

California Regional Water Quality Control Board

Los Angeles Region



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Arnold Schwarzenegger
Governor

April 5, 2010

Mr. Stephen Maguin, Chief Engineer and General Manager County Sanitation Districts of Los Angeles County 1955 Workman Mill Road Whittier, CA 90607-4998

REVISED WASTE DISCHARGE REQUIREMENTS - SPADRA LANDFILL AND RESOURCE CONSERVATION PROJECT, POMONA, LOS ANGELES COUNTY, CALIFORNIA (File No. 57-091, Order No. R4-2010-0057, CI 2295)

Dear Mr. Maguin:

Reference is made to our letter of February 22, 2010, which transmitted a copy of tentative waste discharge requirements for the subject site.

Pursuant to Division 7 of the California Water Code, this Regional Water Quality Control Board (Regional Board) at a public hearing held on April 1, 2010, reviewed the tentative requirements, considered all factors in the case, and adopted Order No. R4-2010-0057 (copy attached) relative to this site. (To save printing and postage costs, hard copies of the Order and its attachments are sent only to the addressee; however, anyone may obtain copies at the Regional Board's website at http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/, or by contacting the Regional Board staff listed below.)

All monitoring reports should be sent to the Regional Board, <u>Attention: Information Technology Unit</u>. Please reference all technical and monitoring reports to our Compliance File No. <u>CI 2295</u>. We would appreciate it if you would not combine other reports, such as progress or technical, with your monitoring reports but would submit each type of report as a separate document.

If you have any questions, please contact Dr. Wen Yang (Project Manager) at (213) 620-2253.

Sincerely yours,

Rodney H. Nelson

Senior Engineering Geologist

Rodney H. Nelson

Landfills Unit

Enclosures

California Environmental Protection Agency

Cc: Leslie Graves, Division of Water Quality, State Water Resources Control Board Peter Jan, California Department of Resources Recycling and Recovery Cindy Chen, Los Angeles County, DPH, Baldwin Park Pete Oda, Los Angeles County, DPH, Baldwin Park Daniel Hostetler, California Polytechnic University, Pomona Kyle Brown, Lyle Center, California Polytechnic University, Pomona Charles Dowdell, County Sanitation Districts of Los Angeles County Russell Yoshida, County Sanitation Districts of Los Angeles County Alicia Ng, County Sanitation Districts of Los Angeles County Scott Partridge, Spadra Landfill, Walnut Carol Williams, Main San Gabriel Basin Watermaster Timothy Jochem, Upper San Gabriel Valley Municipal Water District Linda Lowry, City of Pomona Robert Wishner, City of Walnut

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

ORDER NO. R4-2010-0057 CORRECTIVE ACTION PROGRAM AND POSTCLOSURE MAINTENANCE WASTE DISCHARGE REQUIREMENTS FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY (Spadra Landfill and Resource Conservation Project) (File No. 57-091)

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

BACKGROUND

- 1. The Spadra Landfill and Resource Conservation Project (Landfill) is a closed Class III municipal solid waste (MSW) disposal facility located at 4125 West Valley Boulevard in the City of Pomona, California (Latitude 34°02'36"N and Longitude 117°49'21"W). The Landfill is approximately 1.4 miles southwest of the intersection of the San Bernardino (I-10) and Orange (I-57) freeways, within the City of Pomona and unincorporated Los Angeles County (Figure 1).
- 2. Landfill operations at the site began on July 15, 1957, and ended on September 28, 2000. Final closure activities at the site were completed in March 2002. During its active life, the Landfill received approximately 17.1 million tons of MSW.
- 3. The Landfill has been operated by the County Sanitation Districts of Los Angeles County (Discharger) on lands owned by the California State Polytechnic University, Pomona (Cal Poly) and the County of Los Angeles (County) under a Joint Powers Agreement (JPA) dated October 24, 1985, between the Discharger, Cal Poly, and the County.
- 4. The 323-acre Landfill is divided into two major fill areas: the Cal Poly Canyons on the west side and the Main Canyon on the east side (Figure 2). The Cal Poly Canyons are underlain by a composite liner equipped with a leachate collection and recovery system (LCRS), while the Main Canyon is mostly unlined, with the exception of a 35-acre section on the eastern edge known as the Kirst Cut, which is underlain by a clay liner and drainage system. Landfill liquids (leachate and gas condensate) collected at the Landfill are treated onsite with an air stripper and then discharged under permit to the Los Angeles County sewer system.
- 5. The final cover of the Spadra Landfill consists of a monolithic evapotranspiration (ET) cover at least five feet thick underlain by a minimum of one-foot thick foundation or interim cover soil. This final cover system is an engineered alternative to the prescriptive final cover system required under title 27 of California Code of Regulations (27 CCR), section 21090.
- 6. To demonstrate that the ET cover affords equivalent protection against water quality impairment as that provided by a 27 CCR prescriptive final cover system, the Discharger conducted a soil moisture monitoring study at the Landfill between October 2002 and November 2005. In a letter dated June 20, 2006, the Regional Board Executive Officer (Executive Officer) determined that the ET cover meets the requirements for engineered alternatives in 27 CCR, section 20080(b).
- 7. In accordance with a *Final Postclosure Maintenance Plan* (FPCMP) that was first submitted to the Regional Board by the Discharger in July 1997 and subsequently revised in August 1997, March

1998, July 1998, October 1998, June 2002, and December 2002, the Discharger maintains the slopes of the Landfill as vegetated open space and Cal Poly maintains the 50-acre top deck as a perennial pasture. The Discharger has the responsibility to ensure that the entire Landfill, including the 50-acre top deck, is properly maintained in accordance with this Order.

- 8. Under the JPA, the Discharger retains all maintenance responsibilities with respect to land that has been utilized for landfill operations, while Cal Poly has the responsibility for the development of postclosure uses of the closed landfill site. Cal Poly is responsible for maintenance of aboveground structures and facilities in these developed areas, except for the access roads and water/environmental control/gas-to-energy systems. Cal Poly has named the project site (including the Landfill and surrounding non-landfill areas owned by Cal Poly) LandLab, which was established in 1985 as a center for education and research in sustainable use of resources. The anticipated land use of the LandLab includes botanical gardens, woodland preservation areas, farmer's market, nursery, orchards, vineyards, jogging and equestrian trails, a golf course, a visitor center, open space, and other Cal Poly research projects. In January 1999, Cal Poly prepared a document titled Closure Plan, Postclosure Maintenance Strategy, and Financial Assurance Mechanism for the 50-acre Top Deck of the Spadra Landfill which selected a perennial pasture postclosure use for the 50-acre top deck of the Landfill.
- 9. In accordance with the California Water Code (CWC), this Regional Board adopted Resolution No. 59-35 on April 23, 1959, prescribing waste discharge requirements (WDRs) for the disposal of inert waste, non-hazardous solid waste, and certain "semi-liquid" wastes at the Landfill. On January 23, 1989, the Regional Board adopted Order No. 89-006 prescribing revised WDRs for the disposal of certain non-hazardous solid wastes and inert wastes at the Landfill. The revised WDRs included a Monitoring and Reporting Program (M&RP) (No. CI-2295) that was subsequently amended by the Executive Officer on January 17, 1990.
- 10. CWC section 13263 (e) provides that all WDRs shall be reviewed periodically and, upon such review, may be revised by the Regional Board to comply with changing state or federal laws, regulations, policies, or guidelines. This Order revises the WDRs for the Landfill to include requirements for post-closure maintenance and a Corrective Action Program (CAP) for the Landfill.
- 11. In accordance with the 27 CCR, section 21585, the Discharger submitted three Joint Technical Document (JTD) addendums dated November 15, 2002, December 31, 2002, and February 2009, respectively, to the Regional Board to facilitate the revision of the WDRs.
- 12. This Order includes the attached Definition of Terms and Acronyms (Attachment A), which the Regional Water Board Executive Officer may revise as the need arises.

REGULATORY REQUIREMENTS

13. Although the State Water Resources Control Board (State Board) and Regional Boards are the state agencies designated to protect water quality that may be impacted by solid waste disposal activities, the California Department of Resources Recycling and Recovery (CalRecycle, formerly California Integrated Waste Management Board, or CIWMB) regulates all other aspects of solid waste disposal in the state. California Code of Regulations, title 27 (27 CCR), promulgated on July 18, 1997, clarifies the roles and responsibilities of the State Board/Regional Boards and CalRecycle in regulating MSW disposal sites.

- 14. The United States Environmental Protection Agency (USEPA) under title 40 of the Code of Federal Regulations (CFR), Parts 257 and 258 (Subtitle D) revised existing regulations for MSW disposal facilities in response to the 1984 Hazardous and Solid Waste Amendments of the Resources Conservation and Recovery Act and added new detailed requirements addressing the issues of location restrictions, facility operation and design criteria, groundwater monitoring and corrective action, closure and postclosure maintenance, and financial assurance. The USEPA delegated the responsibility for implementing these regulations to states with a fully approved landfill regulatory program. As the responsible agencies for an approved state with respect to the water quality protection aspects of the federal MSW regulations, the State Board adopted Resolution No. 93-62 on June 17, 1993, and this Regional Board adopted Order No. 93-062 on September 27, 1993, to implement the federal Subtitle D regulatory requirements. Regional Board Order No. 93-062 revised existing WDRs of all active Class III landfills in this Region, including the Landfill.
- 15. Pursuant to section 402 (p) of the Clean Water Act and 40 CFR Parts 122, 123, and 124, the State Board adopted a National Pollutant Discharge Elimination System (NPDES) General Permit to regulate stormwater discharges associated with industrial activities in California (State Board Order 97-03-DWQ). Stormwater runoff from the Spadra Landfill is currently regulated under the general NPDES permit (WDID No. 4 19I006190, enrolled since April 22, 1992). The Discharger is implementing a Storm Water Pollution Prevention Plan (SWPPP) at the Landfill as required by the general NPDES permit.
- 16. 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 requirements in this Order, as they are met, are in conformance with the goals of the Basin Plan.

ENVIRONMENTAL SETTING

- 17. The Spadra Landfill is located in the northeast portion of the Los Angeles Basin. The area is characterized by a series of northeast-trending low hills and intervening valleys collectively described as the San Jose Hills that consist primarily of Pliocene to Miocene age marine sedimentary rocks with localized, relatively thick deposits of alluvium that occur within the canyons and lowland areas. Geologic units at the site include bedrock of the La Vida member of the Miocene-aged Puente Formation and alluvium that consists of inter-bedded mudstones and siltstones with minor inter-beds of fine-grained sandstone. The bedrock is tightly compacted but generally poorly cemented.
- 18. There are no known active faults within 200 feet of the Landfill. Active faults are defined as Holocene Epoch faults, meaning that they have shown surface movement in the last 11,000 years. The closest active fault to the Landfill is the Whittier Fault, which is located approximately six miles to the southwest. The San Andreas Fault, which is the most prominent fault in the region, is approximately 24 miles to the northeast of the site. A seismic stability study in 1988 predicted that the landfill slopes will remain stable during either a large earthquake occurring along the San Andreas Fault or a moderate earthquake occurring closer to the Landfill.

- 19. Hydrogeologically, the Landfill is located at a divide that separates the Spadra Sub-Basin, which is part of the Santa Ana Groundwater Basin, and the Puente Sub-Basin, which is part of the Main San Gabriel Valley Basin. Groundwater at the site occurs in bedrock as well as alluvium under unconfined conditions. Hydraulic conductivity at the site varies from 1.17 x 10⁻⁵ to 1.82 x 10⁻² cm/second. The general groundwater flow direction in the vicinity of the landfill is to the southwest, while local groundwater flow directions are inferred from the topography prior to the development of the Landfill. Groundwater exiting the landfill eventually enters the water bearing strata of the Spadra Sub-Basin (Figure 3).
- 20. The Seismic Hazard Zone Map for the San Dimas 7.5 minute quadrangle (released March 25, 1999) produced by the California Division of Mines and Geology Seismic Hazards Mapping Program (incorporated herein by reference) indicates that the Landfill is located within identified liquefaction zones. The hazard zone map also identifies 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.
- 21. The National Flood Insurance Program has grouped areas surrounding the landfill in "Zone D" meaning that the flood hazard has not been determined. There is no Flood Insurance Rate Map for Spadra Landfill. The landfill's location with respect to the surrounding topography renders it unlikely to be within a 100-year flood plain.
- 22. A variety of land uses exist within one mile of the landfill. Adjacent to the eastern and southwestern borders of the site, in the Cities of Pomona and Walnut, are residential uses. Further to the southeast and east are land uses including: farming, industrial uses, a feedlot, and a hospital. The campus of Mt. San Antonio College is west of the site and the Cal Poly campus is to the north.

