



### Los Angeles Regional Water Quality Control Board

April 18, 2018

Mr. Matthew Baumgardner
Director of Operations
Ventura Regional Sanitation District
1001 Partridge Drive, Suite 150
Ventura, CA 93003-0704

REVISED WASTE DISCHARGE REQUIREMENTS - TOLAND ROAD LANDFILL, SANTA PAULA, CA (FILE 69-091, CI-5644, ORDER R4-2018-0058, GEOTRACKER ID. L10006875092)

Dear Mr. Baumgardner:

Reference is made to our letter to you, dated February 1, 2018, transmitting tentative Waste Discharge Requirements (WDRs) for the Toland Road Landfill. Pursuant to Division 7 of the California Water Code, this Regional Water Quality Control Board (Regional Board) at a public hearing held on April 12, 2018, reviewed the tentative requirements, considered all factors in the case, and adopted Order No. R4-2018-0058 (copy attached) that includes revised WDRs for the subject site. The revised WDRs package will be posted on the Regional Board's website at:

http://www.waterboards.ca.gov/losangeles/board\_decisions/adopted\_orders/.

Hard copies of the Order may be obtained by contacting the Regional Board staff listed below.

If you have any questions, please contact Dr. Enrique Casas (Project Manager), at (213) 620-2299 or enrique.casas@waterboards.ca.gov or Dr. Wen Yang, Chief of the Land Disposal Unit, at (213) 620-2253 or wen.yang@waterboards.ca.gov.

Sincerely,

CC:

Wen Yang, Ph.D, C.E.G.

Chief, Land Disposal Unit

Ms. Brianna St. Pierre, State Water Resources Control Board

Ms. Megan Emslander, CalRecycle

Mr. Sean Debley, Ventura County Environmental Health Division

# STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

#### ORDER NO. R4-2018-0058

# WASTE DISCHARGE REQUIREMENTS FOR MUNICIPAL SOLID WASTE DISPOSAL

# VENTURA REGIONAL SANITATION DISTRICT (TOLAND ROAD LANDFILL) (File No. 69-091)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

#### **BACKGROUND**

- 1. The Ventura Regional Sanitation District (Discharger), a public waste management agency in the County of Ventura, California, owns and operates the Class III municipal solid waste (MSW) Toland Road Landfill (Landfill) located in an unincorporated area of Ventura County between the cities of Santa Paula and Fillmore. The address of the Landfill is 3500 Toland Road, Santa Paula, CA 93060 (Figure 1, attached). The Landfill is centered at latitude N34° 24' 06" and longitude W118° 00' 49".
- 2. The following is a condensed chronologic history of the development of the Landfill and relevant Regional Board regulatory activities:
- a. The Landfill began operations in 1970 as a County landfill operated by the Ventura County Public Works Agency on a 161-acre leased property. Waste disposal was planned for approximately 53 acres within the property. The landfill was operated under an agreement between the County of Ventura, and the cities of Santa Paula and Fillmore. During its early history, the Landfill served the Santa Clara Valley (Santa Paula, Fillmore, Piru, and adjacent unincorporated areas). It was permitted to receive 135 tons per day (tpd) of waste, and had a permitted capacity of 6 million cubic yards or approximately 2.5 million tons of solid waste.
- b. On March 11, 1970, the Regional Board adopted Resolution No. 70-22 that included Waste Discharge Requirements (WDRs) regulating the operations of the Landfill.
  - c. In July 1972, the Discharger assumed the lease of the land and Landfill operations.
- d. In May 1975, the Ventura County Board of Supervisors issued Conditional Use Permit (CUP) No. 3141, finding that the operation of the Landfill were compatible with the agricultural land uses in the area.
  - e. In 1986, the Discharger purchased the property on which the Landfill is located. In 1988, The Discharger purchased an additional approximately 55-acre parcel adjoining the property to the south. The total acreage for the Landfill increased to approximately 216.5 acres (Figure 2).

- f. In October 1988, the Discharger submitted a revised Report of Waste Discharge (ROWD) for the continued disposal of nonhazardous solid waste and inert solid wastes at the Landfill in accordance with title 23, Chapter 15, of the California Code of Regulations.
- g. On October 6, 1995, the Discharger filed another revised ROWD, proposing to expand operations at the Landfill.
- h. On February 22, 1996, the Discharger's Board of Directors certified a Final Environmental Impact Report (EIR, SCH No. 95031009) in accordance with the California Environmental Quality Act (CEQA) for the expansion of the Landfill. The EIR proposed a vertical and lateral expansion that would have the capacity for a maximum of 30 million cubic yards, or a maximum of 15 million tons of solid waste. The Landfill's permitted daily tonnage would increase from 135 tpd to 1,500 tpd and an additional 33 acres of the property would be used for landfilling operations.
- i. On May 22, 1996, the Ventura County Board of Supervisors issued Conditional Use Permit (CUP) No. 3141(3) to the Discharger, providing for the expanded Landfill to be operated until the year 2027, or upon completion of the approved fill design, whichever came earlier. The permitted refuse footprint of the Landfill was increased to 91.4 acres.
- j. On July 15, 1996, the Regional Board adopted Order No. 96-053 to incorporate the expanded refuse footprint and to reflect changes in site conditions. Order No. 96-053 terminated Resolution No. 70-22.
- k. On July 25, 1996, the City of Fillmore and the City of Santa Paula (Cities) petitioned the adoption of Order No. 96-053 to the State Water Resources Control Board (State Board), citing seismic and water quality concerns. On August 12, 1996, the Ventura County Citizens to Stop Toland Landfill (Citizens), a group of primarily local property owners, petitioned the adoption of Order No. 96-053 to the State Board, also citing seismic and water quality concerns. On January 8, 1998, the Cities and the Discharger settled their litigation and, the Cities withdrew their petition of Order No. 96-053. On April 16, 1998, the State Board adopted Order No. WQ 98-02, denying the Citizens petition of Order No. 96-053.
- In March 1998, the Ventura County Planning Division issued an adjustment to CUP 3141 (3) to add 2.5 acres of non-fill cut-slope to the permit boundary. On December 20, 2001 the Ventura County Planning Division adopted a revision of CUP No. 3141(3) to expand the refuse footprint by approximately 5.4 acres in order to fill a small V-shaped depression on the approved fill plan and change the final slopes from 1:1 (horizontal:vertical) to 2.5:1 or greater in the area being modified. Pursuant to (CUP) No. 3141, the maximum elevation of the Landfill will be approximately 1,435 feet above mean sea level.
- m. On January 24, 2002, the Regional Board adopted Order No. R4-2002-023 to incorporate the expanded refuse footprint (Figure 3) and to reflect changes in site conditions. Order No. R4-2002-023 terminated Order No. 96-053.
- n. In November 2006, the Discharger released a Mitigated Negative Declaration / Initial Study for the Toland Road Landfill Biosolids and Electric Generation Project (Biosolids

Project) in accordance with CEQA. The Biosolids Project proposed to imported biosolids from Ventura County wastewater treatment plants as a local solution for the management of biosolids. The project included the construction and operation of electrical generators and biosolids drying facilities at the Landfill powered by landfill gas. Biosolids would be dried to meet the U.S. Environmental Protection Agency (EPA) Class A and/or Class B standard for use as alternative daily cover (ADC) at the Landfill and potentially for soil amendment uses. Wastewater generated as condensate from the drying the biosolids would meet the secondary-23 recycled water standard specified in section 60301 et seq., of title 22 of the California Code of Regulations (22 CCR) for use as dust control on the roads and/or surface irrigation or nonedible vegetation or landscaping. On January 11, 2007, the Discharger's Board of Directors adopted the Mitigated Negative Declaration / Initial Study for the Biosolids Project.

- On December 6, 2007, The Regional Board adopted Order R4-2007-0063 to reflect changes in site conditions, specifically the operation of the Biosolids Project. Order R4-2007-0063 terminated Order No. R4-2002-023 and include the current WDRs for the Landfill.
- p. On March 23, 2015, the Discharger became aware of excessive total coliform levels in the treated condensate generated from the Biosolids Project. In conjunction with increased costs for treatment equipment to meet air-quality emissions standards, the added costs for expanded wastewater treatment to address the excessive total coliform levels made the operation of the Biosolids Project prohibitively expensive. The Biosolids Project was discontinued and the dryer equipment dismantled. However, the electrical generation portion of the project is still in operation (Figure 4).
- q. On September 9, 2017, the Discharger submitted application materials to the County of Ventura Planning Department requesting modifications to CUP No. 3141 for the Landfill Optimization Plan Project. The proposed CUP modification would:
  - 1. Increase the maximum permitted daily amount of wastes from 1,500 tpd to 1,800 tpd;
  - 2. Eliminate the 2027 closure date of the Landfill:
  - 3. Eliminate the 15-million-ton lifetime cap of the Landfill; and
  - 4. Remove from the Conditions of Approval the decommissioned Biosolids Project facility.
- 3. The WDRs are being revised to include updated site information following the abandonment of the Biosolids Project, as well as to update the Landfill water quality detection monitoring program. However, the adoption of this Order has no bearing on whether or not the proposed modifications of CUP No. 3141 are approved.

#### **ENVIRONMENTAL SETTING**

4. The Landfill is underlain by Quarternary alluvial fan deposits and Tertiary aged marine bedrock of the Los Posas and Pico Formations (Figure 5). The bedrock formations, consisting of interbedded sandstones, siltstones, and claystones.

- 5. The Landfill lies within the Transverse Ranges physiographic province which is dominated by east-west trending folded and faulted mountain ranges that are the result of tectonic compressional forces. In the vicinity of the Landfill, the Ventura Basin is comprised mainly of the east-west trending Santa Clara syncline which is bounded on the south and north margins by the Oak Ridge and San Cayetano Faults, respectively.
- 6. Structural geologic models for the region indicate that the Culbertson Fault, mapped as a Holocene fault based on guidelines established by the California Division of Mines and Geology, and other similar faults such as the Thorpe and Orcutt faults, are the result of flexural slip within the overturned limb of the syncline that lies south of, and structurally below the San Cayetano Fault. The San Cayetano, Culbertson, and other faults and the overturned syncline exist within and are the product of north-south tectonic compression. The San Cayetano Fault, the nearest major active fault, is located approximately 1.7 km (1.1 miles) north of the Landfill.
- 7. Geologic features in the northeastern portion of the Landfill, identified through trenching studies by Fugro Consultants (1996, 1997, 1998, 2001), have been described as a possible trace of the Culbertson Fault. (Approximately 9,600 lineal feet of trenching was completed by the Discharger to evaluate the potential for onsite active faulting). A seismic evaluation completed by GeoLogic Associates in 2001, indicates that the episodic slip rates for this onsite fault can be ascribed to an aseismic slip model, indicating that the degree of risk associated with ground rupture along the fault is low.
- 8. The Seismic Hazard Zone Map for the Fillmore 7.5 minute quadrangle produced by the California Division of Mines and Geology Seismic Hazards Mapping Program indicates that proposed operational areas at the Landfill are located outside of identified liquefaction zones. The hazard zone map also identify areas where the previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions, indicate a potential for permanent ground displacements such that mitigation is required. The map shows that portions of the Landfill where continued development is proposed are located within a potential earthquake-induced landslide zone.
- 9. Groundwater at the Landfill, when present, is limited to canyon alluvium and fractured and weathered pockets in bedrock and moves slowly down canyon towards the Santa Clara-Sespe area of the Ventura Central Groundwater Basin (Figure 6). Generally, the Pico Formation acts as a regional aquitard to the permeable Saugus Formation, which primarily composes the Ventura Central Groundwater Basin. The Saugus Formation does not underlie the Landfill.
- 10. Groundwater in bedrock underlying the Landfill is distinctly sodium chloride and sodium sulfate in chemical nature, typically displaying total dissolved solids (TDS) concentrations in excess of 5,000 milligrams per liter.
- 11. The Landfill is surrounded on three sides by ridges that restrict inflow and is at the top of a watershed. Groundwater flows in alluvium, weathered bedrock, or fractured bedrock, which generally following surface topography and exiting the canyon to the south. Water exiting the canyon eventually enters the water bearing strata of the Santa Clara River watershed.
- 12. The Landfill is located outside of a 100-year flood plain according to the 1994 Ventura County General Plan.

- 13. Climatic conditions at the Landfill are semi-arid. Rainfall typically occurs between November and April with very little rainfall during the summer months. Average annual precipitation in the area is approximately 14.8 inches. Average annual evaporation in the area is approximately 57.2 inches.
- 14. The Landfill is under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). The VCAPCD issued Authority to Construct and granted Permit to Operate No. 1395 for the Landfill in July 1993. The units included under this permit include the Landfill gas collection and flare system.
- 15. Surrounding land uses of the Landfill include open space and agricultural lands.
- 16. The postclosure land use of those portions of the Landfill on which solid waste fill has been or will be placed is designated as open space.

# **EXISTING ENVIRONMENTAL PROTECTION AND MONITORING SYSTEMS**

- 17. All wastes disposed of at the Landfill prior to August 1996 are restricted to the area that is referred as the "Old Landfill", which is unlined (Figure 7). The subsequent Phase 1 vertical expansion was filled on top of wastes in the Old Landfill. Between the Phase 1 expansion and the Old Landfill wastes, a two-foot thick low permeability intermediate soil barrier (i.e., 1x10-6 centimeters per second) was installed to isolate Old Landfill wastes from the Phase 1 expansion. A landfill gas collection system was installed beneath the intermediate soil barrier to extract landfill gas from the Old Landfill. A leachate collection and removal system (LCRS) was installed on top of the intermediate soil barrier to remove leachate from Phase 1 waste (Figure 8).
- 18. Engineered containment features for all continued development of the Landfill will be constructed to the prescriptive standards of 27 CCR and title 40 of the Code of Federal Regulations (40 CFR) or equivalent performance standards. This Order specifies that final design and construction methods for proposed engineered environmental control systems be reviewed and approved by the Regional Board Executive Officer prior to installation and use.
- 19. Section 20260 of 27 CCR requires the installation of a clay liner when site characteristics alone are not adequate to ensure protection of the quality of groundwater or surface water. Section 20080(b) of 27 CCR allows the Regional Board to approve engineered alternatives to constructions or prescriptive standards in applicable regulations if it is demonstrated that the construction or prescriptive standard is not feasible and that the proposed engineered alternative affords equivalent protection against water quality impairment.
- 20. The Discharger has constructed liner systems under all expansion areas at the Landfill. Engineered containment features include geosynthetic clay liner (GCL) and a high density polyethylene (HDPE) base liners installed beyond the footprint of the Old Landfill, GCL and HDPE liner systems installed on sideslopes, a LCRS, ground water monitoring systems, and a landfill gas collection system. This Order specifies that no disposal of wastes shall occur in a new area until the corresponding construction is complete and approved by Regional Board staff.

