontal and vertical gradients, groundwater flow rate, and flow direction for the respective groundwater body.

Sample Procurement Limitation

For any given monitored medium, the Discharger shall collect samples from Monitoring Points within a span not exceeding 30 days within a given Monitoring Period; collect samples in a manner that ensures sample independence to the greatest extent feasible.

PART II: SAMPLE COLLECTION AND ANALYSIS

A. SAMPLING AND ANALYTICAL METHODS

The Discharger shall collect, store, and analyze samples according to the most recent version of Standard U.S. Environmental Protection Agency (USEPA) methods (USEPA publication "SW-846"), and in accordance with a sampling and analysis plan approved by the Central Coast Water Board's Executive Officer. A laboratory certified for these analyses by the State of California Environmental Laboratory Program shall perform all water analyses and they must identify the specific methods of analysis. The director of the laboratory whose name appears in the certification shall supervise all analytical work in his/her laboratory and shall sign reports of such work submitted to the Central Coast Water Board. In addition, the Discharger is responsible for seeing that the laboratory analysis of samples from Monitoring Points meets the following restrictions:

- 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 analytical method having the lowest Method Detection Limit (MDL) shall be selected.
- Trace results (results falling between the MDL and the Practical Quantitation Limit) shall be reported as such.
- 3. MDLs and Practical Quantitation Limits (PQLs) shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. Both limits are defined in Part V and shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. If the laboratory suspects that, due to a change in matrix or their effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived values, the results shall be flagged accordingly, and an estimate of the limit actually achieved shall be included.
- 4. Report Quality Assurance and Quality Control (QA/QC) data along with the sample results to which it applies. Also report sample results that are unadjusted for blank results or spike recovery. The QA/QC data submittal shall include:
 - a. Method, equipment, and analytical detection limits;
 - b. Recovery rates, 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, and;
- g. Name and qualifications of the person(s) performing the analyses.
- 5. Report and flag (for easy reference) QA/QC analytical results involving detection of common laboratory contaminants in associated samples.
- 6. Identify, quantify, and report, to a reasonable extent, non-targeted chromatographic peaks. Perform second column or second method confirmation procedures when significant unknown peaks are encountered in attempt to identify and more accurately quantify the unknown analyte(s).

B. CONCENTRATION LIMIT DETERMINATION

- 1. For the purpose of establishing Concentration Limits for COC and Monitoring Parameters detected in greater than ten percent of a medium's samples, the Discharger shall:
 - a. Statistically analyze existing monitoring data (Part III), and propose, to the Executive Officer, statistically derived Concentration Limits for each COC and each Monitoring Parameter at each Monitoring Point for which sufficient data exist;
 - b. In cases where sufficient data for statistically determining Concentration Limits do not exist the Discharger shall collect samples and analyze for COC and Monitoring Parameter(s) which require additional data. Once sufficient data are 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;
 - c. Sample and analyze new Monitoring Points, including any added by this Order, until sufficient data are available to establish a proposed Concentration Limit for all COC and Monitoring Parameters. Once sufficient data are 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. Once established, review concentration limits a minimum of annually. Propose new concentration limits, when appropriate.

C. RECORD MAINTENANCE

The Discharger shall maintain records in accordance with CCR Title 27 §21720(f) and 40 CFR 258.29, including maintenance and retention of analytical records for a minimum of five years by the Discharger or laboratory. The Discharger shall extend the period of retention during the course of any unresolved litigation or when requested by the Executive Officer. Such records shall show the following of each sample:

- 1. Identification of sample, Monitoring Point from which sample was taken, and 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 personnel performing each analysis;

- 4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;
- 5. Results of analyses, and MDL and PQL for each analysis; and
- 6. A complete chain of custody log.