ENVIRONMENTAL PROTECTION AND MONITORING SYSTEMS

- 23. To control groundwater that may be impacted by the Landfill, the Discharger constructed subsurface barriers and groundwater extraction systems at five locations at the Landfill (Figure 2). Barriers 1 and 2 were installed in 1986 to cut off the hydraulic connectivity of the Main Canyon towards the Spadra Sub-basin, while Barriers 3, 4, and 5 were installed in 1991 across the mouths of the Cal Poly Canyons to contain and control groundwater flowing to the Puente Sub-basin. Each subsurface barrier is composed of a cement-bentonite mixture and has a design hydraulic conductivity of less than 1 x 10⁻⁶ cm/s. With the exception of the central portion of Barrier 1, the barriers are "keyed" into bedrock to a minimum depth of five feet. Extraction wells were installed up-gradient of each barrier to collect groundwater from the uppermost aquifer. Groundwater extraction wells have been operated since 1992 at Barriers 1 and 2, where groundwater has been affected by the Landfill. In 2007, the Discharge started groundwater extraction at Barrier 4 following a detection of abnormal inorganic parameters in groundwater downgradient to the barrier. Although the Discharger has demonstrated that the inorganic abnormality was not related to the Landfill, groundwater extraction at the barrier has been continued as a precaution.
- 24. Groundwater monitoring at the Landfill started in 1989 following the adoption of Board Order No. 89-006. On August 9, 1994, as required by Board Order 93-062, the Discharger submitted a *Water Quality Monitoring System Report* (Subtitle D Report) to the Regional Board that proposed modifications to the M&RP. The proposed modifications to M&RP were approved by Regional

Board staff during a meeting with the Discharger on November 7, 1994, and have been implemented at the Landfill since then.

- 25. The current groundwater monitoring network at the Landfill includes three background wells (M42B, M49B, and M50B), 15 on-site downgradient wells (R06A, R06B, M12A, M13B, M19B, M21B, R27A, M27B, M29B, M32B, M51B, M52B, R53B, M57B, and M58B), and one off-site well (M43A) that is located in the Spadra Sub-basin approximately 1,400 feet down gradient of Barrier 1 (Figure 4).
- 26. Since 1994, the Discharger has been monitoring leachate annually from the LCRS in the Cal Poly Canyons for constituents listed in Appendix II of 40 CFR Part 258 (Attachment B), and re-testing for newly discovered ones, in order to create a constituents of concern (COC) list containing those Appendix II constituents that could be released from these areas of the Landfill. For the Main Canyon area that is largely unlined, this Order requires the Discharger to monitor the leachate extracted from the Kirst Cut area and conduct the same tests that are required for leachate extracted from the LCRS in the Cal Poly Canyons. This Order narrows the scope of the COC list for the Landfill to include, from Appendix II, only those constituents that have been detected and verified in leachate from either or both the Cal Poly Canyons and Main Canyon. By monitoring for detectable COCs, and any foreseeable breakdown products, the Discharger will be monitoring for all Appendix II constituents that could be released from the Landfill. This is the manner in which this Order meets the requirements of 40 CFR section 258.55(b).
- 27. 27 CCR section 20415(d) requires an unsaturated zone groundwater monitoring program at Class III Landfills. The intent of an unsaturated zone monitoring program is to monitor unsaturated soils/bedrock between the waste management unit and groundwater to potentially provide an early indication of groundwater quality degradation. The current unsaturated zone groundwater monitoring program at the Landfill includes five lysimeters (L3, L4, L5, L6, and L7) (Figure 4) that have been required under Order No. 93-062. However, existing monitoring data indicates that these lysimeters are ineffective in supplementing water quality monitoring because they consistently fail to yield an adequate volume of water to allow analysis. Through adoption of this Order, this Regional Board grants an exemption to further unsaturated zone monitoring, pursuant to 27 CCR 20415(d)(5).
- 28. The Discharger has installed and operated a landfill gas recovery system at the Landfill. Landfill gas is collected under vacuum through a system of vertical extraction wells and horizontal trenches. The recovered landfill gas is used at an onsite Gas-to-Energy Facility with flares used for backup capacity.
- 29. The Discharger uses recycled water for irrigation and dust control purposes at the Landfill. These uses are in conformance with the goals of the Basin Plan and State statutes and regulations pertaining to the use of recycled water in California that can be found in the CWC, CCR, and the health and safety code (HSC). State policy promotes the use of recycled water to the maximum extent in order to supplement existing surface and groundwater supplies to help meet water needs (CWC sections 13510 to 13512).

KNOWN CONTAMINATION AND CORRECTIVE ACTION PROGRAM

- 30. In December 1994, low levels of volatile organic compounds (VOCs) were detected at monitoring wells R27A and M27B downgradient to Barrier 1 and monitoring well M12A downgradient to Barrier 2. These detections were confirmed in a retest conducted in January 1995. In response to the detection of VOCs, the Discharger submitted an Amended Report of Waste Discharge to the Regional Board in May 1995 and proposed an Evaluation Monitoring Program (EMP) at the Landfill meeting 27 CCR section 20425. To assess the nature and extent of groundwater contamination, the Discharger conducted a comprehensive hydrogeologic investigation at the site from July 1998 to December 1999, focusing on the Barriers 1 and 2 areas.
- 31. On January 10, 2000, the Discharger submitted a Final Report on the Hydrogeologic Investigation of the Groundwater Extraction System for the Spadra Landfill to the Regional Board. The report concluded that VOCs entered groundwater at the site as a consequence of the contact of groundwater with landfill gas. The presence of VOCs in groundwater was determined to be restricted to the vicinities of Barriers 1 and 2 areas. The vertical extent of the landfill effect at both barriers was determined to be limited to alluvium and weathered bedrock. No evidence was found to indicate that groundwater in the Spadra Sub-Basin offsite was impacted by the Landfill.
- 32. VOCs detected in groundwater at the impacted monitoring wells include benzene, chlorobenzene, chloroform, o-dichlorobenzene, p-dichlorobenzene, 1,1-dichloroethane (DCA), 1,2-dichloroethane, 1,1-dichloroethylene, cis-1,2-dichloroethylene (DCE), trans-1,2-dichloroethylene, 1,2-dichloropropane, ethylbenzene, Freon-11, methylene chloride, tetrachloroethylene (PCE), trichloroethylene (TCE), toluene, and vinyl chloride. However, PCE, TCE, cis-1,2-DCE and 1,1-DCA were by far the most frequently detected. The remaining VOCs, when present, were generally at concentrations not much above the method detection limit.
- 33. In an Amended Report of Waste Discharge for Corrective Action Program dated October 2001 (JTD Addendum No. 1), the Discharger proposed a Corrective Action Program (CAP) that includes extracting VOC impacted groundwater from three wells up-gradient of Barrier 1 and two wells up-gradient of Barrier 2 and treating such water with an on-site air stripping treatment system. The proposed CAP has been implemented at the Landfill on an interim basis since 2001. The treated water has been discharged to the Los Angeles County sewer system.
- 34. Since 2005, VOCs have been detected at monitoring well M29B at the eastern boundary of the Landfill. The contamination is also believed to be caused by the contact of landfill gas with groundwater. As part of the CAP at the Landfill, the Discharger installed an automated pumping system in a slant well in the Kirst Cut area to extract leachate and increased the vacuum on the landfill gas collection system on the eastern boundary area.
- 35. The most recent (Fourth quarter of 2009) VOC concentration in groundwater monitoring wells at the Landfill are summarized in Table 1 [Bold font denotes concentrations exceeding the California Maximum Contamination Level (MCL) for drinking water]. The VOC concentrations in monitoring wells down gradient to Barriers 1 and 2 have been significantly reduced from the levels of 1998 when VOCs were first detected in those areas, while the VOC concentrations in well M29B at the eastern boundary have not significantly changed since 2005, when VOCs were first detected in the well. This Order requires the Discharger to continue the existing corrective action measures at the Landfill, including extracting contaminated groundwater at Barriers 1 and 2,

extracting landfill liquids at the Kirst Cut area, and properly managing the landfill gas collection system to prevent the contact of landfill gas with groundwater.

		Barrier 1				Barı	Eastern Boundary	
Constituent	MCL	R06A	R06B	R27A	M27B	M12A	M13B	M29B
1,1-DCA	5.0	1.0	0.6	<0.5	0.8	<0.5	<0.5	1.5
cis-1,2-DCE	6.0	2.0	4.0	<0.5	<0.5	<0.5	<0.5	8.0
PCE	5.0	8.0	6.0	0.7	5.0	0.99	1.7	5.6
TCE	5.0	3.0	5.0	<0.5	0.9	4.3	18.5	1.0
Vinyl Chloride	0.5	0.8	1.0	< 0.5	<0.5	< 0.5	<0.5	<0.5

Table 1. Fourth Quarter 2009 VOC detections in groundwater monitoring wells (ug/L)

- 36. This Order is in conformance with state and federal requirements for a CAP, for known and any future releases, because it implements all applicable 27 CCR CAP requirements and all additional federal requirements under 40 CFR sections 258.56, 258.57 and 258.58, including section 258.58(a)(1)(i-iii), which requires the Discharger to implement an assessment monitoring program (AMP) pursuant to 40 CFR section 258.55 in conjunction with the CAP.
- This Order places the entire Landfill into a CAP while implementing corrective measures for the known releases meeting applicable state and federal requirements. This approach eliminates needless complexity associated with applying concurrent programs (i.e., running unaffected portions of the Landfill under a DMP and the portions affected by the release under either an EMP or a CAP, or both). The Regional Board chooses to implement this approach by documenting and responding to the compliance status of each monitoring parameter (Mpar) individually at each compliance well separately (i.e., the Discharger will track the compliance status of each such "well/MPar pair" separately).
- 38. Under this Order, at any given time, each well/MPar pair will be in one of two compliance status conditions. Prior to the MPar's exhibiting a measurably significant exceedance at a given well, that well/MPar pair will be in "detection mode" and monitoring will involve statistical or non-statistical data analysis designed to detect a Landfill-related increase at that well for that MPar. Once a well/MPar pair exhibits a measurably significant increase (i.e., an initial exceedance of its Concentration Limit, verified by retesting), it will change to "tracking mode" and monitoring will involve concentration-versus-time plotting to document changes in the release. Once in tracking mode, a well/MPar pair can return to detection mode only upon inception of a proof period to demonstrate the successful completion of corrective action.
- 39. This Order minimizes the occurrence of false-positive indications in two ways:
 - a. it includes a non-statistical data analysis method, meeting 27 CCR section 20415(e)(8-9) requirements, that collectively analyzes all the Mpars, at a given well, whose background data exceeds its respective method detection limit (MDL) no more than 10% of the time; and

- b. all statistical and non-statistical data analysis methods used on well/MPars in detection mode data analyses under this Order include a pass-1-of-3 retesting approach (explained in the attached M&RP) imposed pursuant to 27 CCR 20080(a)(1) as a more-effective replacement for the usual discrete retest of 20415(e)(8)(E).
- 40. To assure compliance with the requirements and considerations under 40 CFR section 258.55 through section 258.58 and 27 CCR section 20425 in the simplest way possible, this Order:
 - a. requires statistical or non-statistical data analysis, at any given compliance well, only for those MPars that are in detection mode at that well;
 - b. requires concentration-versus-time plotting, at any given compliance well, for all MPars that are in tracking mode at that well; and
 - c. uses annual leachate sampling for all non-COC Appendix II constituents, to keep the COC list updated to include all Appendix II constituents that could be released from the Landfill. New constituents so identified automatically become a part of the COC list and an MPar for all compliance wells.
- 41. Given that detection mode testing can be compromised by the arrival of a COC at any background well either as a result of the release (e.g., through advective flow, in the unsaturated zone, of gasphase VOCs in landfill gas) or through the arrival of such a constituent from an upgradient source, this Order implements a simple means for identifying such anomalies which requires the Discharger to investigate their cause, and initiates appropriate adjustments to the monitoring program.
- 42. Given that the VOCs in the federal monitoring parameter list, Appendix I to 40 CFR part 258 (Appendix I), are all Appendix II constituents, leachate sampling from the LCRSs for the Cal Poly Canyons and Kirst Cut areas also serves as a basis for narrowing the scope of VOCs which the Discharger must monitor in these areas to include only those Appendix I constituents that have ever been detected in leachate, at trace level or above, and verified by retest. This is the manner in which this Order implements 40 CFR section 258.54(a)(1).
- 43. 27 CCR sections 20380(b) and 22222 require WDRs for MSW landfills to contain a provision which requires the discharger to obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the landfill (27 CCR 22220 et seq.). The Discharger has not provided the Regional Board with a corrective action plan and corrective action cost estimate for all known or reasonable foreseeable releases from the Landfill. This Order requires the Discharger to obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the Landfill within 90 days of the adoption of this Order.
- 44. In accordance with 27 CCR section 20430(h), this Order requires corrective actions measures (CAM) effectiveness reports to be submitted to the Regional Board semi-annually. The CAM effectiveness report must include, at a minimum, a comprehensive discussion of the compliance record and the result of any corrective actions taken, or planned, which may be needed to bring the Discharger into full compliance with the WDRs.

ADMINISTRATIVE

- 45. In accordance with regulations adopted by the State Board in September 2004 regarding electronic submittal of information (ESI), the Discharger has been electronically submitting monitoring reports required under the WDRs to the State Board GeoTracker system in addition to submitting hardcopies of the reports to the Regional Board. The requirements in this Order, as they are met, are in conformance with the ESI regulations.
- 46. Revision of the Discharger's WDRs for the Landfill constitutes an existing project as defined in section 15301, chapter 3, title 14 of the CCR and is therefore exempt from the provisions of the CEQA (Public Resources Code section 21000 et seq.).