- 21. Section 20370 of 27 CCR requires that hazardous and designated waste landfills be designed to withstand a maximum credible earthquake (MCE) and MSW units be designed to withstand a maximum probable earthquake (MPE) without damage to the foundation or to the structures which control leachate, surface drainage, or erosion, or gas. This Regional Board requires that MSW landfills must be designed to withstand a MCE to prevent failure of the final refuse fill.
- 22. A revised seismic hazard evaluation conducted for the site by GeoSyntec Consultants (2008) indicated a MCE characterized by a Moment Magnitude 6.8 event on the Santa Cayetano Fault, which is located 0.9 miles from the Landfill, induced Peak Horizontal Ground Acceleration (PHGA) of 0.48g to 0.52g in the bedrock and a PHGA of up to 0.70g at the Landfill top deck.
- 23. The Discharger operates a landfill-gas management system at the Landfill that is designed and operated to actively collect and control landfill gas generated within the Landfill. The system consists of a network of vertical and horizontal extraction wells, laterals, headers, condensate management systems, flares, and a landfill gas-to-energy facility (Figure 9). Condensate from the facility is collected and conveyed to an existing condensate collection and disposal system.
- 24. Landfill gas migration monitoring probes are installed along the southern boundary of the Landfill (Figure 10). These probes are currently monitored on a monthly basis pursuant to requirements of the California Department of Resources Recycling and Recovery (CalRecycle). The perimeter monitoring network is limited to the southern boundary because there are no inhabitable structures within 1,000 feet of the property boundary to the west, north, and east of the Landfill.
- 25. Surface water runoff from the Landfill drains primarily in a southerly direction. Storm water at the Landfill is controlled by channeled ditches, pipelines, drainage benches and drainage structures (Figure 11) that are designed and maintained to accommodate flows from the 100-year frequency, 24-hour duration storm in accordance with section 20365 of 27 CCR.
- 26. Stormwater monitoring at the Landfill is conducted pursuant to the State Board general industrial storm water permit, Order 2014-0057-DWQ (Storm Water Permit).
- 27. A solid waste assessment test (SWAT) analysis, consistent with the requirements of section 13273 of the California Water Code (CWC) was conducted between February 1988 and October 1989 for the Landfill. SWAT results indicated that the Landfill had not adversely impacted the beneficial uses of groundwater. Since then, the Discharger has continued implementing a groundwater monitoring program to regularly evaluate groundwater quality at the Landfill.
- 28. An unsaturated zone (vadose zone) monitoring program is required for the Landfill pursuant to 27 CCR, section 21769. The intent of an unsaturated zone monitoring program is to monitor unsaturated soils/bedrock between the waste management unit and groundwater to provide an early indication of potential groundwater quality degradation. The Discharger installed three unsaturated zone monitoring wells at the toe of the existing Landfill consisting of suction lysimeters. However, the unsaturated zone monitoring system proved ineffective in supplementing water quality monitoring because the lysimeters consistently failed to yield a sufficient volume of water to allow analysis. Moreover, they were redundant to other

- alluvial monitoring wells located further downgradient of the Landfill. On March 17, 2006, the Regional Board Executive Officer approved discontinuing monitoring of the unsaturated zone monitoring wells.
- 29. Historically, there have been three groundwater seeps near the boundaries of the Landfill. Monitoring of the seeps has proved ineffective because collection of water samples has been problematic as the seeps often failed to yield an adequate volume of water to allow analysis. On March 17, 2006, the Regional Board Executive Officer approved discontinuing monitoring of the historic groundwater seeps.
- 30. Wastewaters produced at the Landfill are treated using granular activated-carbon adsorbing filters, or equivalent technology, and used onsite for dust suppression purposes. Prior to use, the water must meet all conditions of Section G (Requirements for Onsite Water Use) of this Order.
- 31. Pursuant to 27 CCR sections 20090(b) and (e), 20200(d), 20340(g) and 40 CFR section 258.28, reintroduction of leachate and gas condensate back into the Landfill is an acceptable practice under specific conditions. The conditions that apply to the Landfill are: (1) the receiving unit has an LCRS; (2) the receiving unit has at least the same classification as the unit(s) from which the leachate was extracted; (3) the discharge of leachate to a different unit must be approved by the Regional Board; and (4) the discharge of leachate shall not exceed the moisture holding capacity of the receiving unit. On April 26, 2010, the Regional Board Executive Officer approved reintroduction of leachate and gas condensate (Figure 12) over portions of the Landfill that are equipped with a LCRS. This Order includes requirements for the reintroduction of leachate and gas condensate back into the Landfill.
- 32. The Discharger continues to implement a Hazardous Waste Exclusion Program (a waste-load-checking program) to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable materials at the Landfill. Intercepted hazardous materials are temporarily stored in a dedicated hazardous waste storage area and then disposed of at a permitted hazardous waste facility according to hazardous waste laws.
- 33. The Discharger submitted preliminary closure and post closure maintenance plans (PCPCMP) on May 1996 that were most recently updated in September 2016. In accordance with 27 CCR, the final cover system includes three distinct layers defined as follows:
  - a. Foundation Layer A two-foot layer of soil placed between the daily cover and the low permeability layer.
  - b. Low Permeability Layer (clay) A one-foot layer of low permeability (1x10<sup>-6</sup> cm/sec) compacted clay placed between the foundation and vegetative layers.
  - c. Vegetative Layer A minimum one-foot layer of soil suitable to propagate vegetation placed on top of the compacted clay layer.

#### REGULATORY REQUIREMENTS

34. On June 13, 1994, this Regional Board adopted a revised Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). The Basin Plan

(including its subsequent amendments) designates beneficial uses and water quality objectives for the area of the Landfill. The Basin Plan designates beneficial uses (municipal, domestic and agricultural supply, industrial service and process supply) and establishes water quality objectives for protection of beneficial these uses in the Santa Clara – Santa Paula area of the Ventura Central Groundwater Basin. The requirements in this Order, as they are met, will be in conformance with the goals of the Basin Plan.

35. The following are water quality objectives established in the Basin Plan for groundwater in the Ventura Central Groundwater Basin:

Constituents	<u>Units</u>	Maximum Value
TDS	milligrams per liter (mg/L)	1000
Sulfate	mg/L	400
Chloride	mg/L	50
Boron	mg/L	0.7

In addition, the Basin Plan indicates that water designated for use as domestic or municipal supply shall not contain concentrations of chemical constituents in excess of the limits specified in provisions of 22 CCR, including section 64431 for inorganic chemicals, section 64431 for fluoride, and section 64444 for organic chemicals.

- 36. The Landfill is located within the Fillmore Hydrologic Subarea of the Sespe Hydrologic Subunit in the Santa Clara-Calleguas Hydrologic Unit that is outlined in the Basin Plan. The existing beneficial uses of the Fillmore Hydrologic Subarea are municipal and domestic supply, agricultural supply, industrial service supply, groundwater recharge, freshwater replenishment, water contact and non-contact recreation, warm freshwater habitat, wetland habitat, wildlife habitat, rare, threatened and endangered species habitat, and migration of aquatic organisms habitat.
- 37. On October 9, 1991, the United States Environmental Protection Agency (USEPA), under 40 CFR, revised existing regulations for MSW disposal facilities in response to the 1984 Hazardous and Solid Waste Amendments of the Resource Conservation and Recovery Act (RCRA) and added detailed requirements addressing location restriction, facility operation and design criteria, groundwater monitoring and corrective action, closure and postclosure maintenance, and financial assurance. As responsible agencies for an approved state, the California State Water Resources Control Board (State Board) and the Regional Board revised WDRs for each MSW landfill in the Region to implement the federal 40 CFR regulatory requirements (State Board Resolution No. 93-62 and Regional Board Order No. 93-62, respectively). Regional Board Order No. 93-062, also known as the Super Order, was adopted on September 27, 1993.
- 38. On January 29, 2006, the Regional Board adopted Order R4-2006-0007 as Addendum No. 1 to Order No. 93-062 establishing requirements for the acceptance of treated wood waste (TWW) at MSW landfills throughout the Region, including the Landfill. Order R4-2006-0007 provides that, pursuant to California Health and Safety Code (HSC) sections 25143.1.5 and 25150.7, as amended in 2004, TWW can be discharged to a composite lined portion of a MSW landfill.
- 39. Under the Solid Waste Disposal Regulatory Reform Act of 1993, the California Legislature streamlined the state's solid waste disposal regulatory process by developing one

consolidated set of solid waste disposal facility regulations. The revised regulations, promulgated under 27 CCR, clarified the roles and responsibilities of CalRecycle and the State Board/Regional Boards in regulating MSW disposal sites. While the State Board and Regional Boards are the state agencies designated to protect water quality resulting from solid waste disposal activities, CalRecycle regulates all other aspects of solid waste disposal in the State.

- 40. The 27 CCR regulations combine prior disposal site/landfill regulations of CalRecycle and the State Board/Regional Boards that were maintained in title 14 and title 23 of the California Code of Regulations (14 CCR and 23 CCR). The requirements in this Order conform with the relevant regulations of 27 CCR, and the Porter-Cologne Water Quality Control Act (commencing with CWC section 13000).
- 41. The County of Ventura, Environmental Health Services, Solid Waste Program, is the local enforcement agency for CalRecycle in Ventura County where the Landfill is located.
- 42. CWC section 13267(b) authorizes the regional boards to require a person who discharged waste or is suspected of having discharged waste to furnish technical and monitoring reports. The technical and monitoring reports required by this Order and the attached Monitoring and Reporting Program No. CI-5644 (MRP) are necessary to assure compliance with these waste discharge requirements.
- 43. The State Board has implemented regulations that require the electronic submittal of information (ESI) for Groundwater Cleanup programs (section 3890 et seq. of 23 CCR and 27 CCR, division 3). Starting January 1, 2005, required electronic submittal and submittal of a portable data format (PDF) copy of certain reports was extended to include all State Board groundwater cleanup programs, including the Land Disposal Program. The requirements contained in this Order conform with the ESI reporting regulations. Documents that cannot be conveniently reviewed in electronic format, such as large maps or drawings, shall be submitted as hard copies to the Regional Board office at:

California Regional Water Quality Control Board Los Angeles Region 320 W. 4th Street, Suite 200 Los Angeles, California 90013 ATTN: Land Disposal Unit

#### **ADMINISTRATIVE**

- 44. Definitions of terms used in this Order shall be as set forth in 27 CCR section 20164, 14 CCR section 17381, CWC section 13050, 40 CFR part 258.2, the General Order, and other applicable state and federal regulations.
- 45. State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California") requires whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality must be maintained. Resolution 68-16 only allows change in the existing high quality if it has been demonstrated to the Water Board that the change is consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses of such water, and will not result in water quality less

than that prescribed in the policies. Resolution 68-16 further requires that discharges meet WDRs which will result in the best practicable treatment or control of the discharge necessary to assure that (a) pollution or nuisance will not occur and (b) the highest water quality consistent with the maximum benefit to the people of the State will be maintained. Resolution 68-16 incorporates the federal "anti-degradation" policy ( 40 CCR section 131.12). This Order is consistent with these policies. This Order prohibits discharges of waste to surface waters except in specified circumstances that are consistent with federal regulations, requires Dischargers to manage waste and waste disposal to prevent degradation of groundwater, and requires Dischargers to manage waste to minimize odors and prohibit nuisance conditions. The Water Board finds that under normal operating conditions:

- a. The discharge conditions and effluent limitations established in this Order will ensure that the existing beneficial uses and quality of waters of the State in the Region will be maintained and protected, and
- b. Discharges regulated by this Order will not degrade existing water quality if the terms and conditions of this Order are met.
- 46. Revision of WDRs for the Landfill constitutes an existing project as defined in section 15301, chapter 3, of 14 CCR and is therefore exempt from the provisions of the CEQA (Public Resources Code section 21000 et seq.).
- 47. The Regional Board has notified interested agencies and all known interested persons of its intent to adopt WDRs for this discharge and has provided them with an opportunity to submit their written views and recommendations. The Regional Board in a public meeting on April 12, 2018 heard and considered all comments pertaining to the discharge and to the tentative requirements.
- 48. Any person aggrieved by this action of the Regional Board may petition the State Water Board to review the action in accordance with CWC section 13320 and 23 CCR section 2050 and following. The State Water Board must receive the petition by 5:00 p.m., thirty days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations found on the Internet filing petitions may be applicable http://www.waterboards.ca.gov/public notices/petitions/water\_quality or will be provided upon request.

IT IS HEREBY ORDERED, that the Discharger shall comply with the following requirements at the Landfill:

#### A. SPECIFICATIONS

- The Discharger shall only accept waste for disposal at the Landfill that is deemed acceptable for disposal at a MSW facility by the Regional Board through orders or regulations.
- 2. Wastes disposed of at the Landfill shall be limited to municipal solid wastes (as described in 27 CCR section 20220(a)), inert waste (as described in 27 CCR section

20230), water treatment sludge, treatment plant sludge, TWW, and non-hazardous, non-designated contaminated soils, and related wastes.

- 3. Non-hazardous solid waste means all putrescible and non-putrescible solid, semi-solid and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded waste (whether of solid or semi-solid consistency); provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of waters of the state (i.e., designated waste).
- 4. Dewatered sewage sludge (including preliminary bar screening and grit chamber material) or water treatment sludge may be discharged under the following conditions:
  - Sludge shall only be disposed of in areas equipped with liner and LCRS systems, provided it contains at least twenty percent solids if primary sludge, or at least fifteen percent solids if secondary sludge, mixtures of primary or secondary sludges, or water treatment sludge; and
  - b. A minimum solids-to-liquids ratio of five-to-one (5:1) by weight shall be maintained to ensure that the co-disposal will not exceed the initial moisture-holding capacity of the nonhazardous solid waste.
  - 5. TWW may be disposed of at the Landfill under the following conditions:
    - a. TWW shall only be disposed of in areas equipped with liner and LCRS systems;
    - b. The TWW is managed so as to prevent scavenging;
    - c. Any management of the TWW at the Landfill prior to disposal, or in lieu of disposal, complies with applicable HSC requirements; and
    - d. TWW disposal shall be discontinued if monitoring of the Landfill where TWW disposal has occurred indicates a verified release until corrective action results in cessation of the release.

#### **B. UNACCEPTABLE MATERIALS**

- 1. No hazardous wastes (as defined in 22 CCR section 66261.3 et seq.), designated wastes (as defined in CWC section 13173), or special wastes (27 CCR section 20164, as categorized in 22 CCR sections 66261.120, 66261.122, and 66261.124), such as liquids, oils, waxes, tars, soaps, solvents, or readily water-soluble solids, such as salts, borax, lye, caustic or acids shall be disposed of at the Landfill.
- 2. No semi-solid wastes shall be disposed of at the Landfill, except sludges under conditions set forth in section A.4 (Dewatered Sewage) of these WDRs, or unless they are first processed in a solidification operation. Semi-solid waste means waste containing less than fifty percent solids, as described in 27 CCR section 20200(d)(3). In cases of spoiled, discarded, or expired semi-solid food wastes, Regional Board staff is

authorized to approve solidification or waste disposal operations at the Landfill on a case-by-case basis.

- 3. No radioactive waste, including low level radioactive waste, as defined by the agency with jurisdictional authority, shall be disposed of at the Landfill.
- 4. No materials that are of a toxic nature, such as insecticides, poisons or hazardous materials shall be disposed of at the Landfill.
- 5. No medical wastes, including infectious materials, hospital or laboratory wastes, except those authorized for disposal to land by the agency with jurisdictional authority for the control of plant, animal and human disease, shall be disposed of at the Landfill.
- 6. No pesticide containers shall be disposed of at the Landfill, unless they are rendered nonhazardous by triple rinsing. Otherwise, they must be hauled offsite to a legal point of disposal.
- 7. No septic tank or chemical toilet wastes shall be disposed of at the Landfill.