PART III: STATISTICAL AND NON-STATISTICAL ANALYSIS OF DATA

A. STATISTICAL ANALYSIS

For Detection Monitoring, the Discharger shall use statistical methods to analyze COC and Monitoring Parameters that exhibit concentrations that equal or exceed their respective MDL in at least ten percent of applicable historical samples. The Discharger may propose and use any statistical method that meets the requirements of California Code of Regulations, Title 27, §20415(e)(7). All statistical methods and programs proposed by the Discharger are subject to prior Executive Officer approval.

B. NON-STATISTICAL METHOD

For Detection Monitoring, the Discharger shall use the following non-statistical method for analyzing constituents which are detected in less than 10% of applicable historical samples. This method involves a two-step process:

- For constituents that this 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 under Part III.C.

C. RE-TEST PROCEDURE

- 1. In the event that the Discharger concludes that a release has been tentatively indicated, the Discharger shall carry out the reporting requirements of Part IV.C.2 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 requirements of Part IV.C.
- 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 an analyte of the VOC composite parameter is re-tested, report the results of the entire VOC composite.

PART IV: REPORTING

A. MONITORING REPORT

The Discharger shall submit a Monitoring Report semiannually by **April 30 and October 31** of each year. Submit the Monitoring Reports in an electronic format, with transmittal letter, text, tables, figures, laboratory analytical data, and appendices in PDF format. The Discharger is required to upload the full Monitoring Report into Geotracker, as stipulated by California State law. The Monitoring Report shall address all facts of the landfill's monitoring. The Monitoring Report shall include, but should not be limited to the following:

Letter of Transmittal

A letter transmitting the essential points shall accompany each report. The letter shall include a discussion of violations caused by the Landfill since submittal of the last such report. If the Discharger has not observed any new violations since the last submittal, the Discharger shall state this in the transmittal letter. Both the Monitoring Report and the transmittal letter shall be signed by: for private facilities, a principal executive officer at the level of vice president; for public agencies, the director of the agency. Upon Water 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.

Compliance Summary

The Summary shall contain at least:

a. Discussion of compliance with concentration limits, release indications, and any corrective actions taken.

3. Graphical Presentation of 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. 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. Where applicable, include Maximum Contaminant Levels (MCLs) and/or concentration limits along with graphs of constituent concentrations. When multiple samples are taken, graphs shall plot each datum, rather than plotting mean values.

The Discharger shall also determine horizontal gradients, groundwater flow rate, and flow direction for each respective groundwater body. Present this data on a figure that depicts groundwater contours and flow directions as well as gradient. Include one figure for each water level measuring period with the semiannual monitoring report.

4. Corrective Action Summary

Discuss significant aspects of any corrective action measures conducted during the Monitoring Period and the status of any ongoing corrective action efforts, including constituent trend analysis. Calculate pollutant load removed from the sites impacted media by mass (water, gas, leachate) removal system(s). Base the mass removal calculations 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

Summarize and report laboratory results and statements demonstrating compliance with Part II. Include results of analyses performed at the landfill that are outside of the requirements of this Monitoring and Reporting Program.

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 Detection Systems

A summary of the total volume of leachate collected each month since the previous Monitoring Report for each leachate collection system. Also include fluid level measurements in leachate collection and recovery system (LCRS) along with transducer calibration records. Tabulate and graph the LCRS fluid level measurements and fluid volumes in the semiannual reports.

8. Standard Observations

A summary of Standard Observations (Part V) made during the Monitoring Period.

9. Map(s)

The base map for the Monitoring Report shall consist of a current aerial photograph or include relative topographical features, along with Monitoring Points and features of the landfill facility.

B. ANNUAL SUMMARY REPORT

The Discharger shall submit an annual report to the Central Coast Water Board covering the previous monitoring year. The annual Monitoring Period ends on December 31 each year. Submit this Annual Summary Report no later than April 30 of each year. The Discharger may combine the Annual Summary Report with the Second Semiannual Monitoring Report of the year. The annual report must include the information outlined above and the following:

1. Discussion

Include a comprehensive discussion of the compliance record as it relates to Waste Discharge Requirements Order No. R3-2008-0050, 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 up-coming year.