The Regional Board has notified interested agencies and all known interested parties of its intent to issue requirements for postclosure maintenance, CAP, and AMP for the Landfill.

The Regional Board in a public meeting heard and considered all comments pertaining to postclosure maintenance, CAP, and AMP for the Landfill.

Any person aggrieved by this action of the Regional Board may petition the State Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Board must *receive* the petition by 5:00 p.m., 30 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 Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml or will be provided upon request.

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

A. SPECIFICATIONS

- 1. The Landfill is closed. No MSW or any other wastes may be received at the Landfill for the purpose of disposal.
- 2. Inert soil, concrete, and asphalt materials that are used for the construction or repair of the final cover, access roads, or other facilities at the site may be imported to the site, provided that the source, volume, and usage of such imported materials are reported in the regular semi-annual report for the Landfill.
- 3. The Discharger shall remove any unacceptable wastes that arrive at the site in violation of the requirements in this Order and discharge such removed waste at a classified waste management unit.

B. PROHIBITIONS

1. Discharge of waste as a result of inadequate postclosure maintenance 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 waste that the landfill received throughout its operating life shall not:
 - a. cause the occurrence of coliform or pathogenic organisms in waters pumped from a groundwater basin;
 - b. cause the occurrence of objectionable tastes or odors in waters pumped from a groundwater basin;
 - c. cause waters pumped from a groundwater basin to foam;
 - d. cause the presence of toxic materials in waters pumped from a groundwater basin;
 - e. cause the pH of waters pumped from a groundwater basin to fall below 6.0, or rise above 9.0;
 - f. cause the Regional Board's objectives for the groundwaters 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 groundwaters or surface waters as established in the Basin Plan.
- 3. Odors, vectors, and other nuisances of waste origin that migrate beyond the limits of the Landfill are prohibited.
- 4. The discharge of waste to surface drainage courses or to usable groundwater is prohibited.
- 5. The Discharger shall conduct site operations such that there is no release from the Landfill that causes any Basin Plan objective to be exceeded at any location under, or in the vicinity of, the Landfill. Moreover, no COC shall exhibit a measurably significant increase over its respective Concentration Limit (background data set) at any well, as indicated by an approved statistical or nonstatistical data analysis method (including that method's retesting approach).
- 6. All federal, state, and county sanitary health codes, rules, regulations, and ordinances pertinent to the disposal of wastes on land shall be complied with in the operation and maintenance of the Landfill.

C. REQUIREMENTS FOR POSTCLOSURE MAINTENANCE

- 1. This Order approves the addendums to the FPCMP included in JTD Addendum No. 3 that was submitted to the Regional Board by the Discharger on March 5, 2009. Postclosure maintenance of the Landfill shall be conducted in accordance with the revised FPCMP and its amendments as approved by the Executive Officer.
- 2. If the Discharger notices any closure or post-closure maintenance standard in Article 2 of Subchapter 5 of Chapter 3 of Division 2 of 27 CCR (commencing with Section 21090) that

should apply at the Landfill, but that is missing from this Order, the Discharger shall notify the Regional Water Board within seven days.

- 3. The Landfill's post-closure maintenance period shall continue until the Regional Board determines that remaining wastes in all waste management units at the site will not threaten water quality.
- 4. 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.
- 5. The landfill shall have containment structures that are capable of preventing degradation of the waters of the state. Construction standards for containment structures shall comply with 27 CCR requirements. Design specifications, including any alternative design proposal meeting the prescriptive standards and/or performance goals of 27 CCR, are subject to the Executive Officer's review and approval prior to construction of any containment structure.
- 6. The Discharger shall perform an annual testing per 27 CCR section 20340(d) of any LCRS to demonstrate their operating efficiency during the postclosure maintenance period of the landfill.
- 7. Surface drainage from the Landfill is subject to State Board Order 97-03-DWQ (general industrial stormwater permit). The Regional Board may adopt a site specific NPDES permit for the discharge of stormwater runoff if the Board determines that such a permit becomes necessary.
- 8. Drainage controls, structures, and facilities shall be designed to divert any precipitation or tributary runoff and prevent ponding and percolation of water at the Landfill in compliance with sections 20365 and 21090(b)(1) of 27 CCR. When necessary, temporary structures shall be installed as needed to comply with this requirement.
- 9. The Landfill shall be graded and maintained to promote runoff of precipitation and to prevent ponding of liquids and surface water. Erosion or washout of refuse or cover materials by surface flow shall be controlled to prevent off-site migration.
- 10. The migration of gases from the Landfill shall be controlled as necessary to prevent water pollution, nuisance, or health hazards. The discharge of wastes or waste by-products (i.e., leachate or gas condensate) to off-site surface drainage courses or to groundwater is prohibited.
- 11. No surface water or stormwater shall leave the Landfill except as permitted by a NPDES permit issued in accordance with the federal Clean Water Act (CWA) and the CCR. The Discharger shall maintain and modify, as necessary, the SWPPP developed for the Landfill.
- 12. Gas condensate gathered from the gas monitoring and collection system at the Landfill shall not be returned to the Landfill unless approved by the Executive Officer, and if approved, the condensate shall be discharged to a composite-lined portion of the Landfill. Any proposed

modifications or expansions to this system shall be designed to allow the collection, testing and treatment, or disposal by approved methods, of all gas condensate produced at the Landfill.

- 13. The Discharger shall intercept and remove any liquid detected in all LCRSs at the Landfill to a legal point of disposal and leachate shall not be returned to the Landfill unless it meets the requirements of this Order for onsite reuse as described in Section F below, which implements the leachate handling requirements contained in 27 CCR sections 20340(g) and 21090(a)(5), and 40 CFR section 258.28. Any leachate determined to be hazardous shall be transported by a licensed hazardous waste hauler to an approved treatment or disposal facility.
- 14. The Discharger shall maintain permanent survey monuments at the Landfill throughout the postclosure maintenance period. Benchmarks shall be established and maintained in sufficient numbers to enable reference to key elevations and to permit control of critical grading and compaction operations.
- 15. 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.
- 16. The Discharger shall conduct periodic inspections at the Landfill, at least once per month, to ensure the compliance of this Order. The inspections shall cover the final cover system, the water quality monitoring system, drainage system, landscape and irrigations systems, leachate collection and removal systems, landfill gas collection system, and any other systems at the site that may have an impact to water quality at the site. Such inspections shall be documented and reported to the Regional Board in accordance with the M&RP.
- 17. The Discharger shall report any noncompliance or any incident at the Landfill that are in violation of this Order. Any such information shall be provided verbally to responsible Regional Board staff within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission to the Executive Officer shall be provided within fourteen 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. 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.

D. REQUIREMENTS FOR GROUNDWATER MONITORING

1. The Discharger shall implement the attached M&RP (Attachment T) 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 (caused by) discharges of waste at the Landfill

and to continue the CAP for areas of the Landfill where releases to groundwater have occurred. The M&RP is designed to satisfy both federal and state regulatory monitoring requirements.

- 2. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer, proposing modifications to the M&RP. The Discharger shall implement any changes to the revised M&RP approved by the Executive Officer upon receipt of a signed copy of the revised M&RP.
- 3. 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 provisions contained in the attached M&RP No. CI-2295, as directed by the Executive Officer.
- 4. The effectiveness of all groundwater monitoring wells, groundwater monitoring devices, and leachate and gas collection systems shall be maintained throughout the Landfill's postclosure maintenance period in accordance with acceptable industry standards. The Discharger shall maintain a monitoring well preventative maintenance program (MWPMP) approved by the Executive Officer. Elements of the program should include a minimum of periodic visual inspections of well integrity, pump removal and inspection, and appropriate inspection frequencies. If a well or piezometer is found to be inoperative, the Regional Board and other interested agencies shall be so informed in writing within fourteen days after such discovery, and this notification shall contain a time schedule for returning the well or piezometer to operating order. Changes to the existing program shall be submitted for Executive Officer approval at least 30 days prior to implementing the change(s).
- 5. If a groundwater monitoring well or piezometer is proposed to replace an inoperative well or piezometer identified in the MWPMP, the Discharger shall not delay replacement while waiting for Executive Officer approval. However, a technical report describing the location and construction details shall be submitted to the Executive Officer within 30 days.
- 6. The Discharger shall provide for proper handling and disposal of water purged from groundwater monitoring wells at the Landfill during sampling. Water purged from a groundwater monitoring well shall not be returned to that well (or any other Landfill well).
- 7. Any abandoned groundwater monitoring 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.
- 8. For any monitoring wells installed at the Landfill in the future, the Discharger shall submit technical reports for approval by the Executive Officer prior to installation. These technical

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reports shall be submitted at least 60 days prior to the anticipated date of installation of the wells. 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.

Within 30 days of the installation of a groundwater monitoring well at the Landfill, the Discharger shall submit an as-built report to the Regional Board and the California Department of Water Resources DWR, including delineation of the stratigraphy encountered and all water bearing zone(s) encountered.

- 9. As of the effective date of this Order, the compliance monitoring wells at the Landfill shall consist of those wells listed in Table T-1 of the M&RP. All monitoring wells shall be monitored pursuant to this Order and as directed by the Executive Officer through future revisions of the M&RP.
- 10. The Discharger shall install any additional groundwater, soil pore liquid, soil pore gas, or leachate monitoring devices necessary to comply with the M&RP, as adopted or as revised by the Executive Officer.
- 11. As of the effective date of this Order, the Landfill's constituents of concern (COCs) are those listed in Table T-2 in the M&RP. Any non-COC Appendix II constituent exceeding its respective PQL in both an initial leachate scan and retest automatically becomes a new COC.
- 12. In accordance with 27 CCR section 20390, the water quality protection standard (WQPS) for the Landfill is established as the natural background groundwater quality at the site.
- 13. In accordance with 27 CCR section 20390(a), WQPS shall apply during the closure period, the post closure maintenance period, and during any compliance period of the Landfill.
- 14. The point of compliance (POC) for groundwater monitoring for the Landfill is a vertical surface located at the hydraulically downgradient limit of the Landfill that extends through the uppermost aquifer underlying the Landfill pursuant to 27 CCR section 20405(a).
- 15. Pursuant to 27 CCR 20415(d)(5), unsaturated zone groundwater monitoring at the Landfill is exempt.

E. REQUIREMENTS FOR A CORRECTIVE ACTION PROGRAM (CAP)

- 1. The Discharger shall continue the Corrective Action Program (CAP) at the Landfill that currently includes extracting contaminated groundwater at Barriers 1 and 2 to prevent such water being released to offsite, extracting landfill liquids at the Kirst Cut area, and properly managing the landfill gas collection system to prevent the contact of landfill gas with groundwater. Extracted groundwater and landfill liquids shall be treated as necessary and either used onsite as permitted under Section F of this Order, or discharged to the sanitary sewer system.
- 2. In each semi-annual report submitted under the M&RP, the Discharger shall summarize all corrective actions taken at the Landfill during the reporting period and the corrective actions that will be taken for the following monitoring periods. The Executive Officer may require additional corrective actions that are deemed necessary by Regional Board staff.
- 3. If the Discharger or Executive Officer determines that the CAP either fails to contain the release or fails to provide effective remediation for those portions of the aquifer already affected by the release, the Discharger shall, pursuant to 27 CCR sections 20430(i) or (j) and 40 CFR section 258.58(b), submit an amended ROWD to make appropriate changes to the CAP within 90 days of the determination.
- 4. Within 90 days of the adoption of this Order, the Discharger shall submit to the Regional Board a proposal for assurance of financial responsibility for all known or reasonably foreseeable releases from the Landfill pursuant to 27 CCR section 20380(b) and section 22220 et seq. Once the corrective action cost estimate is reviewed and approved by the Executive Officer, the Discharger shall work with Waste Board staff to provide and maintain acceptable financial assurance mechanisms for corrective action for the Landfill.

F. REQUIREMENTS FOR ON-SITE USE OF WATER

- 1. No water shall be routinely applied at the Landfill except for irrigation, dust control, or other non-emergency uses approved by the Executive Officer. Any water used at the Landfill, except for potable water, recycled water permitted under Water Reclamation Requirements (WRRs) adopted by the Regional Board, and any other water allowed by the Executive Officer, shall be subject to these WDRs.
- 2. No wastewater shall leave the Landfill except as permitted by an NPDES permit issued in accordance with the federal CWA and CWC. The Discharger shall maintain and modify, as necessary, the NPDES Storm Water Pollution Prevention Plan developed for the Landfill subject to approval by the Executive Officer.
- 3. Wastewater produced at the Landfill shall not be subject to these WDRs, pursuant to paragraph F.2 above, if it meets applicable requirements of the CWC, CCR, and HSC for recycled water. The Discharger shall demonstrate to the Executive Officer compliance with this provision before each Landfill wastewater source is used as an equivalent recycled water as defined above.