#### C. PROHIBITIONS

- 1. The discharge of waste to land as a result of inadequate waste disposal practices, and that have not been specifically described to the Regional Board and for which valid WDRs are not in force, are prohibited.
- 2. The discharge of waste shall not:
  - a. cause the occurrence of coliform or pathogenic organisms in the groundwater basin;
  - b. cause the occurrence of objectionable tastes or odors in the groundwater basin;
  - c. cause waters pumped from a groundwater basin to foam;
  - d. cause the presence of toxic materials in the groundwater basin;
  - e. cause the pH of waters in the groundwater basin to fall below 6.5, or rise above 8.5;
  - f. cause the Regional Board's objectives for groundwater or surface waters as established in the Basin Plan to be exceeded; or
  - g. cause pollution, contamination, or nuisance, as defined in CWC section 13050, or adversely affect beneficial uses of groundwater or surface waters as established in the Basin Plan.
- 3. Odors, vectors, and other nuisances originating from waste that migrate beyond the limits of the Landfill are prohibited.
- 4. The discharge of waste to surface drainage courses or groundwater is prohibited.
- 5. The Discharger shall conduct site operations such that no constituents of concern

- (COCs) shall exhibit a measurably significant increase over its respective concentration limit (background data set) at any well, as indicated by an approved statistical or non-statistical data analysis method (including the method retesting approach).
- 6. The Discharger shall comply with all federal, state, and county sanitary health codes, rules, regulations, and ordinances pertinent to the disposal of wastes on land and the operation and maintenance of the Landfill.

#### D. REQUIREMENTS FOR DISPOSAL SITE OPERATIONS

- The Discharger shall maintain an operating record for the Landfill in accordance with 40 CFR section 258.29(a). All records of Landfill operations, construction, inspection, monitoring and remediation, and copies of design plans, construction quality assurance documents, monitoring reports, and technical reports that are submitted to regulatory agencies, shall be included in the operating record.
- 2. The Discharger shall comply with notification procedures contained in CWC section 13271 in regards to the discharge of hazardous wastes. The Discharger shall remove and relocate to a legal point of disposal any wastes that are discharged at the Landfill in violation of these requirements. For the purpose of these requirements, a legal point of disposal is defined as a point of disposal for which a California regional water quality control board has established WDRs with which the point of disposal is in full compliance. The Discharger shall inform the Regional Board pursuant to ESI reporting requirements within seven days when the Discharger determines that relocation of wastes is necessary. The source and final disposition (and location) of the wastes, as well as methods undertaken to prevent future recurrence of such disposal shall also be reported.
- The Landfill shall be graded and maintained to promote run-off of precipitation and to prevent ponding of liquids and surface water. Erosion or washout of refuse or cover materials by surface flows shall be controlled to prevent offsite migration.
- 4. All wastes shall be covered at least once during each 24-hour period in accordance with 27 CCR sections 20680, 20690, and 20705. Intermediate cover over wastes discharged to the Landfill shall be designed and constructed to minimize percolation of precipitation through wastes and contact with waste materials.
- Wastes deposited at the Landfill shall be confined thereto, and shall not be permitted to blow, fall, or otherwise migrate off the site, or to enter off site water drainage facilities or watercourses.
- 6. CalRecycle has approved the Discharger to use tarps, greenwaste, dredge materials, and contaminated soils as ADC at the Landfill. The Discharger may evaluate the use of other materials as alternative cover materials in the future consistent with section 20690 of 27 CCR. Sludge-derived material shall not be used as ADC in areas of the Landfill where public access is permitted.
- 7. The migration of gases from the Landfill shall be controlled as necessary to prevent water pollution, nuisance, or health hazards.

- 8. Leachate and gas condensate collected at the Landfill may be returned to the Landfill as described in the report *Landfill Liquids Reintroduction*, dated June, 12 2009, which was approved by the Regional Board Executive Officer on April 26, 2010, and meets the following requirements:
  - a. Spray application to the working disposal areas is prohibited.
  - b. The Discharger shall limit liquids reintroduction at the Landfill to areas underlain by a composite liner. No portion of a gallery, trench, or well used for liquids reintroduction shall be constructed within 100 feet of the vertical boundary of existing composite liner limits.
  - c. The Discharger shall routinely monitor for visible seeps and evaluate the potential migration of reintroduced liquids beyond composite-lined areas of the Landfill.
  - d. The Discharger shall provide notification to Regional Board staff a minimum of thirty days prior to the construction of any liquids reintroduction facilities, including an updated map showing all galleries, trenches, or wells.
  - e. The Discharger shall routinely monitor the amount of leachate and condensate produced and the volumes reintroduced at each gallery, trench, or well. A summary of the leachate and condensate production and reintroduction shall be reported semiannually pursuant to requirements of MRP No. CI-5644.
- 9. The Discharger shall intercept and remove any liquid detected in a Landfill LCRS to a legal point of disposal unless it is returned to the Landfill as described in the report Landfill Liquids Reintroduction, dated June, 12 2009, or otherwise approved by the Regional Board Executive Officer. If any liquid is determined to be hazardous, a licensed hazardous waste hauler shall transport all such liquid to an approved treatment and disposal facility.
- 10. In any area within the Landfill where a natural spring or seep is observed, provisions shall be made and/or facilities shall be provided to ensure that this water will not come in contact with decomposable refuse in the Landfill. The locations of all springs and seeps found prior to, during, or after placement of waste material that could affect the Landfill shall be reported to the Regional Board semiannually pursuant to requirements of MRP No. CI-5644.
- 11. In accordance with 27 CCR section 20240(c), waste material shall not be discharged on any ground surface that is less than five feet above the highest anticipated groundwater elevation. The base of the treatment zone, which is defined as the bottom of the LCRS layer of the liner system, shall be a minimum of five feet above the highest anticipated elevation of underlying groundwater.
- 12. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, and adequate laboratory and process controls including appropriate quality assurance procedures.

- 13. No wastewater or storm water shall leave the Landfill except as permitted by a NPDES permit issued in accordance with the federal Clean Water Act (CWA) and the CWC, commencing with section 13000.
- 14. Any abandoned wells or bore holes under the control of the Discharger, and situated within the Landfill boundaries, must be located and properly modified or sealed to prevent mixing of any waters between adjacent water-bearing zones. A notice of intent to decommission a well must be filed with the appropriate regulatory agencies prior to decommissioning. Procedures used to decommission these wells, or to modify wells still in use, must conform to the specifications of the local health department or other appropriate agencies.
- 15. The Discharger shall report to the Regional Board any noncompliance or any incident resulting from Landfill operations that are in violation of this Order. Any such information shall be provided verbally to Regional Board staff within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission pursuant to ESI reporting requirements shall also be provided to the Regional Board Executive Officer within seven days of the time that the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance.
- 16. The Discharger shall establish and maintain a sufficient number of benchmarks at the Landfill to enable reference to key elevations and to permit control of critical grading and compaction operations.
- 17. The Discharger shall submit to the Regional Board and to CalRecycle evidence of financial assurance for closure and postclosure maintenance, pursuant to 27 CCR sections 22200 through 22278. The postclosure period shall be at least thirty years. However, the postclosure maintenance period shall extend as long as wastes pose a threat to water quality.
- 18. In accordance with Section 22220 of 27 CCR, the Discharger maintains assurance of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the existing Landfill (27 CCR 22220 et seq.). The Discharger shall work with CalRecycle staff to provide and maintain acceptable financial assurance mechanisms for corrective action.
- 19. The Discharger shall continue to implement a waste load-checking program at the Landfill to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable wastes.

# E. REQUIREMENTS FOR CONTAINMENT SYSTEMS

 Design specifications, including any alternative design proposal meeting the prescriptive standards and/or performance goals of 27 CCR, are subject to the Regional Board Executive Officer's approval prior to construction of any containment structure. The Discharger shall submit detailed design plans, specifications, and descriptions for all proposed containment structures and construction features for the Regional Board

Executive Officer's approval at least 90 days prior to construction. The design plans shall contain detailed quality assurance/quality control requirements for the proposed construction as required by 27 CCR.

- 2. As part of the design report for a composite liner phase, the Discharger shall include a report updating seismic stability analyses for the area of the composite liner phase. Specifically, the report shall substantiate the basis for how the MPE was selected and/or calculated for the site, confirm conformance with MCE requirements in section 258.14(b)(1) of 40 CFR, Part 258, Subpart B and the Regional Board policy that all final Landfill refuse fills incorporate the MCE to resist settlement and prevent failure, and conform to the proposed waste mass thickness/configuration. Moreover, the report shall include copies of all information or conclusions reached by the Discharger cited in the report. Subsequently, as part of the technical design for each composite liner phase constructed at the Landfill, the Discharger shall submit an updated seismic design analysis report that includes:
  - a. A summary of subsurface geological data used in the stability design of the composite liner phase. Specifically, soils data for any alluvium present, information regarding the location, extent, and any investigations performed on existing landslides, and updated groundwater data to confirm the historical high groundwater elevation.
  - b. Laboratory testing/data to confirm the engineering properties used in the liner system, including shear strength values, for all geomembrane/geotextile, alluvium, bedrock, and engineered fill materials.
  - c. Critical interface strength data, either actual laboratory testing data or from the literature, between all layers in the liner system, to support the slope stability analysis in the design report.
  - d. A liquefaction analysis for any areas where a significant amount of saturated alluvium is to remain after excavation for the composite liner foundation.
- 3. All containment structures and erosion and drainage control systems at the Landfill shall be designed and constructed under direct supervision of a California-registered civil engineer or certified engineering geologist, and shall be certified by the individual as meeting the prescriptive standards and/or performance goals of 27 CCR.
- 4. The Landfill shall be designed, constructed, and maintained to prevent, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout in compliance with 27 CCR sections 20365 and 21090(b)(1) which could occur as a result of precipitation from a 100-year, 24-hour frequency storm. This shall be accomplished by, at a minimum, the following:
  - a. Top deck surfaces shall be constructed to achieve a minimum of three percent slope, including structures which direct water to downdrains;
  - Downdrains and other necessary drainage structures must be constructed for all sideslopes as necessary; and

- All components of the facility drainage system must be designed and constructed to withstand site-specific maximum intensity precipitation (peak flow) from a 100-year, 24-hour storm.
- The Discharger shall install new and replacement landfill gas probes and gas collections systems (wells and trenches) necessary to maintain landfill gas control throughout the Landfill.
  - 6. Leachate and landfill-gas condensate containment systems shall be protected and maintained continuously to ensure their effectiveness and to prevent commingling of leachate and gas condensate with surface water run-on and run-off.
- 7. The Discharger shall design, construct, and maintain:
  - a. A run-on drainage control system to prevent flow from offsite sources onto the disposal areas of the Landfill (active or inactive portions), and to collect and divert both the calculated volume of precipitation and the peak flow from offsite sources that result from a 100-year, 24-hour storm. When necessary, temporary structures shall be installed as needed to comply with this requirement;
- A runoff drainage control system to minimize sheet flow from the disposal areas, and to collect and divert both the calculated volume of precipitation and the peak flow from onsite surface runoff that results from a 100-year, 24-hour storm; and
  - c. Drainage control structures to divert natural seepage from native ground and to prevent such seepage from entering the waste management units.
  - d. All drainage structures shall be protected and maintained continuously to ensure their effectiveness.
  - 8. Periodic inspection of the Landfill, including drainage control systems and all containment structures shall be performed to assess the conditions of these facilities and to maintain compliance with this Order.
  - 9. The static factor-of-safety (FOS) of final configurations of the Landfill, including liner systems, final covers, and cut and fill slopes, shall not be less than 1.5, while the static FOS for interim slopes (slopes existing for a period less than six months) shall not be less than 1.2.
- 10. Landfill refuse slopes shall be designed pursuant to the requirements in 27 CCR and constructed in a manner that will resist settlement and prevent failure during an MPE for interim slopes, or an MCE for final refuse slopes. Critical slopes shall be designed to have an FOS no less than 1.5. If a Newmark-type seismic deformation analysis is used in lieu of achieving an FOS of no less than 1.5, the calculated permanent seismic deformation must not exceed six inches for liner system and must not exceed 36 inches for the final cover.
- 11. Prior to start of construction of any containment structure in native areas, a geologic map of the final excavation grade shall be prepared for review, approval, and confirmation in the field by Regional Board staff.

- 12. The construction report, including construction quality assurance (CQA) data and drawings documenting "as-built" conditions, shall be submitted within 60 days after the completion of construction. If the "as-built" conditions are virtually identical to the approved preliminary plans and specifications, only change sheets need be submitted in lieu of a complete set of drawings.
- 13. No waste disposal operations shall occur in a new area until the corresponding construction is completed, certified to meet design standards by the engineer of record, and approved by the Regional Board staff.
- 14. The Discharger shall perform an annual testing per 27 CCR section 20340(d) of all LCRS to demonstrate their operating efficiency during the operational, closure and postclosure maintenance periods of the Landfill.

#### F. REQUIREMENTS FOR GROUNDWATER MONITORING

- 1. In accordance with 27 CCR section 20390, the water quality protection standards (WQPS) for the Landfill are established as the natural background groundwater quality at the Landfill, which is set to either the statistically predicted value (if the constituent naturally exists) or the laboratory detection limit (if the constituent does not naturally exist in the water). WQPS that have been calculated based on available water quality data are included in MRP No. CI-5644. The following are five parts of the WQPS as established by the Regional Board:
  - a. WQPS may be modified for site specific purposes by the Regional Board based on more recent or complete groundwater monitoring data such as from the monitoring network required by this Order, changes in background water quality, or for any other reason deemed valid by the Regional Board Executive Officer. Proposed changes must be in accordance with guidelines described in appropriate sections of 27 CCR.
  - b. The Discharger shall test for the monitoring parameters and the COCs listed in MRP No. CI-5644.
  - c. Concentration Limits The concentration limit for each monitoring parameter and COC for each monitoring point shall be its background value as calculated using an appropriate statistical methodology for a given reporting period.
  - d. Monitoring points (perimeter monitoring points and points of compliance for detection monitoring shall be those listed in MRP No. CI-5644. The points of compliance extend through the zone of saturation.
  - e. Compliance period The compliance period for the Landfill, (i.e. the minimum period of time during which the Discharger shall conduct a water quality monitoring and reporting program) shall extend past the closure of the Landfill and through the regulatory postclosure maintenance period.
- 2. The Discharger shall conduct required monitoring and response programs in accordance with 27 CCR sections 20385. (A detection monitoring program per 27 CCR section 20420, an evaluation monitoring program per 27 CCR section 20425, or a corrective

action program per 27 CCR section 20430, depending on where a measurably significant release of waste has been detected at the Landfill and whether corrective action is required).