2. Statistical Limit Review

The Discharger shall review the statistically derived concentration limits a minimum of annually and revise them as necessary. The Discharger shall discuss data collected during the past year and consider 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 compact disk, and ExcelTM format or in another file format acceptable to the Executive Officer.

4. Leachate Collection and Detection System

The Discharger shall submit the results of the annual leachate collection system testing, as required by Part I.F. Submit annual testing results that show that the leachate is non-hazardous, if leachate is used for dust control.

5. <u>Map(s)</u>

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 concerning the discovery of previously unreported seepage from the disposal area. File a written report with the Water Board within seven days, containing at least the following information:

- a. A map showing the location(s) of seepage along with photographic documentation;
- b. An estimate of the flow rate;
- c. Location of sample(s) collected for laboratory analysis, as appropriate;
- d. A description of the nature of the discharge (e.g. pertinent observations and analysis); and
- e. A summary of corrective measures both taken and proposed.

2. <u>Initial Release Indication Response</u>

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

- Within 24 hours, notify the Central Coast Water Board verbally or by email 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:
 - Shall carry out a discrete re-test in accordance with Part III.C. 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 IV.C.4. In any case, the Discharger shall inform the Water 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, §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.

Physical Evidence of a Release

If either the Discharger or the Executive Officer determines that there is significant physical evidence of a new release pursuant to Title 27, §20385(a)(3), the Discharger shall conclude that a release has been discovered and shall:

- a. Within seven days notify the Executive Officer of this fact by certified mail (or acknowledge the Executive Officer's determination):
- b. Carry out the requirements of Part IV.C.4. for potentially-affected medium; and
- c. Carry out any additional investigations stipulated in writing by the Executive Officer for the purpose of identifying the cause of the indication.

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:
 - (1) meets the requirements of Title 27, §20420 and §20425; and
 - (2) satisfies the requirements of 40 CFR §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, §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 Landfill has proceeded beyond the facility boundary, the Discharger shall notify persons who either own or reside upon the land that directly overlies any part of the plume and are immediately downgradient 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 V: 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 (Part III); 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)

An extensive list of constituents likely to be present in a typical municipal solid waste landfill. The COC 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 Monitoring and Reporting Program (groundwater, surface water, liquid, leachate, 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 Landfill are listed in **Part I. E**.

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.E**. The due date for any given report will be 30 days after the end of its Monitoring Period, unless otherwise stated.

I. 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. PQLs reported by the laboratory shall not simply by restated from USEPA analytical method manuals. Laboratory derived PQLs are expected to closely agree with published USEPA estimated quantitation limits (EQL).

J. RECEIVING WATERS

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

K. STANDARD OBSERVATIONS

- 1. For Receiving Waters:
 - a. Floating and suspended materials of waste origin; presence or absence, source, and size of affected area.
 - b. Discoloration and turbidity description of color, source, and size of affected area.
 - c. Evidence of odors; presence or absence, characterization, source, and distance of travel from source.
 - d. Evidence of beneficial use presence of water-associated wildlife; and
 - e. Flow rate to the receiving water.
 - f. Weather Conditions wind direction and estimated velocity, total precipitation during the

previous five days and on the day of observation.

2. For the Landfill:

- a. Whether stormwater drainage ditches and stormwater sediment basins contain liquids.;
- b. Evidence of liquid leaving or entering the Landfill, estimated size of affected area, and estimated flow rate (show affected area on map).:
- c. Evidence of odors; presence, characterization, source and distance from source;
- d. Evidence of ponding over the WMUs (show affected area on map);
- e. Evidence of erosion or of exposed waste;
- f. Evidence of waste in the drainage system (e.g., ditches and stormwater sediment basins);
- g. Inspection of stormwater discharge locations for evidence of non-stormwater discharges during dry season; and
- h. Integrity of drainage systems during wet season.

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 includes all VOCs detectable using USEPA Methods 8260B (water) and TO-14 (gas) or equivalent.

ORDERED BY: //ogun///>
Executive Officer/

Figure:

Figure A-1 Monitoring Point Location Map

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