- 4. Requirements for the use of recycled water at the Landfill are also controlled by WRRs for the Pomona Water Reclamation Plant (Regional Board Order No. 97-072), which is the source of recycled water used at the Landfill. Order No. 87-50, which was readopted on May 12, 1997, through general blanket Order No. 97-072, contains recycled water requirements and provisions in accordance with California Code of Regulations Title 22 Water Recycling Criteria. The use of Title 22 tertiary treated recycled water at the Landfill includes, but is not limited to landscape irrigation and dust control.
- 5. Mixing any Landfill wastewater source with recycled or potable water to achieve equivalence to recycled water standards, as described in paragraph F.3 above, is prohibited if deemed unsuitable by the Executive Officer.
- 6. During periods of precipitation, when the use of irrigation or dust control is not necessary for the purpose specified in this Order, all wastewater generated at the Landfill shall be stored, discharged to the sanitary sewer, or hauled to a legal point of disposal.
- 7. Washing of paved Landfill roads during rainy periods shall only occur when muddy roads create a safety concern. Washing of equipment or vehicles on the Landfill shall be confined to controlled areas where the wastewater is collected for proper disposal.
- 8. Wastewater used at the Landfill shall not percolate into the disposal areas or native soil, or enter stormwater collection systems, except as specifically permitted by this Order.
- 9. Overflow, runoff, or ponding caused by the over-application or improper management of onsite use of water are prohibited.
- 10. All uses of potable water, recycled, or wastewater 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 Landfill.
- 11. The Discharger is not currently reusing wastewater generated at the Landfill. Should the Discharger propose to reuse such wastewater, the Discharger shall submit a technical report for approval by the Executive Officer which describes the current practice for wastewater handling and processing, characterizes the wastewater sources, and evaluates the suitability of each wastewater source for on-site reuse.

G. REQUIREMENTS FOR REPORTING SCHEDULED ACTIVITIES

- 1. The Discharger shall notify Regional Board staff at least 30 days prior to any maintenance activities, for approval by the Executive Officer, which 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.
- 2. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request 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.

- 3. If the Discharger becomes aware that it failed to submit any relevant facts in any report to the Regional Board, it shall submit such facts or information within fourteen days of its discovery of the omission.
- 4. The Regional Board shall be notified of any incident at the Landfill that are in violation of this Order and that may endanger the environment, by telephone within 24 hours from the time the Discharger becomes aware of the circumstances, and in writing within fourteen days of the time that the Discharger becomes aware of the circumstances. 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 of the incident. All instances of noncompliance with this Order shall also be reported to the Regional Board in the same manner as stated above, and shall also be included in the next scheduled monitoring report.
- 5. The Discharger shall notify the Executive Officer, in writing, at least 30 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 accepts responsibility for compliance with this Order.
- 6. The Discharger shall notify the Regional Board in writing within fourteen days, if fluid is detected in a previously dry LCRS.
- 7. The Discharger shall notify the Regional Board of changes in information submitted in the JTD addendums and revised FPCMP and supplementary information. The Discharger shall notify the Regional Board at least 120 days before any material change is made at the Landfill.
- 8. 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:
 - i. For a corporation by a principal executive officer of at least the level of vice-president.
 - 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 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."

H. GENERAL PROVISIONS

- 1. This Order does not authorize violation of any federal, state, or local laws or regulations.
- 2. Any time the Discharger becomes aware of a requirement in 27 CCR, or 40 CFR part 258, that should be addressed in this Order, the Discharger shall so notify the Regional Board within seven days.
- 3. The Discharger has a continuing responsibility for correcting any problems which may arise in the future as a result of waste discharged at the Landfill, and from gases and leachate that may be caused by infiltration or precipitation of drainage waters into the waste disposal units, or by infiltration of water applied to this property during subsequent use of the land or other purposes.
- 4. 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;
 - 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 purpose of assuring compliance with this Order or as otherwise authorized by the CWC, any substances or parameters at this location.
- 5. The Discharger shall maintain a copy of this Order at the Landfill so as to be available at all times to Landfill operating personnel.
- 6. These requirements do not exempt the Discharger from compliance with any other current or future law that may be applicable. They do not legalize this waste management facility, and they leave unaffected any further restraints on the disposal of wastes at this waste management facility that may be contained in other statutes.
- 7. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements", adopted November 7, 1990 (Attachment W) which is incorporated herein by reference.
- 8. The requirements adopted herein neither authorize the commission of any act causing injury to the property of another, nor protect the Discharger from liabilities under federal, state, or local laws.
- 9. The filing of a request by the Discharger for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any condition, provision, or requirements of this Order.
- 10. This Order does not convey any property rights of any sort, or any exclusive privilege.
- 11. The Discharger is the responsible party for these WDRs, including any M&RP or other body of requirements incorporated by reference therein. The Discharger shall comply with all conditions of these WDRs. 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 WDRs by the Regional Board.
- 12. The Discharger shall within 48 hours of a significant earthquake event, provide an initial verbal assessment to the Regional Board of any earthquake damage at the Landfill. A detailed post-earthquake report describing any physical damages to the containment features, groundwater monitoring and/or leachate control facilities and a corrective action plan to be implemented at the Landfill shall be submitted to the Regional Board within thirty days of the earthquake event. 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.
- 13. The Discharger shall immediately notify the Regional Board of any flooding, slope failure or other change in Landfill conditions that could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
- 14. The Discharger shall submit to the Regional Board and to the CalRecycle evidence of financial assurance for postclosure maintenance, pursuant to 27 CCR, division 2, chapter 6. The postclosure maintenance period shall be at least 30 years. However, postclosure maintenance shall extend as long as wastes pose a threat to water quality.

- 15. 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.
- 16. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
- 17. This Order is not transferable to any person except after notice to the 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. The Discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage as described under Provision No. G.5 of this Order.
- 18. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to being superseded or modified. All discharges of waste into the waters of the state are privileges, not rights.
- 19. 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.
- 20. This Order becomes effective on the date of adoption by the Regional Board.
- 21. This Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - c. A change in any condition that required either a temporary or permanent reduction or elimination of the authorized waste discharge.
- 22. This Order in no way limits the authority of the Regional Board, as delineated in the CWC, to require additional investigations and cleanups pertinent to this project. This Order may be revised by the Executive Officer as additional information from the project becomes available.
- 23. Failure to comply with the terms and conditions of this Order may result in imposition of civil liability against the Discharger by the Regional Board, either by the Regional Board or judicially by the Superior Court, in accordance with CWC section 13350 et. seq. and/or referral

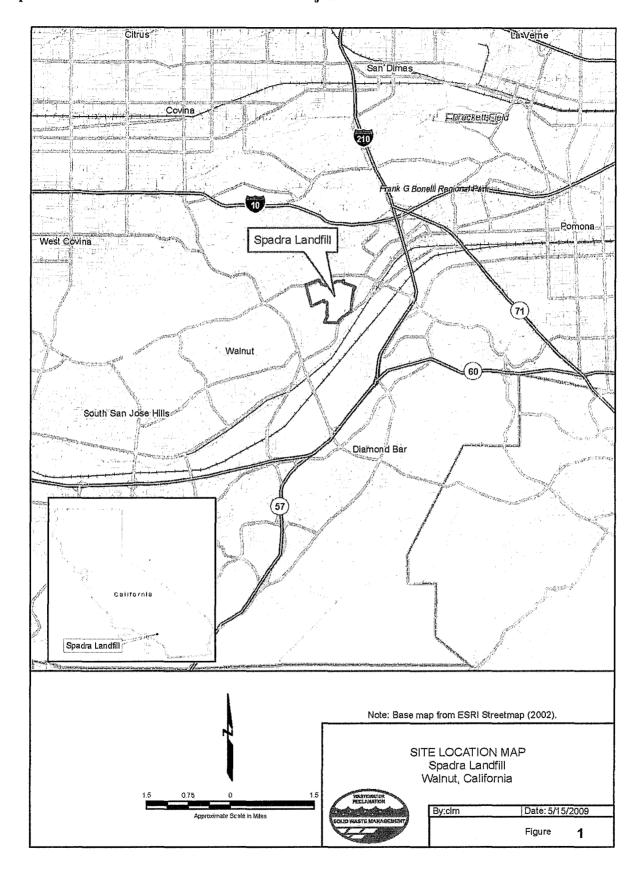
to the Attorney General of the State of California for such legal action as may be deemed appropriate.

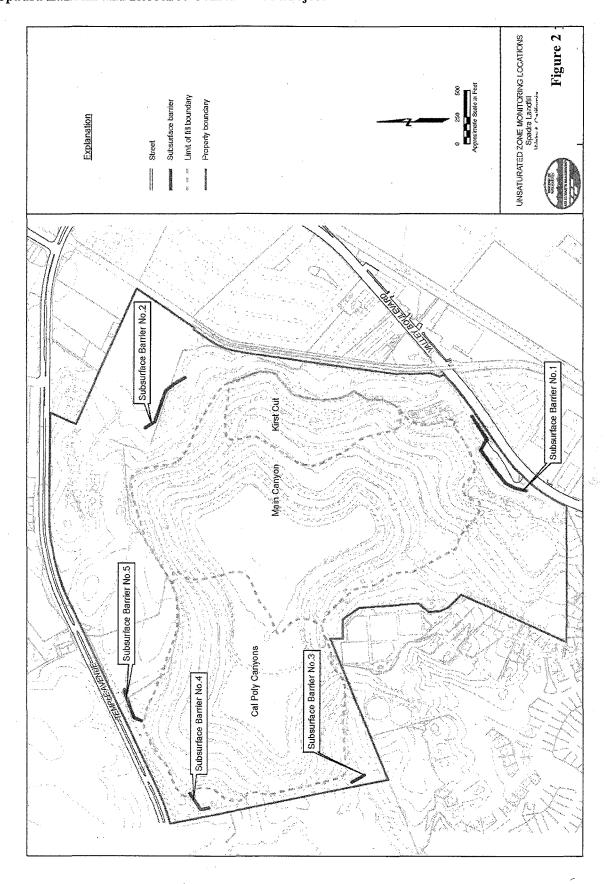
I. RESCISSIONS

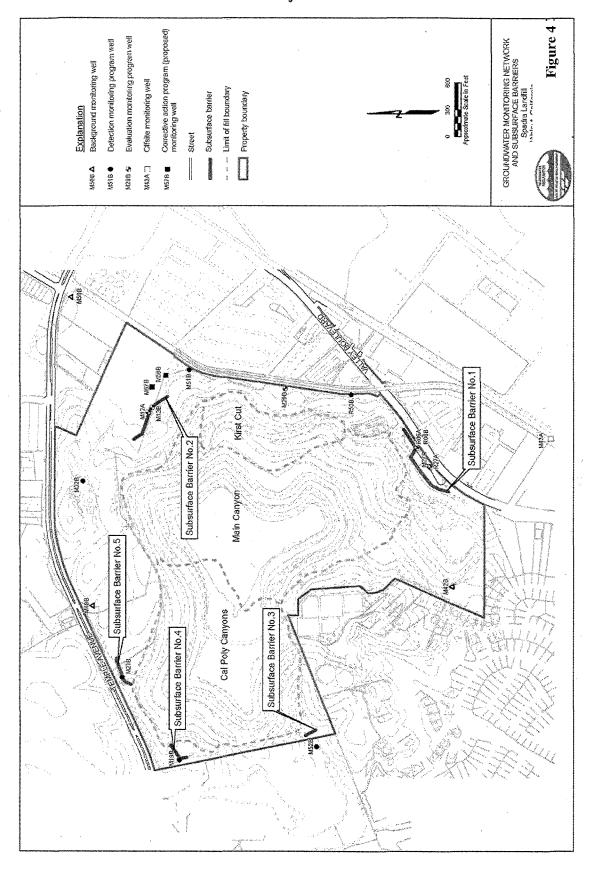
- 1. Except for violation enforcement purposes, Regional Board Order No. 89-006, adopted January 23, 1989, is hereby superseded.
- 2. Because requirements applying a federal assessment monitoring program and a federal corrective action program are incorporated into this Order, the Landfill is no longer subject to Regional Board Order No. 93-062 requirements.

I, Tracy J. Egoscue, 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 1, 2010.

Tracy J. Egoscue
Executive Officer







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

MONITORING AND REPORTING PROGRAM NO. CI-2295 FOR COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY (Spadra Landfill and Resource Conservation Project)

(File No. 57-091)

GENERAL

- 1. Monitoring responsibilities of the Sanitation Districts of Los Angeles County (Discharger) for the Spadra Landfill and Resource Conservation Project (Landfill) are specified in California Water Code (CWC) section 13225(a), section 13267(b) and section 13387(b), and State Water Resources Control Board (SWRCB) Resolution No. 93-62. This self-monitoring program is issued pursuant to California Regional Water Quality Control Board, Los Angeles Region (Regional Board) Order No. R4-2010-0057 (Order).
- 2. The Discharger shall implement this monitoring and reporting program (M&RP), as described in Section D (Requirements for Groundwater Monitoring) of the Order, starting April 2010.
- 3. The Discharger shall comply with the requirements of title 27 of the California Code of Regulations (27 CCR), section 20415, for any water quality monitoring program required in 27 CCR section 20420, section 20425, or section 20430, as interpreted in this Order. Groundwater monitoring shall meet the requirements of 27 CCR section 20415(b) and 40 CFR section 258.51 (a, c, and d), as interpreted in this Order.