- 3. The Discharger shall implement the attached MRP No. CI-5644, which is incorporated herein by reference, and revisions thereto, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Landfill or any unreasonable impairment of beneficial uses associated with the discharges of waste to the Landfill.
- 4. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Regional Board Executive Officer, proposing modifications to MRP No. CI-5644. The Discharger shall implement any changes in the revised MRP approved by the Regional Board Executive Officer upon receipt of a signed copy of revised MRP No. CI-5644.
- 5. Monitoring parameters and COCs listed in MRP No. CI-5644 are subject to appropriate statistical or non-statistical tests included in MRP No. CI-5644 and may be revised by the Regional Board Executive Officer as needed.
- 6. All analyses shall be conducted at a laboratory certified for such analyses by the State Board Division of Drinking Water (DDW). All analyses shall be conducted in accordance with the latest edition of the USEPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) promulgated.
  - 7. The Discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with CWC section 13267. Failure or refusal to furnish these reports or falsifying any information provided therein renders the Discharger guilty of a misdemeanor and subject to the penalties stated in CWC section 13268. Monitoring reports shall be submitted in accordance with the specifications contained in MRP No. CI-5644, which is subject to periodic revisions, as warranted and approved by the Regional Board Executive Officer.
  - 8. The effectiveness of all monitoring wells, monitoring devices, and leachate and gas collection systems shall be maintained for the active life of the Landfill and during the closure and postclosure maintenance periods in accordance with acceptable industry standards. If any of the monitoring wells and/or monitoring devices are damaged, destroyed, or abandoned for any reason, the Discharger shall immediately provide substitutes acceptable to the Regional Board Executive Officer to meet the monitoring requirements of this Order.
  - 9. The Discharger shall maintain a Monitoring Well Preventative Maintenance Program for the Landfill. Elements of the program shall include, as a minimum, periodic visual inspections of well integrity, pump removal and inspection, and appropriate inspection frequencies. Within 60 days of the adoption of this Order, the Discharger shall submit an updated Monitoring Well Preventative Maintenance Program to the Regional Board.
  - 10. If a well or piezometer is found to be inoperative, the Regional Board and other interested agencies shall be so informed pursuant to ESI reporting requirements within seven days of such discovery, and this notification shall contain a time schedule for returning the well or piezometer to operating order. Changes to the existing monitoring

program shall be submitted for Regional Board Executive Officer's approval at least thirty days prior to implementing the change(s).

- 11. For any monitoring wells or piezometers installed in the future, the Discharger shall submit technical reports for approval by the Regional Board Executive Officer prior to installation. These technical reports shall be submitted at least sixty days prior to the anticipated date of installation of the wells or piezometers. These reports shall be accompanied by:
  - a. Maps and cross sections showing the locations of the monitoring points; and
  - b. Drawings and data showing construction details of the monitoring points. These data shall include:
    - (i) casing and test hole diameter;
    - (ii) casing materials;
    - (iii) depth of each hole;
    - (iv) the means by which the size and position of perforations shall be determined, or verified, if in the field;
    - (v) method of joining sections of casing;
    - (vi) nature of filter materials;
    - (vii) depth and composition of soils; and
    - (viii) method and length of time of well development.
- 12. The Discharger shall install any additional groundwater, soil pore liquid, soil pore gas, or leachate monitoring devices necessary to comply with MRP No. CI-5644 as adopted or as revised by the Regional Board Executive Officer.
- 13. The Discharger shall provide for proper handling and disposal of water purged from the monitoring wells during sampling. Water purged from a well shall not be returned to that well (or any other well).
- 14. The compliance point(s) where water quality protection standards (WQPS) apply shall be located along downgradient edges of waste management units at the Landfill or an alternate location approved by the Executive Officer.

# G. REQUIREMENTS FOR ONSITE WATER USE

1. No water shall be routinely applied to refuse fill areas except for landscape irrigation, dust control, winter deck construction, road construction, final cover construction or non-emergency uses approved by the Regional Board Executive Officer. Water used for irrigation, dust control, or construction purposes shall be applied only on completed lifts, in quantities not to exceed that necessary to reduce immediate dust hazards, support plant life, or to achieve desired compaction. Overflow or run-off caused by the over-application or improper management of irrigation or dust control water is prohibited. Any water used at the Landfill, except for potable water, reclaimed water regulated under Regional Board Water Reclamation Requirements (WRRs), and any other water allowed by the Regional Board Executive Officer, shall be subject to these WDRs.

- No wastewater shall leave the Landfill except as permitted by an NPDES permit
  issued in accordance with the CWA and CWC. The Discharger shall maintain and
  modify, as necessary, a SWPPP developed for the Landfill subject to approval by the
  Regional Board Executive Officer.
- 3. All use of landscape irrigation, or dust control water shall be within the boundaries of the Landfill property. During an emergency, this water may be used for fire fighting on the Landfill or on undeveloped areas off and adjacent to the site.
- 4. Washing of Landfill equipment or vehicles shall be confined to areas where the wastewater will not percolate into the disposal areas or native soils, or enter the storm water collection system. Washing of paved Landfill roads during rainy periods shall only occur when muddy roads create a safety concern.
- Wastewater used at the Landfill shall not percolate into the disposal areas or native soil, or enter storm water collection systems, except as specifically permitted by this Order.
- 6. During periods of precipitation, when the reuse of any wastewater is not necessary for the purposes specified in this Order, the wastewater shall be stored or disposed at a legal point of disposal.
- 7. Washing of paved Landfill roads during rainy periods shall only occur when muddy roads create a safety concern.
- 8. Wastewater from cleaning site equipment, water purged from wells, condensate removed from the Landfill gas collection system, and leachate removed from the Landfill LCRS intended to be used onsite for dust control or irrigation shall at all times be within the range of 6.5 to 8.5 pH units, and shall not exceed the following limits:

Constituent
Total organic carbon
Oil or grease
Volatile organic compounds

Concentration 110 mg/L 15 mg/L Non-detect

- 9. A sampling station shall be established for each wastewater source where representative samples can be obtained. Wastewater samples shall be obtained at sampling stations prior to being mixed with sources of other water. The minimum sampling frequency for wastewaters is on a quarterly basis for water used for dust control, irrigation or other on-site land applications, except for water purged from wells where the minimum sampling frequency shall be semi-annual.
- 10. Should there be a change in wastewater sampling stations, the Discharger shall submit to the Regional Board a technical report containing a complete description of each proposed wastewater sampling station. Data to support the claim that the proposed station will provide samples representative of the entire flow from that source shall be included.

# H. REQUIREMENTS FOR REPORTING SCHEDULED ACTIVITIES

- The Discharger shall comply with all reporting requirements included in MRP No. CI-5644.
- 2. The Discharger shall notify Regional Board staff at least thirty days prior to any maintenance activities, for approval by the Regional Board Executive Officer, that could alter existing surface drainage patterns or change existing slope configurations. These activities may include, but not be limited to, significant grading activities, the importation of fill material, the design and installation of soil borings, groundwater monitoring wells and other devices for Landfill investigation purposes.
- 3. The Discharger shall furnish, within a reasonable time, any information the Regional Board may require to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
- 4. If the Discharger becomes aware that the Discharger failed to submit any relevant facts in any report to the Regional Board, it shall submit such facts or information pursuant to ESI reporting requirements within seven days of its discovery of the omission.
- 5. The Regional Board shall be notified of any incident resulting from Landfill operations that may endanger the environment, by telephone within 24 hours, and pursuant to ESI reporting requirements within 7 days. The written notification shall fully describe the incident including what occurred, when it occurred, the duration of the incident, when correction occurred (or when correction will occur if it is a continuing incident), and the steps taken or planned to reduce, eliminate, and/or prevent recurrence.
- 6. The Discharger shall notify the Regional Board pursuant to ESI reporting requirements within seven days if fluid is detected in a previously dry LCRS.
- 7. Pursuant to 27 CCR sections 21130 and 21132, the Discharger shall submit a copy of the emergency response plan, including any proposed amendments thereto, to the Regional Board within 90 days of the adoption of this Order.
- 8. The Discharger shall submit or update the "Operations Plan" for the Landfill within 90 days after adoption of this Order, to be approved by the Regional Board Executive Officer, describing Landfill operations which shall include:
  - A description of existing and proposed waste treatment, storage, and disposal methods.
  - b. Contingency plans for the failure or breakdown of waste handling facilities which could potentially have water quality effects, including notice of any such failure, or any detection of waste or leachate in monitoring facilities, to the Regional Board, appropriate local governments, and water users downgradient of the Landfill.

- c. A description of inspection and maintenance programs which will be undertaken regularly during disposal operations, the closure, and the postclosure maintenance period of facilities or equipment, which could have potential water quality effects.
- 9. The Discharger shall notify the Regional Board of changes in information submitted to the Regional Board and supplementary information, including any material change in the types, quantities, or concentrations of wastes discharged, or Landfill operations and features. The Discharger shall notify the Regional Board at least 120 days before any material change is made at the Landfill.
- 10. The Discharger shall comply with the closure and postclosure maintenance requirements and notification requirements contained in 27 CCR section 21769. Closure must be in accordance with a closure plan and postclosure maintenance plan approved by the Regional Board Executive Officer and CalRecycle.
- 11. The Discharger shall report the quality and quantity of sludge disposed of at the Landfill during the corresponding semi-annual monitoring period.
- 12. The Discharger shall report (on a semi-annual basis) the total volume of all irrigation water used at the Landfill each month and the area(s) where it is applied.
- 13. All applications, reports, or information submitted to the Executive Officer shall be signed and certified as follows:
  - a. The applications, reports, or information shall be signed as follows:
    - For a corporation by a principal executive officer of at least the level of vicepresident.
    - ii. For a partnership or sole proprietorship by a general partner or the proprietor, respectively.
    - iii. For a municipality, state, federal or other public agency by either a principal executive officer or ranking elected official.
    - iv. For a military installation by the base commander or the person with overall responsibility for environmental matters in that branch of the military.
  - b. All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph [a] of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
    - i. The authorization is made in writing by a person described in paragraph [a] of this provision;
    - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
    - iii. The written authorization is submitted to the Executive Officer.

c. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violation."

#### I. GENERAL PROVISIONS

- 1. Where necessary to protect water quality, pursuant to 27 CCR section 20012 (a) and (b), the Regional Board can implement CalRecycle requirements promulgated in 27 CCR.
- 2. This Order does not authorize violation of any federal, state, or local laws or regulations.
- 3. The Discharger shall comply with all applicable provisions, requirements, and procedures contained in 27 CCR and any future amendments.
- 4. The Discharger shall maintain a copy of this Order at its local offices and shall ensure that all site-operating personnel are familiar with its content and that it is available to operating personnel at all times.
- 5. The Discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
  - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Order;
  - Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the CWC, any substances or parameters at this location.
- 6. All regulated disposal systems shall be readily accessible for sampling and inspection.
- 7. This Order includes the attached *Standard Provisions Applicable to Waste Discharge Requirements* (Standard Provisions), dated July 16, 2015 (Attachment W), which are incorporated herein by reference.

- 8. The Discharger shall contact the Regional Board within 48 hours of any significant earthquake event that has impacted the Landfill. A significant earthquake is herein defined as an earthquake event above Richter Magnitude 5.0 within a 100-kilometer radius of the property boundaries of the Landfill. A detailed post-earthquake report describing any physical damages to the containment features, groundwater monitoring and/or leachate control facilities, and a plan for corrective action, including implementation schedule, shall be submitted to the Regional Board within seven days.
- 9. Pursuant to 27 CCR sections 20012, 21200 and 21630, the Discharger shall notify the Regional Board Executive Officer, pursuant to ESI reporting requirements, at least thirty days in advance of any proposed transfer of this Order's responsibility and coverage between the Discharger and a new owner or operator of the Landfill. Any transfer agreement between the Discharger and a new owner or operator shall include an acknowledgement that the Discharger is liable for violations up to the transfer date and that the new owner or operator is liable from the transfer date on. The agreement shall include an acknowledgement that the new owner or operator shall accept responsibility for compliance with this Order and 27 CCR requirements for operations, closure, and postclosure maintenance of the Landfill.
- 10. The Discharger shall immediately notify the Regional Board of any flooding, fire, slope failure or other change in Landfill conditions, which could impair the integrity of waste containment facilities or precipitation and drainage control structures.
- 11. The Discharger shall comply with all conditions of this Order and any additional conditions prescribed by the Regional Board in addenda thereto. Noncompliance with this Order constitutes a violation of the CWC and is grounds for:
  - a. Enforcement action;
  - b. Termination, revocation and reissuance, or modification of this Order; or
  - c. Denial of a ROWD in application for new or revised WDRs.
- 12. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from non-compliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
- 13. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
  - a. Violation of any terms or conditions of this Order;
  - Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts;
     or
  - c. A change in any condition that requires either a temporary or permanent reduction, or elimination of the authorized discharge.

- 14. This Order is not transferable to any person except after notice to the Regional Board Executive Officer. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWC.
- 15. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to termination or modification. All discharges of waste into the waters of the state are privileges, not rights.
- 16. The filing of a request by the Discharger for the modification, revocation and reissuance, or termination of this Order or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
- 17. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
- 18. Pursuant to CWC section 13263(e), these requirements are subject to periodic review and revision by the Regional Board.
- 19. This Order becomes effective on the date of adoption by the Regional Board

#### J. TERMINATION

- 1. Except for violation enforcement purposes, Regional Board Order No. R4-2007-0063, adopted on J December 6, 2007, is hereby terminated.
- I, Deborah J. Smith, Executive Officer, do certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 12, 2018.