MONITORING PROGRAM

- 4. The groundwater monitoring network at the Landfill shall include all groundwater monitoring wells listed in Table T-1. The Regional Board Executive Officer (Executive Officer) may require the Discharger to install additional groundwater monitoring wells in response to the detection of a release of pollutant from the Landfill or other changes of site condition. As provided in Paragraph 25 of the Order, background wells M42B and M50B are included in the program for groundwater elevation measurements only. No laboratory testing of groundwater samples is required for these wells unless it is otherwise directed by the Executive Officer.
- 5. Unless otherwise approved by the Executive Officer, groundwater monitoring at the Landfill shall be conducted semi-annually, in May and November of each year¹. In the event monitoring is not performed as above because of unforeseen circumstances, substitute monitoring shall be performed as soon as possible after these times, and the reason for the delay shall be reported in the semiannual report submitted to the Regional Board.
- 6. <u>Constituents of Concern (COCs)</u> As of the effective date of this Order, the Landfill's COCs are listed in Table T-2 and consist of all nonhazardous inorganic constituents for which the Regional

¹ The March 2010 groundwater sampling event required in the existing MR&P shall served as the May 2010 groundwater sampling event required in this requirement. Data obtained in the March 2010 groundwater sampling event shall be reported in the semiannual report that is due to the Regional Board on September 15, 2010.

Water Board would require a corrective action response, if they were included in a release, plus every constituent in Appendix II (to 40 CFR Part 258) that has ever exceeded its Practical Quantitation Limit (PQL) concentration both in an annual landfill leachate scan and also in its follow-up retest leachate sample. After the Order's effective date, the Landfill's COC list will expand, automatically, to include any Appendix II constituent thus detected-and-verified in the annual leachate scan required in this M&RP. At any given time, a COC will be on one of two mutually exclusive lists:

- a. Monitoring Parameter (Mpar) List This list, at any given time, includes several inorganic "Metals Surrogates" which take the place of the fifteen federal metallic constituent MPars [as allowed by 40 CFR §258.54(a)(2)], plus all volatile organic compounds (VOCs) that are COCs, plus any former UCOCs (see next paragraph) that have become MPars per Item 10 (Five-Yearly UCOC Scan) of this M&RP.
- b. <u>Uninvolved Constituents of Concern (UCOC) List</u>, including all those constituents that have become COCs but are not currently on the landfill's MPar List. UCOCs must be tested at least once every five years at each monitoring well per Item 10 (Five-Yearly UCOC Scan) of this M&RP. During the five-yearly scan-testing, any UCOC that exceeds its respective 85th-percentile-of-the-background-data-set² concentration both in the initial sample and in a (pass-1-of-2) single retest sample from the same well moves immediately thereafter to the Landfill's MPar list (ceases being a UCOC) and begins to function as an MPar (i.e., is tested at each compliance well each Reporting Period) beginning with the next Reporting Period.

Table T-1. Required Groundwater Monitoring Wells

Location	Monitoring Wells				
Barrier 1	R06A, R06B, R27A, M27B				
Barrier 2	M12A, M13B, M57B, M58B				
Barrier 3	M52B				
Barrier 4	M19B				
Barrier 5	M21B				
Perimeter	M32B, R53B, M29B, M51B				
Off Site	M43A				
Background	M49B, M42B*, M50B*				

For groundwater elevation measurements only.

7. Concentration Limits - In accordance with 27 CCR section 20400(a)(1), the concentration limit of each COC in groundwater at the Landfill is established as the background value of that constituent. The best indication of the population mean ("background value") is the mean of a group of at least

² For the purposes of scan-testing of UCOCs every five years, the "Threshold Value" (triggering concentration) for a UCOC is the upper 85th percentile of its respective Concentration Limit (background data set). During the UCOC scan, at any compliance well, if a UCOC exceeds its respective Threshold Value in the initial sample, and also exceeds it in a retest sample from that same well, taken three months later, then that constituent becomes an MPar (and ceases to be a UCOC) instantly. In a case where the UCOC's background data are all below its PQL, then its PQL serves as its Threshold Value.

eight background data points that represent what one would expect to see, at that well, in the absence of the effect of any release. Therefore, the "Concentration Limit" for any COC is its respective background data set. One applies an appropriate statistical or nonstatistical data analysis method to this group of background data points to determine its "Threshold Value" (do-not-exceed concentration). An initial exceedance of this Threshold Value, if validated by retesting, causes that well/MPar pair to change from "Detection Mode" (no release indicated) to "Tracking Mode" (release indicated). By contrast, if a UCOC exceeds its Threshold Value (initially and in its retest), that constituent becomes an MPar (ceases to be a UCOC) and is monitored each Reporting Period thereafter at all compliance wells. The "Threshold Value" for a COC is either the upper prediction limit derived from historical monitoring data in accordance with 27 CCR section 20415(e)(7) (for constituents naturally exist in the groundwater) or its PQL (for constituents that do not naturally exist in the groundwater).

Table T-2. Constituents of Concern (COC)

Monitoring Param	eters (MPars)	Uninvolved COCs (UCOCs)			
Metal Surrogates:	Volatile Organic	General	Semi-volatile		
chloride	Compounds (VOCs):	Parameters:	Organic Compounds		
nitrate nitrogen	1,1,1-trichloroethane	boron	(SVOCs):		
pH	1,1-dichloroethane	oil & grease	bis(2-		
sulfate	1,1-dichloroethylene	iron (soluble)	ethylhexyl)phthalate		
total dissolved solids	1,2-dichloroethane	sulfide	diethylphthalate		
	2-butanone	cyanide	m+p cresol		
Field Parameters:	acetone	total organic halogen	pentachlorophenol		
temperature	benzene		phenol		
pH	chloroethane	Metals:			
electrical conductivity	chloroform	arsenic	Herbicide:		
turbidity	chloromethane	barium	2,4,5-TP (Silvex)		
	cis-1,2-dichloroethylene	chromium			
Supplemental	ethyl benzene	cobalt	Any other US EPA		
Monitoring	m+p-xylene	copper	Appendix II		
Parameters	methylene chloride	nickel	pollutants (except for		
(not subject to	o-xylene	selenium	VOCs) and		
routine statistical	p-dichlorobenzene	tin	Emergent Chemicals		
tests):	tetrachloroethylene	vanadium	detected and		
potassium	toluene	zinc	confirmed in annual		
fluoride	trichloroethylene		Non-COC scans		
Soluble BOD	vinyl chloride				
Soluble COD					
TOC	Any Other VOCs				
	Detected and				
	Confirmed in Annual				
	Leachate Scans				

8. The current Threshold Values (upper prediction limits) for all Metals Surrogates and VOCs at all detection monitoring wells at the Landfill are listed in **Table T-3**. The Discharger shall update the Threshold Values in its annual report submitted to the Regional Board for the Landfill in accordance with Item 12 of this M&RP.

Constituent	Unit	M19B	M21B	M32B	M51B	M52B	R53B
Chloride	mg/L	693	238	175	101	42.4	147
Nitrate Nitrogen	mg/L	24.2	12.2		29.7	2.82	2.03
Sulfate	mg/L	55.2	321	97.6	835	161	57.9
pН	mg/L	6.62	6.88	6.97	6.82	6.94	6.81
Total Dissolved Solids	mg/L	2425	1382	897	1993	767	663
Appendix I VOCs	Laboratory practical quantitation limits (PQLs)						

Table T-3. Threshold Values for Detection Monitoring Program Wells

- 9. Annual Non-COC Scan Pursuant to 40 CFR 258.55(b), the Discharger shall take one leachate sample from the LCRS in the Cal Poly Canyons, one leachate sample from the leachate extraction well at the Kirst Cut area, and one groundwater sample from monitoring well R27A that is downgradient to the unlined Main Canyon area in November of each year and shall analyze the samples for all constituents of 40 CFR Appendix II (Appendix II) that are not already included in Table T-2 of this M&RP as COCs, and emergent chemicals including 1,4-Dioxane, 1,2,3-Trichloropropane, Perchlorate, and N-Nitroso-dimethylamine (NDMA). If the November non-COC scan identifies any previously undetected (i.e. the constituent does not exceed its respective PQL concentration) Appendix II constituent(s) or emergent chemical(s) in any leachate or groundwater samples, the Discharger shall obtain a single retest sample from that source the following May and analyze it for all such new constituents. Any constituents verified in the May retest shall become part of the COC list, with new VOCs going onto the MPar list and all other new COCs going onto the UCOC list. The Discharger shall include a prominent notification of these new COCs in the next scheduled monitoring report.
- 10. <u>Five-Yearly UCOC Scan</u> Every five years, starting in 2013, the Discharger shall analyze a sample from each groundwater monitoring point and test for all UCOCs that are present at a concentration in excess of their respective Threshold Value (the upper-85th-percentile-concentration of their background data set). This constitutes the means by which the Discharger continues to meet the requirements of 40 CFR 258.55(b)-(d). During each such UCOC scanning event, the Discharger shall obtain and analyze a minimum of one sample from each monitoring well (sufficient to obtain a datum for each UCOC that is subject to the scan). Upon detecting a UCOC in excess of its Threshold Value, the Discharger shall, within 90 days, take a single resample from the indicating affected well(s) and reanalyze it only for the newly-detected constituent(s). Any UCOC that exceeds its respective Threshold Value in both the initial and the retest scan samples automatically becomes part of the MPar list for the Landfill. This constitutes the means by which the Discharger shall meet the requirements of 40 CFR 258.55(d)(2).
- 11. The Discharger shall satisfy all stormwater monitoring requirements pursuant to the Order regulating surface water discharges. Specifically, the Discharger shall satisfy requirements of general NPDES industrial stormwater permit (WDID No. 4 19I006190), and any revisions to the permit.

DATA ANALYTICAL METHODS

12. Moving Window Concentration Limits – Unless otherwise directed by the Executive Officer, all well/COC pair statistic testing for the landfill shall use the "intra-well comparison" approach whereby the concentration limit (reference background data set) is derived from each well's historic

data. Beginning November 2010, the Discharger shall develop concentrations limits for all MPars at all groundwater monitoring wells using data obtained in the past ten (10) years. Thereafter, the concentration limits shall be updated biannually by adding monitoring data obtained in the past two years that replaces the oldest two-year data in the database. The Discharger shall report the updated background data set, for each such well/MPar pair, in each Annual Summary Monitoring Report required in this M&RP. Concentration limits for new well/COC pairs shall be developed when ten or more data points are available for the well/MPar pair.

13. Statistical Data Analysis Methodology

- a. For the purposes of this M&RP, Minimum Level (ML) and Reporting Limit (RL), as described in Attachment 1, are functionally equivalent to method detection limit (MDL) and practical quantitation limit (PQL) with regard to reporting and statistical evaluation requirements. For this purpose, MLs and RLs shall be derived by the laboratory for each analytical procedure, according to the SWRCB's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (the State Implementation Policy or SIP) and the State of California's laboratory accreditation procedures. Sample results greater than or equal to the ML/RL shall be reported "as measured" by the laboratory. Sample results less than the ML/RL shall be reported as less than the numeric values of the ML/RL. Nominal ML and RL values shall be reported with all data. Correspondingly, any reference to "detections at or above the trace level" shall be substituted with "detections at or above the Minimum Level"
- b. Performance Standards Pursuant to 27 CCR 20415(e)(8), in cases where the Discharger proposes to use a non-statistical data analysis method, the Discharger shall demonstrate that it meets the performance standard given in 27 CCR 20415(e)(8). For the purposes of this paragraph, pursuant to authority under 27 CCR 20080(a)(1), the error rate restrictions of 27 CCR 20415(e)(9)(B) do not apply to any statistical method that (including its retesting approach) meets or exceeds the USEPA's reference power curve (*Unified Guidance*, 2009, USEPA publication EPA 530-R-09-007).
- Retest is Part of the Method In the event that an approved data analysis method provides a c. preliminary indication that a given COC has exhibited a measurably significant increase at a given well, the Discharger shall conduct a verification procedure either in the form of a discrete retest, in accordance with 27 CCR section 20415(e)(8)(E), or, pursuant to 27 CCR 20080(a)(1), any of the better-performing resting options (e.g., the pass-1-of-3 approach) in which the triggering concentration is lowered to counter the adverse effect that retesting would otherwise have on the data analysis method's false-negative rate (compared with a noretest pass-1-of-1 approach). Nevertheless, any approved nonstatistical method used for data analysis shall use a pass-1-of-2 retesting approach as provide in Item 14.b. of this M&RP. The retest is part of the data analysis method, therefore, a measurably significant increase (or for a UCOC scan, a measurably significant indication that the constituent should become an MPar) exists only if the retesting does not countermand the preliminary indication, according to the retesting formula. The Discharger has the discretion to accept that the preliminary indication confirms a measurably significant increase at a given monitoring well and forgo verification retesting procedures.
- d. Limited Retest Scope For any given groundwater monitoring point, the Discharger shall perform the verification procedure only for those MPars that have shown a preliminary indication at that well during that reporting period. At any time, the Discharger may

demonstrate, in accordance with 27 CCR section 20420(k)(7), that a source other than the Landfill caused an MPar to produce a measurably significant increase at a given well or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation, or by natural variation in the ground water.

- e. Water Quality Monitoring Approach The monitoring approach used for each 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:
 - i. 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 in excess of its respective Threshold Value; or
 - ii. 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 concentration at that location via an evolving concentration-versus-time plot. For any well/MPar pair in Tracking Mode, its Threshold Value automatically becomes the mean of its Concentration Limit (background data set), which should be plotted as a horizontal line on its concentration-versus-time plot. The goal is to indicate when the applied corrective action measures have brought the MPar's concentration down to, or below, this concentration. These plots shall be the primary input for the Discharger's twice-yearly analysis of the effectiveness of the corrective action measures.
- f. Detection Mode Data Analyses The following applies to all detection mode data analyses (i.e., this provision does not apply to the five-year scans under Item 10 of this M&RP, or to well/MPar pairs that are in tracking mode):
 - i. MPars Readily Detectable in Background At any given groundwater monitoring point, the Discharger shall apply an approved statistical analysis method for each detection mode MPar that exceeds its respective MDL in 10% or more of the applicable background data set. For each well/MPar pair (separately), an approved statistical analysis is a method, other than analysis of variance (ANOVA), that is either validated and analyzed by the SANITAS® water quality data analysis software (distributed by Intelligent Decisions Technology, Inc., 22052 W 66th Street, Suite 133, Shawnee, KS 66226, Tel: (913) 829-1470) or that the Executive Officer agrees meets the performance standards of 27 CCR section 20415(e)(9). For any statistical data analysis method that is not validated by comparison to the USEPA's Reference Power Curve, if using SANITAS®, the Discharger shall use the "CA Standards" and "CA Retest" settings (under the "Options" pull-down menu).
 - ii. MPars not Readily Detectable in Background For any monitoring point at which one or more detection mode MPars 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 Item No. 14 of this M&RP.

- 14. California Non-statistical Data Analysis Method
 - Non-Statistical Method for Detection Mode for MPars Seldom Found in Background For any given compliance (downgradient) well, regardless of the monitoring program (Detection Monitoring Program [DMP], Evaluation Monitoring Program [EMP], Assessment Monitoring Program [AMP], or Corrective Action Program [CAP]), the Discharger shall use this data analysis method, jointly, for all constituents on the "scope list" of Item No. 14(a)(i) of this M&RP (or, for each retest sample, the modified scope list of Item No. 14(b)(ii)).
 - i. Scope List Within 90 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.
 - ii. Two Triggers From the scope list made under Item No. 14(a)(i), above, for an initial test (or, for a retest, the modified scope list under Item No. 14(b) below), 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. Five 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.
 - b. Single Retest (pass-1-of-2 approach):
 - i. In the event that the Discharger concludes (pursuant to Item No. 14(a)(ii) above) that there is a preliminary indication, then the Discharger shall immediately notify Regional Board staff by phone, followed by more formal notification via fax, email, or writing within fourteen days and inclusion of a notice thereof in the facility operating record. The Discharger shall, within 90 days of such indication, collect **one** new (retest) sample from the indicating compliance well.
 - ii. For any given compliance well, the Discharger shall analyze the retest sample only for those constituents indicated in that well's original test, under Item No. 14(a)(ii) of this M&RP, 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 Item No. 14(a)(ii) above, but using this modified scope list) to separately analyze the retest data at that compliance well.
 - iii. If the retest sample trips either (or both) of the triggers under Item No. 14(a)(ii), then the Discharger shall conclude that there is a measurably significant increase at that well for the constituent(s) indicated in both the original and in the retest sample (i.e., not including constituents triggering in only one of the two samples). Thereafter, the Discharger: shall monitor the indicated constituent(s) in tracking mode instead of detection mode; (see Item No. 13(f)(ii) of this M&RP) at that well; shall eliminate it

from the "scope list" [under Item No. 14(a)(i) of this M&RP] for that well during future runs of this nonstatistical method; shall notify the Regional Board by phone, followed by more formal notification via fax, email, or writing within fourteen days and inclusion of a notice thereof in the facility operating record; and shall note this change prominently in the body of the forthcoming monitoring report and in that report's summary.

- c. The Discharger may propose alternative non-statistical methods for MPars seldom found in background to be approved by the Executive Officer, together with a technical discussion showing how the proposed method performs at least as well as the one described above at achieving the goal of providing the earliest possible detection and measurement of a release for any given rarely-detected constituent at any given well.
- 15. Monitoring Data Information 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 all applicable censored data (trace level and non-detect determinations). In the event that an MDL and/or PQL for an Mpar changes, the Discharger shall highlight that change in the report's summary and the report shall include an explanation for the change that is approved by the owner/director of the analytical laboratory.
- 16. Data analysis shall be carried out as soon as the data is available in accordance with statistical and non-statistical analyses requirements described in this M&RP.

SAMPLING AND ANALYTICAL PROCEDURES

- Unless otherwise approved by the Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the DHS. All analyses shall be conducted in accordance with the latest edition of "Test Methods for Evaluating Physical/Chemical Methods" (SW-846) promulgated by the USEPA (or equivalent standard methods as approved by the Executive Officer) and in accordance with an approved sampling and analysis plan. Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. Specific methods of analysis must be identified. If methods other than USEPA-approved methods or standard methods are used, the exact methodology must be submitted for review and must be approved by the Executive Officer prior to use. For any analyses performed for which no procedures are specified in the EPA guidelines or in this M&RP, the constituent or parameter analyzed, and the method or procedure used, must be specified in the corresponding monitoring report. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall approve all reports of such work submitted to the Regional Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements. In addition, the Discharger is responsible for seeing that the laboratory analysis of all samples meet the following restrictions:
 - a. The methods and 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" or "ND") in data from background monitoring points for that medium, the analytical methods

having the lowest facility-specific MDL shall be selected from among those methods which would provide valid results in light of any matrix effects involved.

- b. Trace results falling between the MDL and the facility-specific practical quantitation limit (PQL), shall be reported as such, and shall be accompanied both by the estimated MDL and PQL values for that analytical run and by an estimate of the constituent's concentration.
- c. MDLs and PQLs shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These MDLs and PQLs shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from USEPA analytical method manuals. If the lab suspects that, due to matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly, along with an estimate of the detection limit and quantitation limit actually achieved.
- d. All quality assurance / quality control (QA/QC) data shall be reported, along with the sample results to which it applies, including the method, equipment, and analytical detection limits, the recovery rates, an explanation (corrective action) of any QA/QC measure that is outside the laboratory control 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 blank results or spike recovery.
- e. Upon receiving written approval from the Executive Officer, an alternative statistical or non-statistical procedure can be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given reporting period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any sample shall be reported and flagged for easy reference by Regional Board staff.
- f. Within 90 days of the adoption of the Order, the discharger shall submit a technical report for approval by the Executive Officer for an analytical methodology to report unknown chromatographic peaks, along with an estimate of the concentration of the unknown analyte.
- g. In cases where contaminants are detected in QA/QC samples (i.e. field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged.
- 18. Proper chain of custody procedures shall be used in all sampling activities at the Landfill.
- 19. All compliance groundwater monitoring system wells shall be equipped with dedicated sampling pumps, unless otherwise approved by the Executive Officer.
- 20. All metals analyses shall be for total metals using unfiltered samples. Metals samples must be preserved in accordance with the specified laboratory methods, however care shall be taken that the dissolved metals samples are not exposed to acids until after filtering. The Discharger may elect to also obtain filtered metals representative of the dissolved phase. If so the Discharger must report the results of both the filtered and unfiltered.

- 21. No filtering of samples taken for organics analyses shall be permitted. Samples for organic analyses shall be taken with a sampling method that minimizes volatilization and degradation of potential constituents.
- 22. Thirty-Day Sample Procurement Limitation: For any given monitored medium, the samples taken from all monitoring points to satisfy the data analysis requirements for a given reporting period shall all be taken within a span of thirty days, and shall be taken in a manner that insures sample independence to the greatest extent feasible [27 CCR section 20415(e)(12)(B)]. For any sampling event during which samples are not collected within thirty days, the Discharger shall report the sampling period in the corresponding semiannual report.
- 23. Groundwater sampling shall also include an accurate determination of the groundwater surface elevation and field parameters (temperature, pH, electrical conductivity, turbidity) for that monitoring point [27 CCR section 20415(e)(13)]; groundwater elevations taken prior to purging the well and sampling for monitoring parameters shall be used to fulfill groundwater flow rate/direction analyses required under Item No. 31(a)(i) of this M&RP. All field parameter measurements shall be included in the semiannual reports submitted to the Regional Board.
- 24. Records to be maintained Written reports shall be maintained by the Discharger or its laboratory and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:
 - a. Identity of sample and of the monitoring point 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 the personnel performing each analysis;
 - d. Complete procedures used, including method of preserving the sample, and the identity and volumes of reagents used;
 - e. Calculations of results; and
 - f. Results of analyses, and the MDL and PQL for each analysis.

REPORTS TO BE FILED WITH THE REGIONAL BOARD

25. Semiannual and annual monitoring reports for the Landfill shall be submitted to the Regional Board pursuant the following schedule.

<u>Report</u>	<u>Period</u>	Date Due
1 st Semiannual	January - June	September 15 th
2 nd Semiannual	July - December	March 15 th
Annual	January – December	March 15 th

The Discharger may combine the annual report with the 2nd semiannual report of the year provided that all required information is included in the combined report. The semiannual and annual reports shall include all information that is routinely required the Order and this M&RP.

- 26. Electronic submittal and hardcopies of report The Discharger shall continue submitting monitoring reports required under this M&RP to the State Board GeoTracker System. In addition, a hardcopy that contains the transmittal letter, the main report text, any tables and/or figures that are directly quoted in the main report text shall be submitted to the Regional Board office by the due date. The hard copy shall include a compact disk (or other appropriate media) that contains all contents of the report (in PDF or other suitable format), including any laboratory reports, quality assurance and quality control (QA/QC) data, and filed records that are used in the report. All original laboratory reports, quality assurance and quality control (QA/QC) data, and filed records must be kept in the Landfill's operating record, as required in 27 CCR section 20415(e)(16). These data must be available for Regional Board staff review, if required.
- 27. All groundwater monitoring reports shall be prepared under the supervision of a California-registered professional geologist or registered civil engineer and shall be certified by the individual as meeting the prescriptive standards and/or performance goals of 27 CCR.
- 28. Transmittal letter A letter transmitting the essential points shall accompany each report. Such a 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 detailed 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.
- 29. Signature, certification, and perjury statement requirements All letters transmitting monitoring reports shall follow the signature, certification, and perjury statement requirements provided in Requirement G.8 of the Order.
- 30. Where to submit All reports required in this M&RP 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

The program number (CI-2295) shall be clearly displayed on the cover pager of each report.

- 31. Semiannual monitoring reports shall be comprised of at least the following:
 - a. Compliance evaluation summary Each report shall include a compliance evaluation summary. The summary shall contain at least:
 - i. For each monitored groundwater body, a description and graphical presentation of the velocity and direction of the groundwater flow under/around the Landfill, based upon water level elevations taken during the collection of the water quality data submitted in the report. In the case where this cannot be determined with meaningful results, a

statement to the nature of the groundwater flow and general flow characteristics will suffice.