Deborah J. Smith Executive Officer

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FIGURE 1: LOCATION MAP

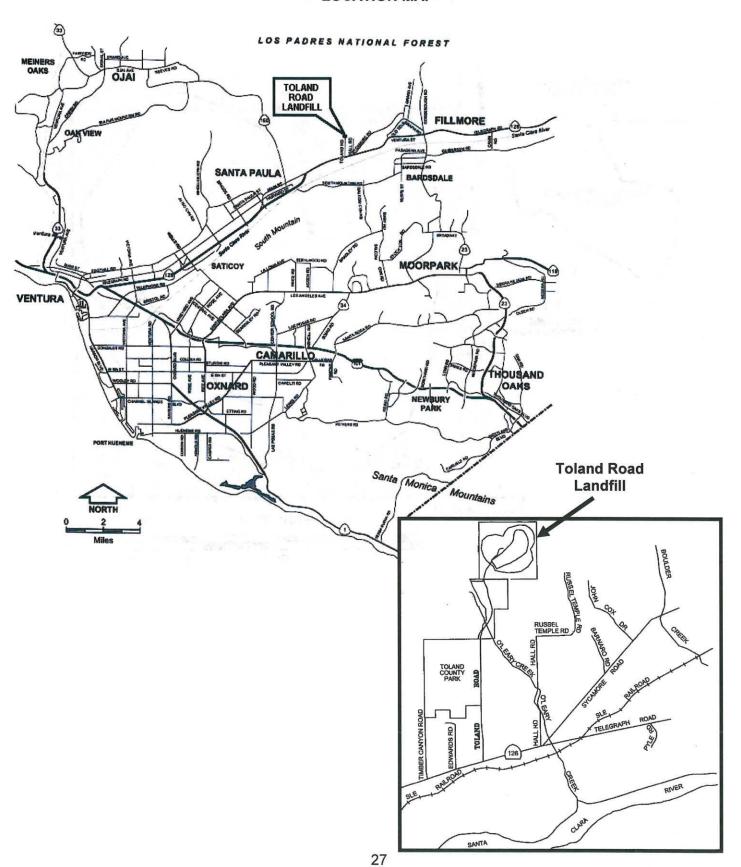


FIGURE 2: LANDFILL SITE PLAN

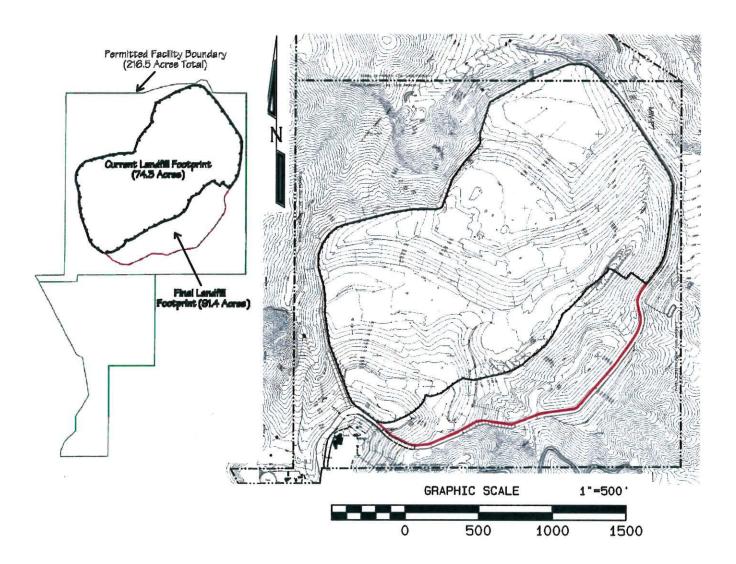


FIGURE 3: PLANNED FINAL FILL ELEVATIONS

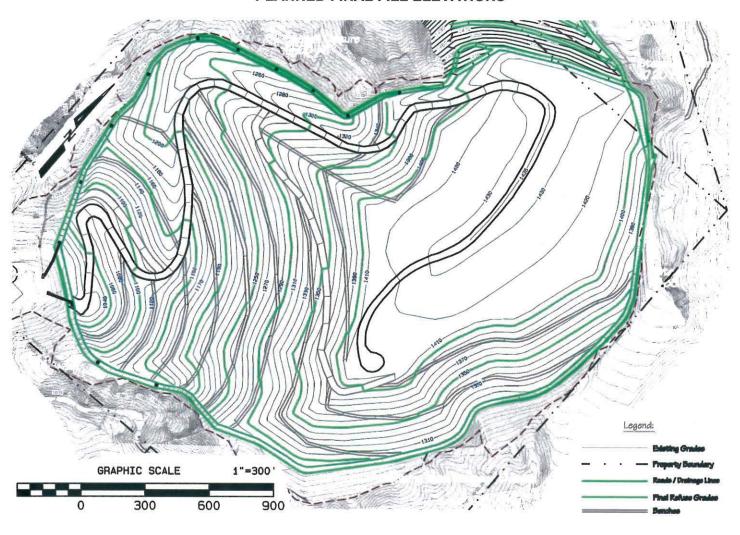


FIGURE 4: **EXISTING ANCILLARY FACILITIES** 600,000 GALLON POTABLE WATER TANK 100 (10,000 GALLON TOTAL) 1 in = 200 ft MAINTENANCE CENTER HAZARDOUS WASTE STORAGE AREA BIOSOLIDS DRYING SEDIMENT HOUSE FACILITY (CLOSED) GAS TREATMENT LEACHATE / CONDENSATE
COLLECTION (2 x 10,000 GALLONS) ELECTRICAL GENERATION FACILIT LANDFILL LEGEND PROPERTY BOUNDARY STOCKPLES, AREAS OF MATERIAL HANDLING & PROCESSING, AND OR STORAGE OF EQUIPMENT & VEHICLES STORM DETENTION BASIN S WATER **EMERGENCÝ** DISCHARGE SPILLWAY OUTLET POINT CONCRETE WEIR STRUCTURE CONCRETE CHANNEL/PIPE FLOW STORM DRAIN INLET

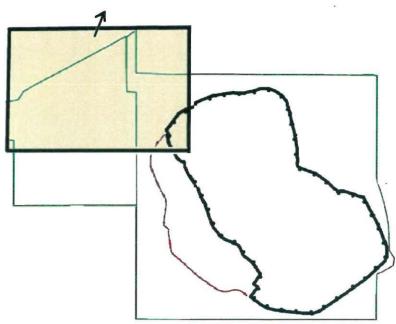
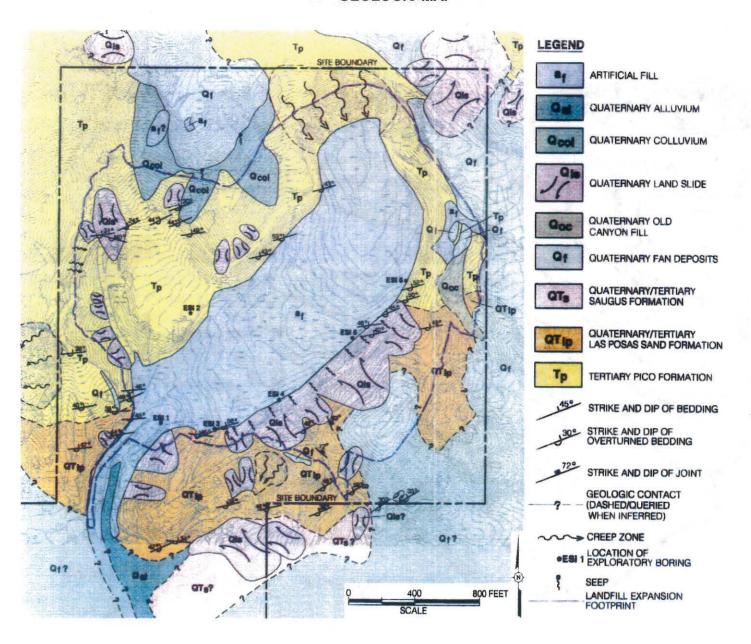


FIGURE 5: GEOLOGIC MAP



# FIGURE 6: GROUNDWATER BASINS

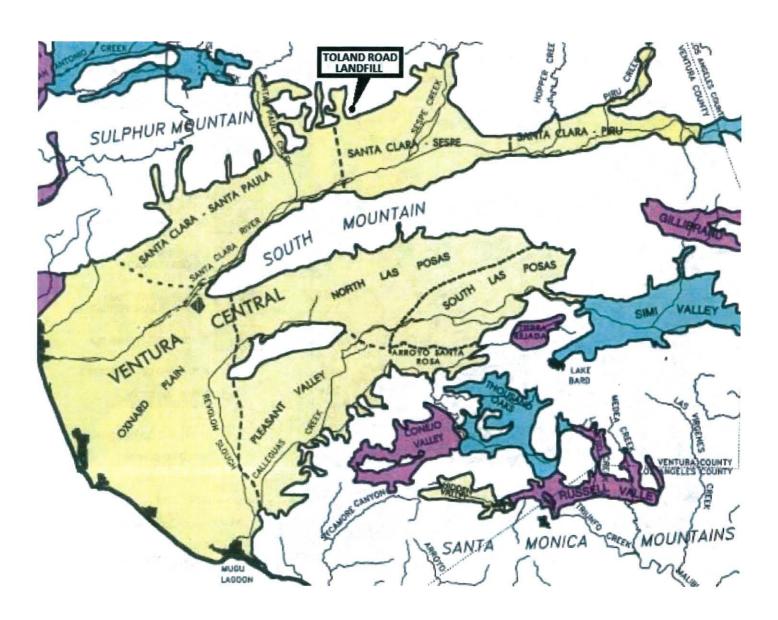


FIGURE 7: LANDFILL DEVELOPMENT PHASES

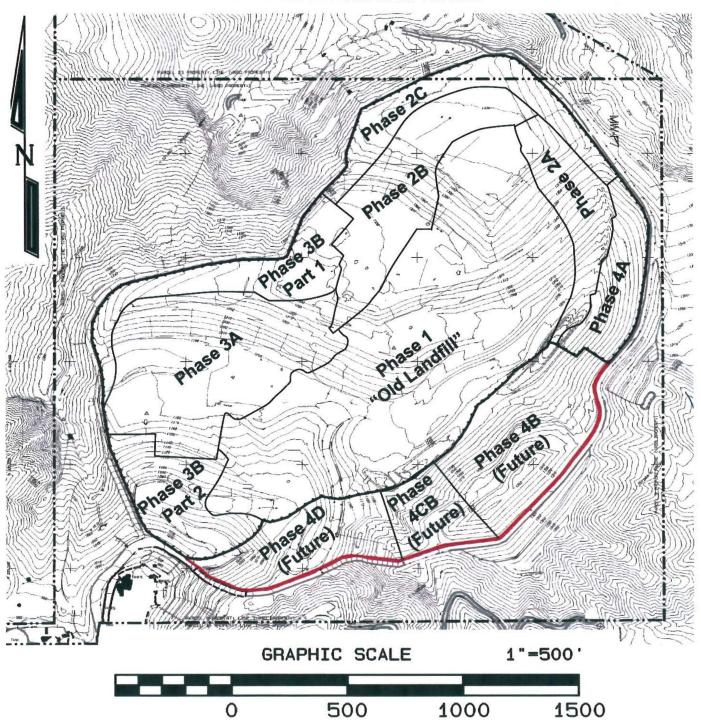


FIGURE 8: LEACHATE COLLECTION AND EXTRACTION SYSTEM

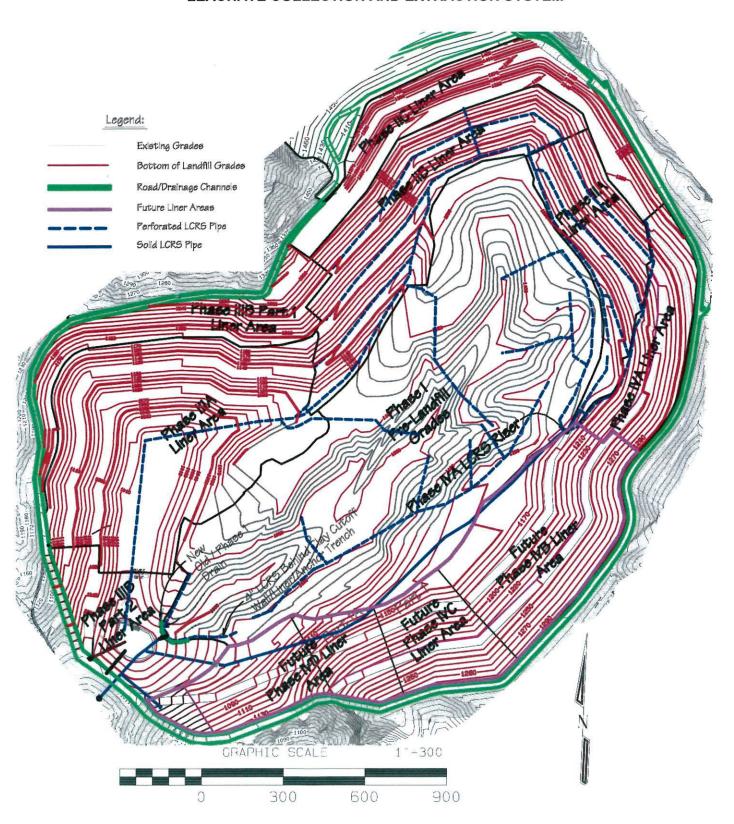


FIGURE 9:
LANDFILL GAS EXTRACTION AND DESTRUCTION SYSTEM

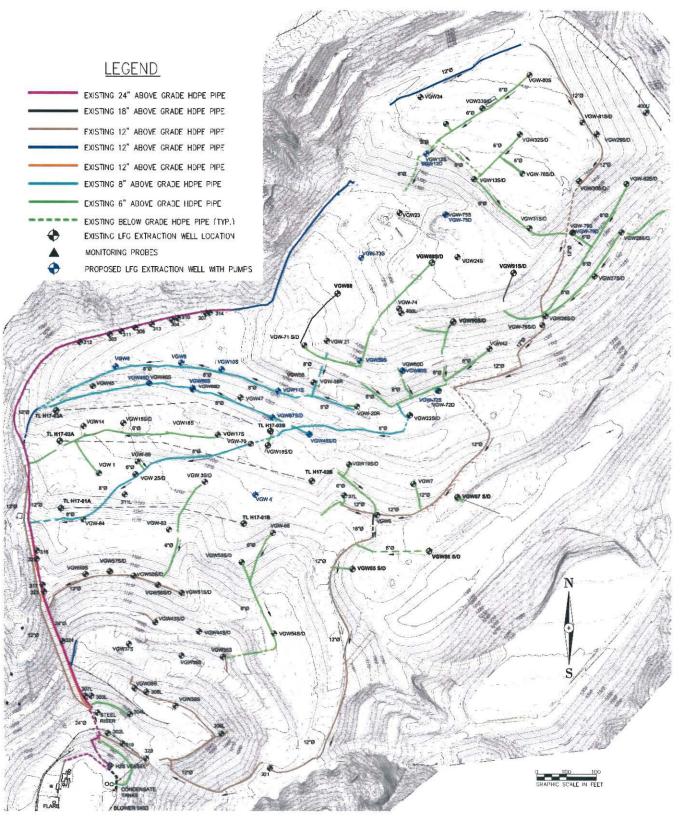


FIGURE 10: LANDFILL GAS MIGRATION BOUNDARY PROBE SYSTEM

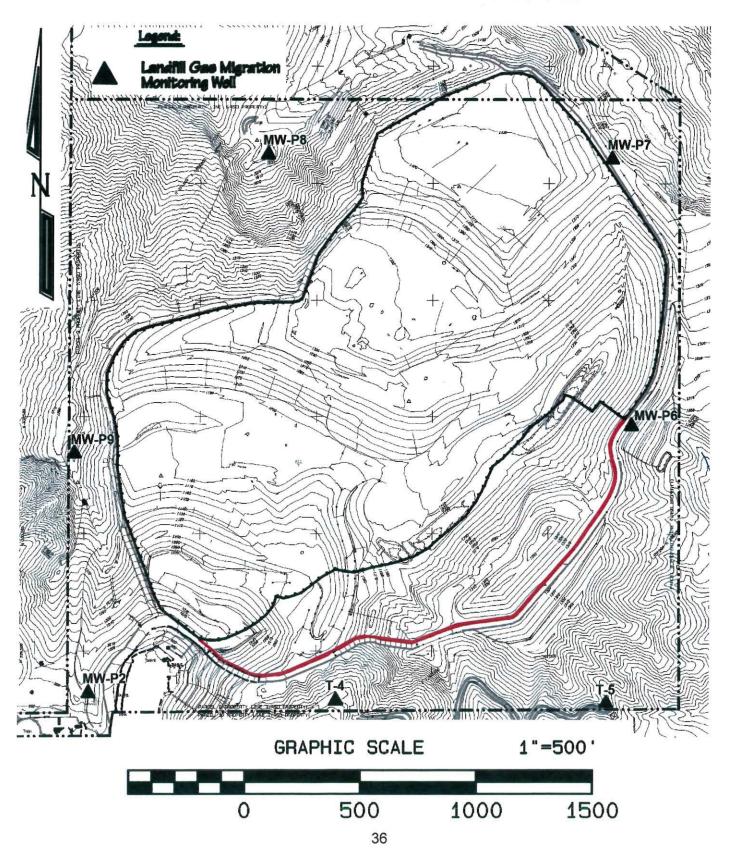
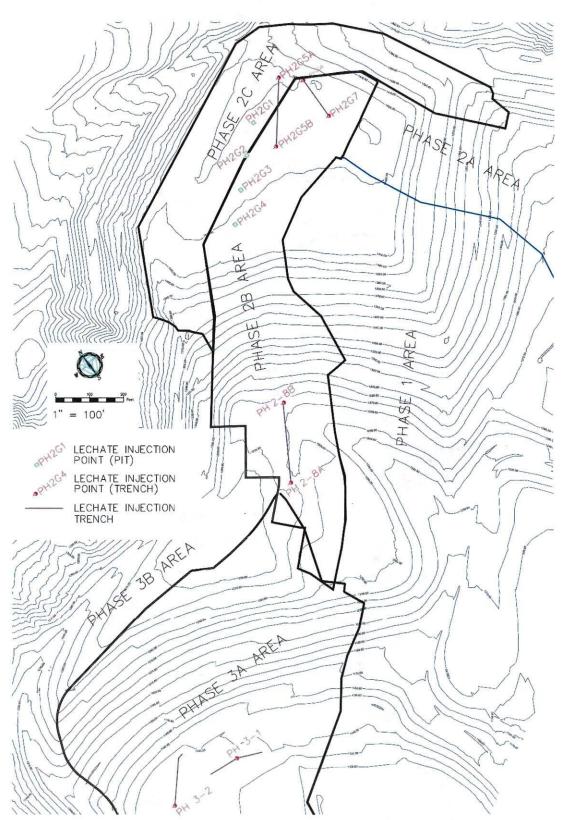