- ii. Pre-sampling purge for samples obtained from wells: For each monitoring point addressed by the report, a description of the method and time of water level measurement, of the type of pump used for purging and the placement of the pump in the well, and of the method of purging (the pumping rate, the equipment and methods used to monitor field pH, temperature, electrical conductivity and turbidity during purging, the calibration of the field equipment, results of the pH, temperature, electrical conductivity, and turbidity testing, and the method of disposing of the purge water).
- iii. Sampling: For each monitoring point addressed by the report, a description of the sampling procedure (number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the date and time of sampling, the name of the person taking the samples, and any other observations).
- iv. A separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the Discharger into full compliance with waste discharge requirements. This section shall be located at the front of the report and shall clearly list all non-compliance with discharge requirements.
- v. A separate appendix containing any revised COC List (showing its then-current MPar and UCOC Lists reflecting any constituent added or constituent moved from the UCOC List to the MPar list), together with, for each such listing, the wells to which that list applies. In any such listing, the new or moved COC(s) shall be in bolded print (or otherwise emphasized).
- vi. A separate appendix containing, for each well/COC pair, the then-current Concentration Limit (i.e., the source of the background data and a list of the then-current background data {concentrations}).
- vii. A separate appendix containing, for the first submittal thereof, a complete succinct description of the data analysis method, including all parameter settings, for each well/MPar pair. If the method is the CNSDAM, simply state "CNSDAM" following the well/MPar pair's name, without further description. For subsequent annual monitoring reports, this appendix need address only those well/MPar pairs for which the data analysis method has changed since the initial (comprehensive) listing, together with the date when that (most recent) change became effective.
- viii. A separate appendix listing, organized by well, listing all MPars that are in Tracking Mode (out of compliance) at each well and showing (in parentheses following the constituent name) the date when that well/MPar pair changed from Detection Mode to Tracking Mode.
- b. A map or aerial photograph showing the locations of observation stations and monitoring points;

- c. Laboratory results for groundwater, LCRS, and reuse water (if the Discharger proposes reuse), shall be summarized in the report. For each report, include laboratory statements of results of all analyses demonstrating compliance with Item No. 17 of this M&RP;
- d. A summary and certification of completion of the routine inspections required in Section C.16 of the Order, including but not limited to, all standard observations listed below for the Landfill and the perimeter of the Landfill.
 - i. Along the perimeter of the Landfill:
 - A. Evidence of liquid leaving or entering the Landfill, estimated size of affected area, and flow rate;
 - B. Evidence of odors: presence or absence, characterization, source, and distance of travel from source; and
 - C. Evidence of erosion and/or of exposed refuse.
 - ii. For the Landfill:
 - A. Evidence of ponded water at any point on the waste management facility;
 - B. Evidence of odors: presence or absence, characterization, source, and distance of travel from source; and
 - C. Evidence of erosion and/or of exposed refuse.
- e. Wastewater reuse (if the Discharger proposes wastewater reuse) including the following:
 - i. The volume of wastewater from each source in each month in the reporting period and the area(s) where the water is applied.
 - ii. A statement that, during the reporting period, all wastewater was used only as specified, and for the uses specified in the Order.
 - iii. Analytical results for wastewater. If a wastewater source was not sampled or measured during the reporting period, the reason for the omission shall be given. If no wastewater was used from a source, a statement to that effect shall be provided in lieu of analyses.
 - iv. Records of operational problems, mechanical breakdowns, and diversions to emergency storage or disposal associated with any violations, or potential violations of the Order and any corrective actions taken.
 - v. If all or a portion of the wastewater was not used because of a failure to meet the limits specified in the Order, the report shall so state and identify the disposition of the effluent.
- f. A summary of any repair work of the final cover and any other maintenance work performed during the reporting period and plans for repair and maintenance work for the next monitoring period.

g. A corrective actions measures (CAM) effectiveness report (per 27 CCR section 20430(h)) that includes, at a minimum, a comprehensive discussion of the compliance record and the result of any corrective actions taken, or planned, which may be needed to bring the Discharger into full compliance with the WDRs.

32. Annual monitoring reports shall contain:

- A graphical presentation of analytical data [27 CCR section 20415(e)(14)]: For each monitoring point, submit in graphical format the laboratory analytical data for all samples taken within at least the previous ten 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. The graphs shall plot each datum, rather than plotting mean values. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot downgradient data. On the basis of any aberrations noted in the plotted data, the Executive Officer may direct the Discharger to carry out a preliminary investigation [27 CCR section 20080(d)(2)], the results of which will determine whether or not a release is indicated;
- b. A written summary of the groundwater analyses, indicating any changes made since the previous annual report;
- c. A discussion of any routinely-revised intra-well background monitoring data;
- d. An evaluation of the effectiveness of the run on/run-off control facilities, pursuant to 27 CCR section 20340 (b-d);
- e. A evaluation of the effectiveness of the CAP pursuant to section 20080(a)(1) of 27 CCR and any further corrective actions proposed for the next monitoring period; and
- 33. Contingency response Any incident at the Landfill that may endanger the environment, such as a seepage of leachate, a spill of hazardous chemicals, or discovery of a physical evidence of release as defined in 27 CCR section 20385(a)(3), shall be reported to the Regional Board pursuant to Section G.4. of the Order.
- 34. The Discharger may submit additional data to the Regional Board not required by this program in order to simplify reporting to other regulatory agencies.
- 35. If the Discharger performs analyses for any parameter more frequently than required by this M&RP using approved analytical methods, the results of those analyses shall be included in the monitoring program.

Ordered by

Tracy J. Egosette Executive Officer April 1, 2010 Chief Dep-ty 80

Land Disposal Program

"27 CCR" means the State Water Resources Control Board's regulations, in Division 2 of Title 27 of the California Code of Regulations, applicable to the discharge to land of waste that is not hazardous waste.

"40 CFR 258" means the regulations under Part 258 of Title 40 of the Code of Federal Regulations that apply to municipal solid waste landfills.

"ACM" means the federal Assessment of Corrective Measures process, under 40 Code of Federal Regulations section 258.56, which applies to any municipal solid waste landfill that has exhibited a measurably significant release over the applicable Water Quality Protection Standard at any well along the point of compliance for any Appendix II constituent. In California, this process is one in which the discharger determines the nature and extent of the release, implements interim corrective action measures, and develops a broad suite of possible measures, including a subset thereof which the discharger will propose for Regional Water Quality Control Board adoption under the Selection of Remedy process. Generally speaking, the federal Assessment of Corrective Measures and Selection of Remedy processes serve the same function, under the federal approach, as the Evaluation Monitoring Program does under the State approach.

"Affected parties" means all people who own, or reside upon, land outside the facility boundary that is underlain by any portion of the release from the landfill. Under Title 40 of the Code of Federal Regulations section 258.55(g)(1)(iii), the discharger must keep an up-to-date list of all such people and must assure that they are invited to the discussion of proposed corrective action measures, pursuant to Title 40 of the Code of Federal Regulations section 258.56(d).

"AMP" means a federal Assessment Monitoring Program, under Title 40 of the Code of Federal Regulations section 258.55, which applies to any municipal solid waste landfill that, under Title 40 of the Code of Federal Regulations section 258.54(c), has exhibited a measurably significant increase over the background value for any Monitoring Parameter. In California, given that a municipal solid waste landfill will have established background as the Concentration Limit for each Monitoring Parameter, the exceedance of the background value for a monitored constituent at any monitoring point also constitutes a violation of the Water Quality Protection Standard, thereby, in most instances, triggering the federal Assessment of Corrective Measures and Selection of Remedy studies. The term also describes the federal program that: 1) is ongoing during the Assessment of Corrective Measures and Selection of Remedy studies and under the Corrective Action Program; and 2) constitutes the federal monitoring program that continues after successful completion of the Corrective Action Program.

"Appendix I" (to Title 40 of the Code of Federal Regulations Part 258) means the suite of Volatile Organic Compounds and metals used as the default Monitoring Parameter list under the federal municipal solid waste landfill regulations (Title 40 of the Code of Federal Regulations section 258.1 through section 258.75). The listed constituents are a subset of those listed in Appendix II and are subject to monitoring and data analysis every six months. The Regional Water Quality Control Board can adopt surrogates for the metals, and can eliminate from the entire suite any constituent that it finds could not be released from the landfill or derived from such a release.

"Appendix II" (to Title 40 of the Code of Federal Regulations Part 258) means the suite of hazardous constituents used as the default Constituent of Concern list under the federal municipal solid waste landfill regulations (Title 40 of the Code of Federal Regulations section 258.1 through section 258.75). The listed constituents are subject to periodic scans, at selected compliance and background wells, either

annually or, as adopted for this landfill, every five years. Constituents detected (trace level or higher) and verified in a retest sample become Monitoring Parameters. The Regional Water Quality Control Board can eliminate from the entire suite any constituent that it finds could not be released from the landfill or derived from such a release.

"Background," when applied to a reference data set used in testing for a measurably significant indication of a release for a given well / Monitoring Parameter pair, means a suite of data which comes as close as possible to representing the data one would get, for that Monitoring Parameter at that well, if there were no release from the landfill.

"Background well" means a monitoring well whose purpose is to provide an indication, for each Monitoring Parameter and monitored ground water body, of the mean (or median) and variability one would expect in the Monitoring Parameter's concentration in that ground water body in the absence of a release from the landfill. Such wells can be upgradient, side-gradient, or (in rare instances) far-downgradient of the landfill. Due to the nearly ubiquitous presence of geographic variation, intra-well comparisons have a greater statistical power than inter-well comparisons. Therefore, the purpose of this type of well is three-fold: 1) to validate that a compliance well's historical data, for a given Monitoring Parameter, can be used as the background data set for that well / Monitoring Parameter pair, because the compliance well's historical data does not appear to reflect the presence of a release; 2) to identify the need to adjust the monitoring approach because of the arrival of waters affected by a release of that Monitoring Parameter from a source other than the landfill; and 3) to identify a condition in which a Monitoring Parameter is released from the landfill and migrates to this well in the unsaturated zone (e.g., Volatile Organic Compounds carried by an expanding landfill gas release in the unsaturated zone).

"Box and Whiskers Plot" is a quick way to visualize the distribution of data at a given monitoring location. The basic box plot graphically locates the median, 25th and 75th percentiles of the data set; the "whiskers" extend to the minimum and maximum values of the data set. The range between the ends of a box plot represents the Interquartile Range, which can be used as a quick estimate of spread or variability. When comparing multiple monitoring locations, box plots for each monitoring location can be lined up on the same axes to roughly compare the variability in each monitoring location. This may be used as a quick exploratory screening for the test of homogeneity of variance across multiple monitoring locations. If two or more boxes are very different in length, the variances in those monitoring location groups may be significantly different.

"California Non-statistical Data Analysis Method (CNSDAM)" means the test described in the Monitoring and Reporting Program for this landfill, for use jointly on all those Monitoring Parameters, at a given compliance well, whose applicable background data set exhibits trace level or higher concentrations in less than 10% of the data.

"CAO" means a Cleanup and Abatement Order.

"CAP" means a Corrective Action Program that implements the State Water Resource Control Board's requirements under Title 27 of the California Code of Regulations section 20430 and under State Water Resource Control Board Policy No. 93-62 which, regarding a municipal solid waste landfill, requires the Regional Water Quality Control Board to apply any federal requirements, under Title 40 of the Code of Federal Regulations section 258.58 (federal Corrective Action Program), that are additional to, or are broader in scope than, the Title 27 California Code of Regulations requirements.

"CLGB" — see "concentration limit"

"Compliance well" means any monitoring well named in the Monitoring and Reporting Program as a ground water monitoring point to be used in detecting, or tracking, the release. The term does not include assessment wells that are used [under Title 27 of the California Code of Regulations section 20425(b) and Title 40 of the Code of Federal Regulations section 258.55(g)] to delineate the nature and extent of the release, unless the Regional Water Quality Control Board specifically names such a well as a ground water monitoring point in the Monitoring and Reporting Program.

"Concentration limit" is a part of the landfill's Water Quality Protection Standard and means the reference background data set, or reference concentration value, for a given constituent against which one compares current compliance well data to identify, in detection mode, the arrival of the release at a given well and to identify, in tracking mode, if the corrective action measures are bringing the landfill back into compliance with the Water Quality Protection Standard [for that Monitoring Parameter), in the portion of the aquifer sampled by that compliance well]. For compliance wells within the area affected by the release, this limit can be a single number, adopted by the Regional Water Quality Control Board as a Concentration Limit Greater than Background under Title 27 of the California Code of Regulations section 20400(a)(3) through (h) and Title 40 of the Code of Federal Regulation section 258.55(i) for a given Monitoring Parameter involved in the release. Otherwise, this limit will be either the applicable background data set, for Monitoring Parameters that are readily detectable, or will be the Method Detection Limit, for a constituent that exhibits trace level or higher values in less than 10% of the background data (i.e., a Monitoring Parameter that is subject to the California Nonstatistical Data Analysis Method at that compliance well).

"Constituent of concern (COC)" is a part of the landfill's Water Quality Protection Standard and means the list of constituents that could be released from the landfill, including the foreseeable breakdown products of all such constituents. For the ground water medium at an municipal solid waste landfill, this list must include all Appendix II constituents except for those that the discharger can show are not being mobilized in the landfill's leachate or, for Volatile Organic Compounds only, in its produced landfill gases. A constituent on this list becomes a Monitoring Parameter only after being detected (at trace level or above) and then verified by a well-specific retest in a periodic scan of compliance wells affected by the release.

"Corrective action measure (CAM)" means an active or passive process (or installation) that the discharger implements or constructs to constrain a release, to eliminate its effects, or to prevent or minimize the release of additional waste from the landfill. The scope of the term includes "interim Corrective Action Measures," which is applied before the adoption of the Corrective Action Program, and includes "active Corrective Action Measures," which involves the induced movement of polluted water within the impacted aquifer (e.g., a pump-and-treat operation).

"CWC" means the statutes in the California Water Code.

"Detect," when applied to a scan of leachate or ground water, means that the constituent for which the scan is conducted shows up at trace level or higher. For Constituents of Concern and Monitoring Parameters that are rarely detected in background, the term means analyses done using a laboratory analytical method that complies with Title 27 of the California Code of Regulations section 20415(e)(7).

"Discrete retest" means a particular means of validating a preliminary indication of a release, for a given compliance well / Monitoring Parameter pair, whereby the discharger applies an approved data analysis method to two new samples for that well / Monitoring Parameter pair. The retest validates the preliminary indication if either or both of the retest samples triggers a measurably significant increase indication. The scope of the retest, at any given compliance well, is limited to only those Monitoring Parameters that gave a preliminary indication at that monitoring point.