FIGURE 11: STORM WATER DRAINAGE SYSTEM LEGEND IMPERVIOUS SURFACE AREA EXISTING CONTOUR EXISTING DIRT ROAD SHEET FLOW CONCRETE DRAINAGE DITCH STORM WATER MONITORING POINT ENERGY DISSIPATER CATCH BASIN EXISTING BUILDING DRAINAGE DITCH FLOW TOLAND LANDFILL CATCHMENT AREA O'LEARY CATCHMENT AREA 0 STORAGE TANKS POTENTIAL DUST OR PARTICULATE GENERATING AREAS

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FIGURE 12: EXISTING LIQUIDS RECIRCULATION AREAS



# STANDARD PROVISIONS APPLICABLE TO WASTE DISCHARGE REQUIREMENTS

# 1. DUTY TO COMPLY

The discharger must comply with all conditions of these waste discharge requirements. A responsible party has been designated in the Order for this project, and is legally bound to maintain the monitoring program and permit. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board. (Water Code, Sections 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, and 13350). Failure to comply with any waste discharge requirement, monitoring and reporting requirement, or other order or prohibition issued, reissued or amended by the Los Angeles Water Board or State Water Resources Control Board is a violation of these waste discharge requirements and the Water Code, which can result in the imposition of civil liability. (Water Code, Section 13350, subdivision (a).)

# GENERAL PROHIBITION

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by California Water Code section 13050. In addition, the discharge of waste classified as hazardous, as defined in California Code of Regulations, Title 23, Section 2521, subdivision (a) is also prohibited.

# 3. <u>AVAILABILITY</u>

A copy of these waste discharge requirements shall be maintained at the discharge facility and be available at all times to operating personnel. (Water Code, Section 13263)

### CHANGE IN OWNERSHIP

The discharger must notify the Executive Officer, in writing at least 90 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This notification shall include a Report of Waste Discharge and statement by the new Discharger that construction, operation, closure and postclosure maintenance will be in compliance with any existing waste discharge requirements and any revisions pending update, modification, revocation, reissuance or amendment to this Order.

## CHANGE IN DISCHARGE

In the event of a material change in the character, location, or volume of a discharge, the discharger shall file with this Regional Board a new Report of Waste Discharge. (Water Code, Section 13260, subdivision (c)). A material change includes, but is not limited to, the following:

# Standard Provisions Applicable to Waste Discharge Requirements

- (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.
- (b) Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
- (c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
- (d) Increase in flow beyond that specified in the waste discharge requirements.
- (e) Increase in the area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. (California Code of Regulations, Title 23, Section 2210)

### 6. REVISION

These waste discharge requirements are subject to review and revision by the Regional Board. (Water Code, Sections 13263)

### NOTIFICATION

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information. (Water Code, Sections 13260 and 13267)

#### 8. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the discharger from his liability under Federal, State or local laws, nor do they create a vested right for the discharger to continue the waste discharge. (Water Code, Section 13263, subdivision (g).)

### SEVERABILITY

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

# 10. OPERATION AND MAINTENANCE

The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order. (Water Code, Section 13263, subdivision (f).)

# 11. NOTIFICATION REQUIREMENT

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the discharger is in violation of a prohibition in the applicable Water Quality Control plan. (Water Code, Section 13271, subdivision (a).)

# 12. OIL OR PETROLEUM RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This provision does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan. (Water Code, Section 13272).

# 13. <u>INVESTIGATIONS AND INSPECTIONS</u>

The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order:
- (b) Have access to and copy, at reason able times, any records that must be kept under the conditions of this Order;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices., or operations regulated or required under this Order; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the California Water Code, any substances or parameters at any location. (Water Code, Section 13267)
- (e) Except for material determined to be confidential in accordance with applicable law, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the office of the Los Angeles Water Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.

### 14. MONITORING PROGRAM AND DEVICES

The discharger shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted. (Water Code, Section 13267)

All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Executive Office a written statement, signed by a registered professional engineer, certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

The analysis of any material required pursuant to Division 7 of the Water Code shall be performed by a laboratory that has accreditation or certification pursuant to Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code. However, this requirement does not apply to field tests, such as test for color, odor, turbidity, pH, temperature, dissolved oxygen, conductivity, and disinfectant residual chlorine. (Water Code, Section 13176). Unless otherwise permitted by the Regional Board Executive officer, all analyses shall be conducted at a laboratory

Standard Provisions Applicable to Waste Discharge Requirements

certified for such analyses by the State Water Resources Control Board's Division of Drinking Water. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40CFR Part 136) promulgated by the United States, Environmental Protection Agency (USEPA). (California Code of Regulation, Title 23, Section 2230.)

The Quality Assurance-Quality Control Program must conform to the USEPA Guidelines "Laboratory Documentation Requirements for Data Validation", January 1990, USEPA Region 9) or procedures approved by the Los Angeles Regional Water Quality Control Board.

All quality assurance and quality control (QNQC) analyses must be run on the same dates when samples were actually analyzed. All ONQC data shall be reported, along with the sample results to which they apply, including the method, equipment, analytical detection and quantitation limits, the percent recovery, and explanation for any recovery that falls outside the QC limits, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for lank results or spike recoveries. In cases where contaminants are detected in QNQC samples (e.g., field, trip, or lab blanks); the accompanying sample results shall be appropriately flagged.

The Discharger shall make all QA/QC data available for inspection by Regional Board staff and submit the QNQC documentation with its respective quarterly report. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the quarterly report.

### 15. TREATMENT FAILURE

In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost. (Water Code, Section 13263, subdivision (f).)

# 16. <u>DISCHARGE TO NAVIGABLE WATERS</u>

A person who discharges pollutants or proposes to discharge pollutants or proposes to discharge pollutants to the navigable waters of the United States within the jurisdiction of this state or a person who discharges dredged or fill material or proposes to discharge dredged or fill material into the navigable waters of the United States within the jurisdiction of this state shall file a report of waste discharge in compliance with the procedures set forth in Water Code section 13260. (Water Code, Section 13376).

# 17. ENDANGERMENT TO HEALTH AND ENVIRONMENT

The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Office within 24 hours:

- (a) Any bypass from any portion of the treatment facility.
- (b) Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.
- (c) Any treatment plan upset which causes the effluent limitation of this Order to be exceeded. (Water Code, Sections 13263 and 13267)

# 18. MAINTENANCE OF RECORDS

The discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies off all reports required by this Order, and record of all data used to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Records of monitoring information shall include:

- (a) The date, exact place, and time of sampling or measurement;
- (b) The individual(s) who performed the sampling or measurement;
- (c) The date(s) analyses were performed;
- (d) The individual(s) who performed the analyses;
- (e) The analytical techniques or method used; and
- (f) The results of such analyses.

# Standard Provisions Applicable to Waste Discharge Requirements

- 19. (a) All application reports or information to be submitted to the Executive Office shall be signed and certified as follows:
  - (1) For a corporation by a principal executive officer or at least the level of vice president.
  - (2) For a partnership or sole proprietorship by a general partner or the proprietor, respectively.
  - (3) For a municipality, state, federal, or other public agency by either a principal executive officer or ranking elected official.
- (b) A duly authorized representative of a person designated in paragraph (a) of this provision may sign documents if:
  - (1) The authorization is made in writing by a person described in paragraph (a) of this provision.
  - (2) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
  - (3) The written authorization is submitted to the Executive Officer.

Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Water Code Sections 13263, 13267, and 13268)"

# 20. OPERATOR CERTIFICATION

Supervisors and operators of municipal wastewater treatment plants and privately owned facilities regulated by the Public Utilities Commission, used in the treatment or reclamation of sewage and industrial waste shall possess a certificate of appropriate grade in accordance with California Code of Regulations, title 23, section 3680. State Boards may accept experience in lieu of qualification training. (California Code of Regulations, Title, 23, Sections 3680 and 3680.2.) In lieu of a properly certified wastewater treatment plant operator, the State Board may approve use of a water treatment plant operator of appropriate grade certified by the State Department of Public Health where reclamation is involved. (California Code of Regulations, Title, 23, Section 3670.1, subdivision (b).)

# ADDITIONAL PROVISIONS APPLICABLE TO PUBLICLY OWNED TREATMENT WORKS' ADEQUATE CAPACITY

21. Whenever a regional board finds that a publicly owned wastewater treatment plant will reach capacity within four years, the board shall notify the discharger. Such notification shall inform the discharger that the regional board will consider adopting a time schedule order pursuant to Section 13300 of the Water Code or other enforcement order unless the discharger can demonstrate that adequate steps are being taken to address the capacity problem. The notification shall require the discharger to submit a technical report to the regional board within 120 days showing how flow volumes will be prevented from exceeding existing capacity or how capacity will be increased. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The time for filing the required technical report may be extended by the regional board. An extension of 30 days may be granted by the executive officer. Longer extensions may be granted by the regional board itself. (California Code of Regulations, Title, 23, Section 2232.)

# STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

# MONITORING AND REPORTING PROGRAM NO. CI-5644 FOR VENTURA REGIONAL SANITATION DISTRICT (TOLAND ROAD LANDFILL)

(File No. 69-091)

### A. GENERAL

- 1. This self-monitoring and reporting program (MRP) implements the requirements of title 27 of the California Code of Regulations (27 CCR), title 40 of the Code of Federal Regulations, part 258, and State Water Resources Control Board (State Board) Resolution No. 93-62. In addition, California Water Code (CWC) section 13267(b) authorizes the regional boards to require technical or monitoring program reports. Compliance by the Ventura Regional Sanitation District (Discharger) with the terms of this MRP for the Toland Road Landfill (Landfill) is required by California Regional Water Quality Control Board, Los Angeles Region (Regional Board) Order No. R4-2018-0058 (Order) and CWC section 13267(b).
- 2. The principal purposes of a self-monitoring program by a Discharger are:
  - a. To document compliance with waste discharge requirements (WDRs) and prohibitions established by the Regional Board;
  - b. To facilitate self-policing by the Discharger in the prevention and abatement of pollution arising from waste discharge; and
  - c. To prepare water quality analyses.
- 3. The Discharger shall implement this MRP, as required by the Order, starting the first monitoring period immediately following adoption of the Order.
- 4. The Discharger shall comply with the requirements of 27 CCR section 20415 for any water quality monitoring program developed to satisfy 27 CCR sections 20420, 20425, or 20430, as required in the Order and this MRP.
  - a. Groundwater monitoring shall meet the requirements of 27 CCR section 20415(b) and 40 CFR section 258.51(a, c, and d);
  - b. Surface water monitoring shall meet the requirements of 27 CCR section 20415(c) and NPDES requirements, as required in this MRP and the State Board General NPDES Storm Water Permit for Industrial Activities (General Industrial Storm Water Permit). In addition, whenever possible, the Discharger shall measure volumetric flow or, at a minimum, visually estimate the flow rate for all surface water monitoring points with flowing water (i.e. any flowing seeps or springs that develop during the development or operation of the Landfill).

# **B. REQUIRED REPORTS AND CONTINGENCY REPONSE**

The Discharger shall submit the reports to this Regional Board in accordance with the schedules specified.

# 1. Semi-Annual Monitoring Report

A written monitoring report shall be submitted semi-annually by May 15 (for the period from October 1 to March 31) and November 15 (for the period from April 1 to September 30) of each year. Any reporting or tabulation requirements less than semi-annual in length (i.e., monthly or quarterly) shall be submitted in corresponding semi-annual reports. Semi-annual reports shall include, but shall not be limited to, the following items and sequence:

- a. Transmittal Letter: A letter transmitting the essential points shall accompany each report. The letter shall include a discussion of any violations found since the last such report was submitted, and shall describe actions taken or planned for correcting those violations. If the Discharger has previously submitted a time schedule for correcting said violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter. Monitoring reports and the letter transmitting the monitoring reports shall be signed and certified in accordance with section H.13 of the Order.
- b. Summary of Non-Compliance: The report shall contain a summary of non-compliance that discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs. Significant aspects of any on-going corrective action measures conducted during the monitoring period shall also be summarized. This section shall be located at the front of the report and shall clearly list all non-compliance with WDRs, as well as all exceedances of water quality protection standards.
- c. Site Conditions: General discussion of site conditions (geology, climate, 100-year 24-hour storm, and watershed specifics, etc.) relative to water quality monitoring.
- d. Narrative Description: A narrative discussion of the various monitoring activities and results for the site. Each requirement of Section C (Required Water Quality Monitoring and Inspection Program) of this MRP shall be specifically discussed.
- e. Laboratory Results: Laboratory results and statements demonstrating compliance with Section C (Required Water Quality Monitoring and Inspection Program) of this MRP. Results of additional water sampling and analyses performed, outside of the requirements of this MRP, shall be summarized and reported. If the results of such additional sampling and analyses have or will be reported under separate cover, a statement as such shall be included in the monitoring report.
- f. Standard Observations: A summary and certification of completion of all standard observations for the Landfill property in accordance with the NPDES Storm Water Permit monitoring and reporting requirements. The records of observation are to be

included with the first semi-annual report of the year (due May 15th).

- g. Management of Liquids: A summary of the total volumes, on a monthly basis, of Landfill leachate, gas condensate, and any contaminated subdrain water and groundwater extracted at the site, and how these liquids are handled.
- h. Waste Disposal Reporting: Waste disposal activities at the site, including:
  - i. A tabular list of the estimated average monthly quantities (in cubic yards and tons) deposited each month.
  - ii. An estimate of the remaining capacity (in cubic yards and tons) and the remaining life of the site in years and months.
  - iii. A certification that all wastes were deposited in compliance with the Regional Board's requirements and that no wastes were deposited outside of the boundaries of the waste management area.
  - iv. A description of the location and an estimate of the seepage rate or flow of all known seeps and springs at the site.
- v. The estimated amount of water used at the waste management area for landscape irrigation, compaction, dust control, etc., during each month. (If a source other than potable water is used, the sources and amounts of water from each source shall also be reported).
  - vi. The Discharger shall report all unacceptable wastes inadvertently received at this site and their disposition. The following details shall be included:
    - A. The source (if known), including the hauler, of the unacceptable wastes and date received and/or discovered.
    - B. Identification of waste (if known) and the amount of waste.
    - C. The name and address of the hauler who removed the waste from this site.
    - D. The ultimate point of disposal for the waste.
    - E. The Discharger's actions to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual.
- F. If no unacceptable wastes were received (or discovered) during the month, the report shall so state.
  - i. Dewatered Sludge Sampling and Reporting In addition to reporting the quantity of dewatered sludge per each generator deposited each month, quarterly samples of incoming sludge shall be obtained and analyzed as follows:

- i. A representative sample of the dewatered sludge accepted during the day of sampling shall be weight-proportioned as a composite and mixed as completely as possible (preferably in the absence of oxygen) into a single sample. The total percent solids of the sample shall be reported.
- ii. An extraction solution of the sludge shall be prepared using the Waste Extraction Test (WET) method as outlined in the California Department of Public Health's California Assessment Manual for Hazardous Wastes (CAM), and analyzed as following:
  - A. All testing shall be done within 48 hours after the extraction solution is prepared.
  - B. The extracts shall be analyzed for Total Threshold Limit Concentration (TTLC) for the following metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc. If the concentration of any constituent exceeds 10 times of its Soluble Threshold Limit Concentration (STLC), then the sample shall be analyzed for STLC of that constituent.
  - C. The dewatered sludge shall also be analyzed semiannually for the following parameters: polychlorinated biphenyls (PCBs), DDT, DDE, DDD, Endrin, Lindane, Methoxychlor, Toxaphene, 2,4-Dichlorophenoxyacetic acid and 2,4,5-Trichlorophenoxyacetic acid (Silvex).
- iii. For small generators that dispose of dewatered sludge at the Landfill at a frequency less than one day per quarter, the sample shall be a composited sample that is representative of the incoming dewatered sludge load. The total percent solids of the sample shall be reported and analyzed pursuant to B.1.i.ii, above.
- iv. Sludge analyses results shall be reported in the corresponding semi-annual report, as separate sections along with the pertinent laboratory data.
- j. Map(s): Map(s) or aerial photograph(s) showing waste disposal and monitoring locations, relative physical features, and groundwater contours to the greatest degree of accuracy possible.

# 2. Annual Summary Report

The Discharger shall submit an annual summary report to the Regional Board covering the previous monitoring year. This report may be combined with a semi-annual report and shall be submitted no later than May 15th of each year. The annual summary report shall include at least the following:

a. Discussion: Include a comprehensive discussion of the compliance record, any significant monitoring system and operational changes, a summary of corrective action results and milestones, and a review of construction projects, with water

quality significance, completed or commenced in the past year or planned for the upcoming year.

- b. Graphical Presentation of Analytical Data: For each Monitoring Point, submit in graphical format the laboratory analytical data for all samples taken within at least the previous eight calendar years. Each such graph shall plot the concentration of one or more constituents over time for a given monitoring point, at a scale appropriate to show trends or variations in water quality. Graphs shall plot each datum, rather than plotting mean values.
- c. Analytical Data: All monitoring analytical data obtained during the previous year, presented in tabular form. Additionally, complete data histories of each well shall be submitted in an electronic format acceptable to the Regional Board Executive Officer.
- d. Map(s): Map(s) showing the areas where any significant events that may have taken place during the previous calendar year.
- e. A drainage control system maintenance report that includes, but is not limited to, the following information:
  - For the previous twelve months, a summary of the adequacy and effectiveness of the drainage control system to collect and divert the calculated volume of precipitation and peak flows resulting from a 100-year, 24-hour storm;
  - ii. A tabular summary of both new and existing drainage control structures, including the types and completion dates of maintenance activities performed for each of these structures; and
  - iii. A site map, 11 inches by 17 inches or larger, prepared by either aerial surveillance or a licensed surveyor, indicating the location of the elements listed in Section 2.e.ii above, and the flow direction of all Landfill drainage. The map shall be updated at least annually.

# 3. Contingency Response

- a. Leachate Seep: The Discharger shall, within 24 hours of discovery, report to Regional Board staff by telephone any previously unreported seepage from the Landfill. A written report shall be filed with the Regional Board pursuant to electronic submittal of information (ESI) reporting requirements within seven days, and contain at least the following information:
  - i. Map A map showing the location(s) of seepage.
  - ii. Flow rate An estimate of the flow rate.
  - iii. Description A description of the nature of the discharge (e.g., all pertinent observations and analyses).

- iv. Location Location of sample(s) collected for laboratory analysis, as appropriate.
- v. Corrective measures approved (or proposed for consideration) by the Regional Board Executive Officer.
- b. Response to an Initial Indication of a Release: Should the initial statistical or nonstatistical comparison indicate that a release is tentatively identified, the Discharger shall:
  - *i.* Within 24 hours, verbally notify the designated Regional Board staff contact as to the monitoring point(s) and constituent(s) or parameter(s) involved;
  - ii. Provide written notification pursuant to ESI reporting requirements within seven days of such determination; and
  - iii. Do either of the following:
    - A. Carry out a discrete re-test in accordance with Section C.2.h.ii of this MRP¹. 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 release discovery response requirements in Section B.3.d of this MRP. In any case, the Discharger shall inform the Regional Board of the re-test outcome within 24 hours of results becoming available, following up with written results submitted pursuant to ESI reporting requirements within seven days, or
    - B. Make a determination, in accordance with 27 CCR section 20420(k)(7) that a source other than the waste management unit caused the evidence of a 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.
- c. Physical Evidence of a Release: If either the Discharger or the Regional Board Executive Officer determines that there is significant physical evidence of a release (27 CCR section 20385(a)(3)), the Discharger shall conclude that a release has been discovered and shall:
  - Within seven days notify the Regional Board of this fact pursuant to ESI reporting requirements (or acknowledge the Regional Board's determination).
  - ii. Carry out the requirements of Section B.3.d of this MRP for all potentially affected monitored media.
  - iii. Carry out any additional investigations stipulated in writing by the Regional Board

In case the discrete re-test is triggered by detections of common laboratory contaminants (i.e., acetone, toluene, methylene chloride, and carbon disulfide) the Discharger may postpone the discrete re-test until after the next semi-annual monitoring event. Re-testing for constituents that are common laboratory contaminants will not be required unless the same pollutants are detected in the following semi-annual monitoring event.

Executive Officer for the purpose of identifying the cause of the indication.

- d. Release Discovery Response: If either the Discharger or the Regional Board Executive Officer concludes that a release has been discovered, the following steps shall be carried out:
  - i. If this conclusion is not based upon monitoring for all COCs, the Discharger shall sample for all COCs at all monitoring points in the affected medium (i.e. groundwater). Within seven days of receiving the laboratory analytical results, the Discharger shall notify the Regional Board Executive Officer, pursuant to ESI reporting requirements, of the concentration of all COCs at each Monitoring Point. This notification shall include a synopsis showing, for each monitoring point, those constituents that exhibit an unusually high concentration.
  - ii. The Discharger shall, within 90 days of discovering the release, submit an amended report of waste discharge proposing an evaluation monitoring program (EMP) that:
    - A. Meets the requirements of 27 CCR sections 20420 and 20425.
    - B. Satisfies the requirements of 40 CFR 258.55(g)(1)(ii) by installing at least one monitoring well at the facility boundary directly downgradient of the center of the release.
  - iii. The Discharger shall, within 180 days of discovering the release, submit a preliminary engineering feasibility study (27 CCR section 20420(k)(6)) for a corrective action program necessary to meet the requirements of 27 CCR section 20430.
  - iv. The Discharger shall immediately begin delineating the nature and extent of the release by installing and monitoring assessment wells as necessary to assure that it can meet the requirements of 27 CCR section 20425 to submit a delineation report within 90 days of when the Regional Board Executive Officer directs the Discharger to begin the EMP.
  - e. Release Beyond Facility Boundary: If the Discharger or Regional Board Executive Officer concludes that a release from the Landfill has proceeded beyond the facility boundary, the Discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons) as follows:
    - 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.
    - ii. Subsequent to initial notification, the Discharger shall provide updates to all 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.

iii. Each time the Discharger sends a notification to Affected Persons (under Sections 3.e.i. or 3.e.ii, above), it shall, within seven days of sending such notification, provide the Regional Board with both a copy pursuant to ESI reporting requirements of the notification and a current mailing list of Affected Persons.

# 4. Submitting of Reports

- a. The Discharger shall submit all scheduled reports required in the Order and this MRP electronically, in accordance with 23 CCR section 3890 et. seq., or as directed by the Regional Board Executive Officer. Until directed otherwise by the Regional Board Executive Officer, all reports shall be submitted to the State Board GeoTracker data system in searchable Portable Document Format (PDF) files (Geotracker Global ID. L10006875092). In addition, all groundwater analytical data and monitoring well locations shall be submitted to GeoTracker in Electronic Deliverable Format (EDF). Documents that cannot be conveniently reviewed in electronic format, such as large maps or drawings, shall be submitted as hard copies to the Regional Board office as instructed by Regional Board staff.
- b. All reports required in this MRP shall be addressed to:

California Regional Water Quality Control Board Los Angeles Region 320 W. 4th Street, Suite 200 Los Angeles, California 90013 ATTN: Information Technology Unit

### C. REQUIRED WATER QUALITY MONITORING AND INSPECTION PROGRAM

The Discharger shall conduct the following water quality monitoring and inspection program. Unless otherwise indicated, all monitoring data and inspection results shall be reported to the Regional Board as outlined in Section B (Required Reports and Contingency Response) of this MRP. In addition, Regional Board staff may conduct appropriate verification tests to confirm the accuracy of the Discharger's self-monitoring.

### 1. Groundwater Monitoring Networks

The Discharger shall conduct analytical monitoring of groundwater, surface water, and leachate at the Landfill. The groundwater monitoring system includes six downgradient wells, TMW-1, TMW-2, TMW-3, TMW-4, TMW-5, and OWTS-1 (Figure T-1).

#### 2. Water Quality Monitoring

a. Initial Full Appendix II Scan<sup>2</sup> - Within 30 days of the adoption of this Order, all

An Appendix II scan refers to a laboratory test that includes the analyses of all constituents listed in 40 CFR Part 258 Appendix II.

downgradient groundwater monitoring points where a full Appendix II scan has not been performed within the last five years must be sampled and analyzed for the presence or absence of all Appendix II constituents that are not yet on the Landfill's monitoring parameter (MPar) list. A full Appendix II scan shall also be performed at any new groundwater monitoring well within thirty days of its installation. For any Appendix II constituent detected in the scan that is not yet on the Landfill's MPar list, the Discharger shall resample for that constituent, within ninety days, at all monitoring points where the constituent(s) was detected. Any Appendix II constituent that is detected and confirmed at one or more groundwater monitoring points becomes a new constituent of concern (COC) for the Landfill and shall be added to the Landfill's MPar list, pursuant to 40 CFR 258.55(b-d).

- b. COC List As of the date of this MRP, the COC list for the Landfill consists of all those constituents listed in Table T-1. At any subsequent time, the COC list shall include: all Appendix II constituents detected and affirmed in the initial scan under Section C.2.a of this MRP, all Appendix II constituents that have been detected and affirmed in the leachate scan required by this MRP, and any constituent added by the Regional Board Executive Officer. The Discharger shall notify Regional Board staff of any such new addition to the COC list immediately, via phone, fax, or e-mail, shall note it in the Landfill's operating record within 14 days of the verification, and shall report the addition of constituent(s) to the COC list in the next scheduled monitoring report. Subsequently, any new additional to the COC list shall be consolidated with the existing COC list so that COC monitoring remains on a coordinated five-year monitoring schedule described in Section C.2.f.ii of this MRP.
- c. MPars: Current groundwater MPars at the Landfill are listed in Table T-1, including:
  - i. Indicator Parameters: These constituents are considered capable of providing reliable indication of a release from the Landfill. The Discharger shall apply the statistical analyses described in Section C.2.g of this MRP or non-statistical analysis in Section C.2.h indicator parameter constituents to analyze all groundwater monitoring data obtained under this program for all downgradient groundwater monitoring wells.
  - ii. Supplemental Parameters: These are inorganic constituents that provide important information regarding groundwater geochemistry but may not show significant variation in groundwater in the event of a Landfill release. Monitoring data for supplemental parameters will generally be used to differentiate between any distinct groundwater bodies and will not be subjected to routine statistical analysis.
  - iii. Other COCs: These include trace metals or other pollutants that have been detected and confirmed to be in leachate from the Landfill.
- d. Water Quality Protection Standard (WQPS) In accordance with 27 CCR section 20390, the WQPS for the Landfill is established as natural background groundwater quality at the site, which is either the statistically predicted value (if the constituent exists naturally) or the laboratory detection limit (if the constituent does not naturally

exist in groundwater).

- e. Development and Updating of Concentration Limits Current concentration limits (statistically predicted values) for inorganic indicator parameters at downgradient groundwater monitoring wells are listed in Table T-2. The Discharger shall continue to develop and update concentration limits, including new downgradient monitoring wells, following the procedures provided in Section C.2.g.i of this MRP. The Discharger shall review concentration limits biannually in annual reports submitted to the Regional Board. When appropriate, new concentration limits shall be proposed. For any well/Mpar pair for which an intra-well comparison analysis is not applicable, the Discharger shall use an inter-well comparison analysis to determine whether water quality protection standards are violated.
- f. Groundwater Quality Monitoring The Discharger shall conduct the following groundwater monitoring activities:
  - i. Semi-annual monitoring shall be conducted at all downgradient groundwater monitoring wells shown in the following schedule:

Period Sampling Period
October – March (Fall/Winter)
April – September (Spring/Summer)
Samples shall be taken in March
Samples shall be taken in September

Water samples from these monitoring points shall be analyzed for all indicator parameters and supplemental parameters on a semi-annual basis.

- ii. Five-Yearly COC Scan Every five years, starting in 2018, the Discharger shall analyze a sample from all downgradient groundwater monitoring wells for the detectable presence (including trace determinations) of all COCs that are not yet on the MPar list. This constitutes the means by which the Discharger continues to meet the requirements of 40 CFR 258.55(b)-(d).
  - A. During each such COC scanning event, the Discharger shall obtain and analyze a minimum of one sample from each monitoring well (sufficient to obtain a datum for each COC that is subject to the scan). Upon detecting (including trace value) a COC that is not yet on the MPar list, the Discharger shall, within thirty days, take a single resample from the indicating affected well(s) and reanalyze it only for the newly detected constituent(s).
  - B. Any COC detected in samples collected from a groundwater monitoring well, and verified by a retest, automatically becomes part of the MPar list for the facility. This constitutes the means by which the Discharger shall meet the requirements of 40 CFR 258.55(d)(2).
- g. Statistical Data Analysis Methodology
  - Intra-well comparison methods shall be used for all compliance wells for all constituents that are detectable at concentrations above their respective method

detection limit (MDL) in ten percent or more of the background data to date. Initially, for each given MPar at a given downgradient monitoring well (well/MPar pair), the proposed background data set shall consist of all validated data from that compliance well and parameter, from the preceding five-year period. Every two years, following the adoption of this MRP, as part of the annual monitoring summary report, the Discharger shall add the newer data to the background data set for each well/MPar pair after validating (via a method approved by the Regional Board Executive Officer) that the new data does not indicate an increase over the existing background data. At that time, the Discharger shall also retire the well/MPar's oldest two years of background data, thereby producing a data set covering the then-previous five years. The Discharger shall validate the proposed intra-well background data set as follows for each MPar at each well (initially) or, subsequently, at a new well or for a new MPar at an existing well. The Discharger shall report the validated or updated background data set, for each affected well/MPar pair, in the next scheduled monitoring report. The Discharger may use an alternative statistical method or approach for development of concentration limits, if approved by Regional Board staff.

- ii. Per 27 CCR section 20415(e)(9)(C), if a control chart approach is used to evaluate water quality monitoring data, the specific type of control chart and its associated statistical parameter values (e.g., the upper control limit) shall be included in the supporting documentation as required by 27 CCR section 20415(e)(7). The Discharger shall use the procedure only if this supporting documentation shows the procedure to be protective of human health and the environment. Any control charting procedure must have a false positive rate of no less than 1 percent for each monitoring point charted. For example, upper control limits on X bar or R Charts used only once every six months (where no composite retest is used) must be set at no more than 2.327 standard deviations of the statistic plotted for a one-sided statistical comparison, or at no more than 2.576 standard deviations of the statistic plotted for a two-sided statistical comparison.
- iii. In the event that an approved data analysis method provides a preliminary indication that a given MPar has a measurably significant increase at a given well, the Discharger shall conduct a verification procedure (retest) in accordance with 27 CCR section 20415(e)(8)(E). To maintain sample independence, the retest sampling shall be conducted within 90 to 100 days of the initial sampling event and can be coordinated with the corresponding semi-annual sampling event. The verification procedure shall be performed only for the constituent(s) or parameter(s) that has shown "measurably significant" (as defined by 27 CCR section 20164) evidence of a release, and shall be performed only for those monitoring points at which a release is indicated.
- iv. For any COC or MPar that is detectable at concentrations above its respective MDL in 10% or less of the background data to date, the constituent's concentration limit shall be its MDL. A measurable exceedance of this concentration limit shall be determined by application of the non-statistical analysis method described in Section C.2.h of this MRP.

- v. Water Quality Monitoring Approach Except for COC scans, the monitoring approach used for each MPar at all compliance wells (well/MPar pair) shall be controlled by whether that MPar has exhibited a measurably significant increase at that well. Therefore, the Discharger shall monitor each well/MPar pair in one of two modes, as follows, either:
- A. Detection Mode For an MPar that has not produced a measurably significant increase at that well, the purpose of monitoring, for that well/MPar pair, is to watch for the MPar's arrival at that well at a concentration strong enough to trigger a measurably significant indication using an appropriate statistical or non-statistical data analysis method; or
  - B. Tracking Mode For an MPar that has produced a measurably significant increase at a given well, the purpose of the monitoring, for that well/MPar pair, is to verify the suitability and effectiveness of the existing or proposed corrective measures by tracking changes in the MPar's concentration at that location via an evolving concentration-versus-time plot.
    - vi. Detection Mode Data Analyses The following applies to all detection mode data analyses (i.e., this section does not apply to the scans under Sections C.2.a or C.2.f.ii of this MRP):
      - A. MPars Readily Detectable in Background At any given monitoring point, the Discharger shall apply an appropriate statistical analysis for each detection mode MPar that exceeds its respective MDL in at least 10% of the applicable background data set;
        - B. MPars Not Readily Detectable in Background For any monitoring point at which one or more MPars, in detection mode, exceed their respective MDL in less than 10% of the applicable background data set, the Discharger shall analyze the data for these MPars via the California Non-statistical Data Analysis Method (CNSDAM) test described in Section C.2.h of this MRP.
    - h. California Non-statistical Data Analysis Method (CNSDAM)
- i. Non-Statistical Method for Detection Mode for MPars Seldom Found in Background - For any given compliance (downgradient) well, regardless of the monitoring program (DMP, EMP, AMP, or CAP), the Discharger shall use this data analysis method, jointly, for all constituents on the "scope list" in Section C.2.h.i.A of this MRP (or, for each retest sample, the modified scope list of Section C.2.h.ii.B of this MRP).
  - A. Scope List Within 30 days of the effective date of this Order, the Discharger shall create a current "scope list" showing each detection mode MPar, at that well, that exceeds its MDL in less than 10% of its background data.

- B. Two Triggers From the scope list made under Section C.2.h.i.A of this MRP, for an initial test (or, for a retest, the modified scope list under Section C.2.h.ii.B) of this MRP, the Discharger shall identify each MPar in the current sample from that well that exceeds either its respective MDL or PQL. The Discharger shall conclude that these exceeding MPars provide a preliminary indication (or, for a retest, provide a measurably significant indication) of a change in the nature or extent of the release, at that well, if either:
  - (a) Two or more of the MPars on a monitoring well's scope list exceed their respective MDL; or
  - (b) At least one of the MPars on a monitoring well's scope list equals or exceeds its respective PQL.
- ii. Discrete Retest [27 CCR section 20415(e)(8)(E)]:
- A. In the event that the Discharger concludes (pursuant to Section C.2.h.i.B of this MRP) that there is a preliminary indication, then the Discharger shall immediately notify Regional Board staff by phone, fax, or e-mail and, within 30 days of such indication, shall collect two new (re-test) samples from the indicating compliance well. To maintain sample independence, the retest sampling shall be conducted within 90 to 100 days of the initial sampling event.
  - B. For any given compliance well, the Discharger shall analyze the retest samples only for those constituents indicated in that well's original test, under Section C.2.h.i.B of this MRP, and these indicated constituents shall comprise the well's "modified scope list." As soon as the retest data are available, the Discharger shall apply the same test (under Section C.2.h.i.B of this MRP, but using this modified scope list) to separately analyze each of the two suites of retest data at that compliance well.
  - C. If either (or both) of the retest samples trips either (or both) of the triggers under Section C.2.h.i.B of this MRP, then the Discharger shall conclude that there is a measurably significant increase at that well for the constituent(s) indicated in the validating retest sample(s). Furthermore, thereafter, the Discharger shall monitor the indicated constituent(s) in tracking mode at that well, remove the constituent(s) from the scope list created for that well, notify the Regional Board in writing, and highlight this conclusion and these changes in the next scheduled monitoring report and in the Landfill's operating record.
- i. Groundwater Flow Direction the Discharger shall measure the water level in each well at least semiannually and determine the presence of horizontal and vertical gradients and groundwater flow rate and direction for the respective groundwater body. The Discharger shall determine groundwater flow direction by water level readings monitoring wells and existing piezometers along the southern perimeter of the Landfill.

- j. Leachate Monitoring The Discharger shall conduct leachate monitoring at all leachate collection sumps as follows:
  - Annual Appendix II Constituent Scan Leachate samples shall be taken at each monitoring point each year during the month of October. The samples shall be analyzed for all Appendix II Constituents in 40 CFR, part 258.
- ii. Retest If any constituents that are not in the COC list are detected in the leachate-sampling event at any sampling point above the reporting limit, the Discharger shall resample the leachate at that point during the next March and analyze the sample for those detected constituents. If any such constituent is confirmed to be in the leachate in the retest sample above the reporting limit, the Discharger shall add the constituent to the COC list and report this to the Regional Board within two weeks of the confirmation.
  - iii. Reporting Leachate monitoring results shall be included in the semi-annual and annual report that covers the period during which the monitoring is conducted.
  - k. Vadose Zone Monitoring Vadose zone monitoring at the Landfill shall be conducted semiannually and include:
    - i. Subdrain Monitoring As allowed under 27 CCR section 20415(d)(5), subdrain liquid monitoring will be conducted for those cells that require the placement of a subdrain to control groundwater seepage beneath the liner system. In the event liquids are present in a quantity feasible to sample, samples will be taken and analyzed, to the extent feasible, for all indicator parameters in Table T-1.
  - Surface Water Monitoring Surface water monitoring is not required in this MRP because runoff at the Landfill is monitored under the General NPDES Storm Water Permit.
  - m. Water Used on Site for Irrigation and Dust Control: The Discharger shall record the amount of water used on site for the purposes of irrigation and dust control from each source on a monthly basis. Each water source, other than potable water, shall be sampled semiannually and analyzed for pH, heavy metals, nitrate, and VOCs.

# 3. Site Inspections

The Discharger shall inspect the Landfill, at the minimum, in accordance with the following schedule:

- a. During the wet season (October through April), following each storm that produces storm water runoff, or on a monthly basis if no storm produces runoff during the month.
- b. During the dry season, a minimum of one inspection shall be performed every three months.

- c. Standard Observations During a site inspection, the Discharger shall observe and record at least the following:
- i. Evidence of any surface water leaving or entering the waste management unit, estimated size of affected area, and estimated flow rate (show affected area on map).
  - ii. Evidence of odors; presence or absence, characterization, source, and distance of travel from source.
  - iii. Evidence of erosion and/or of exposed refuse.
  - iv. Evidence of non-storm water discharges at all storm water discharge locations.
  - v. Evidence of ponded water at any point on the waste management facility (show affected area on map).
    - vi. Compliance with the Storm Water Pollution Prevention Plan, insuring that the terms of the General NPDES Storm Water Permit are properly implemented.
    - vii. Integrity of all drainage systems.

### D. SAMPLING AND ANALYTICAL PROCEDURES

# 1. Sampling and Analytical Methods

Sample collection, storage, and analysis shall be performed according to the most recent version of Standard USEPA Methods (USEPA publication "SW-846"), and in accordance with a sampling and analysis plan acceptable to the Regional Board Executive Officer. A State of California approved laboratory shall perform water analysis. Specific methods of analysis must be identified. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign reports of such work submitted to the Regional Board. In addition, the Discharger is responsible for seeing that the laboratory analysis of samples from all monitoring points meets the following restrictions:

- a. The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., trace) in historical data for that medium, the SW-846 analytical method having the lowest MDL shall be selected.
- b. Trace results (results falling between the MDL and the practical quantitation limit (PQL)) for organic compounds shall be reported as such.
- c. MDL and PQL shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. Both limits shall

reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. If the laboratory suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived values, the results shall be flagged accordingly, and an estimate of the limit actually achieved shall be included.

- d. For each MPar addressed during a given reporting period, the Discharger shall include in the monitoring report a listing of the prevailing MDL and PQL for that MPar, together with an indication as to whether the MDL, PQL, or both have changed since the prior reporting period. The Discharger shall require the analytical laboratory to report censored data (trace level and non-detect determinations). In the event that an MPar's MDL and/or PQL change, the Discharger shall highlight that change in the report's summary and the report shall include an explanation for the change that is written and signed by the owner/director of the analytical laboratory.
- e. Quality assurance and quality control (QA/QC) data shall be reported along with the sample results to which it applies. Sample results shall be reported unadjusted for blank results or spike recovery. The QA/QC data submittal shall include:
  - i. The method, equipment, and analytical detection limits.
  - *ii.* The recovery rates, including an explanation for any recovery rate that is outside the USEPA-specified recovery rate.
  - iii. The results of equipment and method blanks.
  - iv. The results of spiked and surrogate samples.
  - v. The frequency of quality control analysis.
  - vi. The name and qualifications of the person(s) performing the analyses.
- f. QA/QC analytical results involving detection of common laboratory contaminants in any sample shall be reported and flagged for easy reference.
- g. Non-targeted chromatographic peaks shall be identified, quantified, and reported to reasonable extent. When significant unknown peaks are encountered, second column or second method confirmation procedures shall be performed in an attempt to identify and more accurately quantify the unknown analyte(s).

#### 2. Records to be Maintained

Analytical records shall be maintained by the Discharger or laboratory, and shall be retained for a minimum of five years. The period of retention shall be extended during the course of any unresolved litigation or when directed by the Regional Board Executive Officer. These records and reports are public documents and shall be made available for inspection during normal business hours at the Regional Board office. Such records

shall show the following for each sample:

- a. Identity of sample and the actual monitoring point designation from which it was taken, along with the identity of the individual who obtained the sample.
- b. Date and time of sampling.
- c. Date and time that analyses were started and completed, and the name of personnel performing each analysis.
- d. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.
- e. Results of analyses, and MDL and PQL for each analysis.

Ordered by:

Deborah J. Smith Executive Officer April 12, 2018

TABLE T-1: Constituents of Concern

Monitoring	Monitoring Parameters (MPars)							
Indicator Parameters*		Supplemental Parameters	Other COCs					
Inorganic Parameters: Alkalinity (total) Ammonia, Nitrogen Chemical Oxygen Demand (COD) Chloride Nitrate-N Sulfate Potassium (total) Total Dissolved Solids (TDS) Total Organic Carbon (TOC)  Appendix I VOCs: 1,1,1,2- Tetrachloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dibromo-3- Chloropropane 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 2-Butanone 2-Hexanone 4-Methyl-2-Pentanone Acctone Acrylonitrile Benzene	Bromochloromethane Bromodichloromethane Bromoform Bromomethane c-1,2-Dichloroethene c-1,3- Dichloropropene Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane Dibromochloromethane Dibromomethane Dichlorodifluoromethane Ethylbenzene Iodomethane Methylene chloride o-Xylene p/m-Xylene Styrene t-1,2-Dichloroethene t-1,3-Dichloropropene t-1,4-Dichloro-2-Butene Tetrachloroethene Trichloroethene Trichlorofluoromethane Vinyl Acetate Vinyl Chloride  Other Organics: Dichlorodifluoromethane (DCDFM) Methyl Tertiary Butyl Ether (MTBE) 1,4-Dioxane	Bicarbonate (as CaCO3) Boron (total) Bromide Calcium (total) Carbon Dioxide (lab) Fluoride Iron (total) Magnesium (total) Manganese (total) pH (field) Semi-Volatile Organics Sodium (total) Sulfide Specific Conductance (field) Temperature (field) Total Organic Halides (TOX) Turbidity (field)	Metals: Antimony Arsenic Barium Beryllium Chromium (total) Cobalt Copper Lead Mercury Nickel Selenium Silver Thallium Vanadium Zinc  Any other pollutants detected and confirmed in Landfil leachate or added by the Regional Board Executive Officer					

<sup>\*</sup>Any modification to the list of Indicator Parameters evaluated through statistical analysis based on source (leachate) concentration or related information must be fully described in each corresponding semi-annual monitoring report.

TABLE T-2:
Downgradient Well Indicator Parameter Concentration Limits (in mg/l) MRP<sup>3</sup>

Constituents	TMW-1	TMW-2	TMW-3	TMW-4	TMW-5	OWTS-1
Alkalinity, total	820	413	421	552	491	669
Ammonia as N	6.22	0.64	0.69	5.99	0.83	0.05
COD	45.4	3.3	10.0	19.0	48.0	8.7
Chloride	105.9	26.4	23.0	170.0	140.0	60.8
Potassium	11.04	5.10	4.89	10.67	10.67	5.56
Nitrate-N	0.04	0.04	0.04	0.18	0.04	15.83
Sulfate	968.6	455.5	160.0	740.0	2327	92.05
TDS	2256	1027	655	1800	3900	901
TOC	13.19	1.05	1.241	5.6	2.327	1.4
Appendix I VOCs	DL	DL	DL	DL	DL	DL

DL = The concentration limit for man-made constituents is the laboratory detection limit.

Any time a new downgradient monitoring well is added, an indicator parameter concentration limit is updated, or the status of an indicator parameter changes (i.e. is not required to be monitored based on LCRS monitoring results [X], is not subject to statistical analysis based on site-specific background water quality [✓], or is placed in tracking mode [TM]), the Discharger shall provide the Regional Board with an updated list of this table in the corresponding semi-annual monitoring report.

FIGURE T-1: Existing Compliance Groundwater Monitoring Locations