"Detection mode," for a given compliance well / Monitoring Parameter pair, means a state in which one tests for a measurably significant increase, for that Monitoring Parameter at that well, using an appropriate statistical or nonstatistical data analysis method. Once that well / Monitoring Parameter pair exhibits a measurably significant increase (including an initial indication verified by a discrete retest), it is monitored, thereafter, in "tracking mode" until the inception of the proof period, following successful completion of corrective action.

"DMP" means a Detection Monitoring Program that implements the State Water Resources Control Board's requirements, under Title 27 of the California Code of Regulations section 20420 and under State Water Resources Control Board Policy No. 93-62, which policy requires the Regional Water Quality Control Board to apply any federal municipal solid waste landfill requirements, under Title 40 of the Code of Federal Regulations section 258.54, that are additional to, or are broader in scope than, the Title 27 California Code of Regulations requirements.

"EMP" means an Evaluation Monitoring Program that implements the requirements under Title 27 of the California Code of Regulations section 20425 and under State Water Resources Control Board Policy No. 93-62, which requires the Regional Water Quality Control Board to apply any applicable federal municipal solid waste landfill requirements, under Title 40 of the Code of Federal Regulations section 258.55 through section 258.57, that are additional to, or are broader in scope than, the Title 27 California Code of Regulations requirements. This state program constitutes a stepping stone to a corrective action program, in response to the landfill exhibiting a measurably significant increase of a release or to its having exhibited physical evidence of a release [see Title 27 of the California Code of Regulations section 20385(a)(2 and 3)].

"Existing Footprint" (as capitalized) means the area of land, at an municipal solid waste landfill, that is covered by waste as of the date that landfill became subject to the federal regulations of Title 40 of the Code of Federal Regulations Part 258, pursuant to section 258.1 of that part.

"Geographic variation" means the random change in the mean, or median, concentration of a given Monitoring Parameter between different locations in a given ground water body, in the absence of a release.

"Indicator parameter" means all MPars that are deemed most capable of providing for a reliable indication of a Landfill release. These include common leachate indicator parameters (total dissolved solids, chloride, sulfate, and nitrate-nitrogen), all Appendix I VOCs, and all MPars for which a successful demonstration has not been made based on LCRS leachate monitoring data that the constituent cannot reliably be differentiated between LCRS leachate and groundwater. Only indicator parameters will generally be subjected to routine statistical analysis.

"Inter-well comparison" means a type of statistical or nonstatistical data analysis, applied to a given

detection mode compliance well / Monitoring Parameter pair, in which one compares current concentration data, for that Monitoring Parameter and well, with a suite of background data from the appropriate upgradient well(s) to determine if that Monitoring Parameter has produced a measurably significant increase at that well. Generally speaking, the use of upgradient background data tends to produce higher false-positive and false-negative rates than the intra-well comparison approach, but is appropriate in those cases where it is not feasible to validate that a compliance well's own historical data reflects water quality in the absence of a release.

"Intra-well comparison" means a type of statistical or nonstatistical data analysis, applied to a given detection mode compliance well / Monitoring Parameter pair, in which one compares current concentration data, for that Monitoring Parameter, with a suite of background data consisting of selected historical data from that same well to determine if that Monitoring Parameter has produced a measurably significant increase at that well. Typically, the use of a compliance well's own historical data, for a Monitoring Parameter, provides better statistical power (to identify a real release and to avoid producing false-positive indications) than does the inter-well comparison approach, but only in a case where it is reasonable to assume that the compliance well's own historical data does not reflect the presence of a release for that Monitoring Parameter.

"LCRS" means a functioning Leachate Collection and Removal System (i.e., one that produces leachate).

"LFG" means landfill gas, including any Volatile Organic Compounds.

"LEA" means local enforcement agency for the California Integrated Waste Managementment Board responsible for management of Waste Board regulations of 27 CCR and 40 CFR. For this Landfill the LEA is the Los Angeles County Department of Health Services, Solid Waste Program.

"M&RP" means the Monitoring and Reporting Program that is an attachment to the Waste Discharge Requirements (or other order) and that is incorporated by reference by the Waste Discharge Requirements.

"Matrix effect" means any increase in the Method Detection Limit or Peak Quantitation Limit for a given constituent as a result of the presence of other constituents, either of natural origin or introduced through a release, that are present in the sample of water or soil-pore gas being analyzed.

"Measurably significant increase" means a condition in which an appropriate data analysis method shows an initial indication of a release, for a given detection mode compliance well / Monitoring Parameter pair, that is verified by a discrete retest (for that well and Monitoring Parameter).

"Method detection limit (MDL)" means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte's concentration is greater than zero, as defined in Title 40 of the Code of Federal Regulations section 136, Appendix B.

"Minimum Level" represents the lowest quantifiable concentration in a sample based upon the proper application of analytical procedures and the absence of any matrix interference. MLs also represent the lowest standard concentration on the calibration curve for a specific analytical technique after the application of appropriate method-specific factors.

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Los Angeles Regional Board Quality Control Board **DEFINITION OF TERMS AND ACRONYMS**

"Monitored media" means those water and/or gas-bearing media (if applicable) that are monitored pursuant to a monitoring and reporting program. The monitored media may include:

- a. groundwater in the uppermost aquifer or in any other portion of the zone of saturation [section 20164 of Title 27 of the California Code of Regulations], in which it would be reasonable to anticipate that waste constituents migrating from the landfill could be detected, and in any perched zones underlying the landfill,
- b. any bodies of surface water that could be measurably affected by a release,
- c. soil-pore liquid beneath and/or adjacent to the landfill, and
- d. soil-pore gas beneath and/or adjacent to the landfill.

"Monitoring parameter (MPar)" is a part of the landfill's Water Quality Protection Standard and means a list consisting of those Constituents of Concern that are present at a detectable level (trace level or above) in ground or surface water affected by the release. This is the subset of the Constituents of Concern that is subject to testing for a measurably significant increase, in detection mode, at all compliance wells. For ground water, at a landfill with a functioning Leachate Collection and Removal System, this suite includes all Appendix II constituents that have been detected (at trace level or above) and verified in a Constituents of Concern scan of ground water at compliance wells affected by the release. For ground water, at a landfill without a functioning Leachate Collection and Removal System, this suite includes all Appendix II constituents that have been detected (at trace level or above) and verified in a Constituents of Concern scan of ground water at any compliance well affected by the release.

"Monitoring point," for any given monitored medium (surface water, ground water, or the unsaturated zone), means a location, including any installed access device (e.g., well or lysimeter), that is named in the Monitoring and Reporting Program as a place where the discharger monitors that medium: 1) to detect the arrival of the release front for each Monitoring Parameter that is in detection mode at that location; 2) to detect changes in the concentration of each Monitoring Parameter that is in tracking mode at that location; and 3) in a case where the location that is in tracking mode for most Monitoring Parameters that are involved in the release, to detect the presence, at trace level or above, of any Constituents of Concern that have not previously been detected in that medium (Constituents of Concern newly detected and verified in that medium become Monitoring Parameters for that medium).

"MSW landfill" means any landfill that is subject to any portion of the federal regulations under Title 40 of the Code of Federal Regulations Part 258 by virtue of having received municipal solid waste (household waste) at any time and having received any waste after October 9, 1991.

"Operating record" means the organized compendium of information about the landfill and facility that the discharger maintains and makes available to the public at a site approved by the Regional Water Quality Control Board and/or the Enforcement Agency and that contains a copy of each document submitted to, or received from, any State or local regulatory agency for purposes of obtaining or updating either the Facility Permit or the Waste Discharge Requirements, demonstrating compliance with the California Environmental Quality Act, or complying (or demonstrating compliance) with any applicable requirement under Title 40 of the Code of Federal Regulations Part 258.

"Point of compliance (POC)" is, for the ground water medium, a part of the landfill's Water Quality Protection Standard and means a conceptual vertical surface that is located, in map view, along the hydraulically downgradient limit of waste placement at the landfill and that extends downward through the uppermost aquifer underlying the Unit. The federal municipal solid waste regulations require one or more ground water monitoring points along this vertical surface to monitor the quality of ground water passing it (see Title 40 of the Code of Federal Regulations section 258.51), whereas the Regional Water Quality Control Board will name other ground water monitoring points (not along this vertical surface) as needed to provide the earliest possible detection and measurement of a release [see Title 27 of the California Code of Regulations section 20415(b)(1)].

"Practical quantitation limit (PQL)" means the value established as a target value by the United States Environmental Protection Agency that is the lowest concentration of a substance that can be consistently determined within +/- 20% of the true concentration by 75% of the laboratories tested in a performance evaluation study. Alternatively, if performance data are not available, the Practical Quantitation Limit for carcinogens is the Method Detection Limit multiplied by 5, and for noncarcinogens is the Method Detection Limit multiplied by 10. These estimated Practical Quantitation Limits are listed in Appendix II to Title 40 of the Code of Federal Regulations Part 258. Generally, these are target values that may not reflect the constraints of matrix effects; therefore, the Regional Water Quality Control Board requires the discharger to keep an up-to-date listing of the applicable laboratory-specific Practical Quantitation Limit and Method Detection Limit estimates for each analyte on the Constituent of Concern list.

"Recycled water" refers to "disinfected tertiary recycled water" as defined in California Code of Regulations, Title 22, Section 60301.230.

"Release" means the three-dimensional portion of the monitored medium (ground water, surface water, or the unsaturated zone) comprised of all locations therein that are affected by one or more Monitoring Parameters that have migrated from the landfill to such an extent that a properly constructed monitoring point, at that location, would trigger a measurably significant increase over the applicable concentration limit, using an appropriate data analysis method meeting the requirements of Title 27 of the California Code of Regulations section 20415(e)(9) and a background data set sample size of 16 or more data points.

"Reporting limit" is the same as Minimum Level when there have been no modifications, such as dilution or concentration to the standard analytical procedure during sample preparation.

"Reporting period" means the duration separating the submittal of a given type of monitoring report from the time the next iteration of that report is scheduled for submittal.

"Retest," when applied to a scan to detect the presence of an appropriate list of analytes in leachate, landfill gas, or ground water (at an affected monitoring point), means taking a single additional sample from the indicating medium (or, for ground water, the indicating monitoring point) to determine whether the initial detection, for that analyte, is valid. When applied to the six-monthly monitoring effort for a given compliance well / Monitoring Parameter pair in detection mode, see "discrete retest."

"RWQCB" or "Regional Board" means the appropriate California Regional Water Quality Control Board.

"Sample size," for a given compliance well / Monitoring Parameter pair in detection mode, means the number of data points used to represent the variability of the background population or to represent the present compliance status of the Monitoring Parameter at that well, when applying an appropriate data analysis method.

"Scan" means a determination as to whether any of a given list of constituents are detectable (at the trace level or above) in the monitored medium (typically leachate, ground water, or landfill gas). The term includes both the initial measurement and, for a newly detected constituent, the results of the single retest sample. To identify a newly detected constituent, the constituent must be detected (at trace level or above) and then verified by being detected in the single sample retest. When applied to leachate or landfill gas, the term indicates a way of determining which Appendix II constituents should be included in the landfill's the Constituents of Concern list (once detected and verified, a constituent is added permanently to the Constituents of Concern list). When applied to ground water, the term indicates a way of determining which Appendix II constituents should be included in the landfill's Monitoring Parameter list (once detected and verified at any given compliance well or background well, a constituent is added permanently to the Monitoring Parameter list).

"SOR" means a federal Selection of Remedy study, under Title 40 of the Code of Federal Regulations section 258.57, which applies to any municipal solid waste landfill that has exhibited a measurably significant release over the applicable Water Quality Protection Standard at any well along the Point Of Compliance for any Appendix II constituent. In California, this process is one in which the Regional Water Quality Control Board, in the presence of any affected persons and other interested parties, considers all relevant factors and adopts a suite of corrective action measures — developed during the Assessment of Corrective Measures study — which the discharger will apply during the Corrective Action Program to remediate the effects of the release. Generally speaking, the studies serve the same function, under the federal approach, as the Evaluation Monitoring Program does under the State approach.

"Standard observations" refers to:

a. For receiving waters:

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

- b. Along the perimeter of the landfill:
 - i. Evidence of liquid leaving or entering the landfill, estimated size of affected area, and flow rate;
 - ii. Evidence of odors: presence or absence, characterization, source, and distance of travel from source; and
 - iii. Evidence of erosion and/or of exposed refuse.
- c. For the landfill:
 - i. Evidence of ponded water at any point on the waste management facility;
 - ii. Evidence of odors: presence or absence, characterization, source, and distance of travel from source;
 - iii. Evidence of erosion and/or of daylighted refuse; and
 - iv. Standard Analysis and Measurements, which refers to:
 - A. Turbidity (only for water samples) in NTU:
 - B. Water elevation to the nearest 1/100th foot above mean sea level (only for groundwater monitoring); and
 - C. Sampling and statistical/non-statistical analysis of the Monitoring Parameters.

"SW-846" means the laboratory analytical guidance document published by the United States Environmental Protection Agency.

"SWRCB" means the California State Water Resources Control Board.

"SWRCB Resolution No. 93-62" means the order the State Water Resources Control Board adopted in 1993 as State Policy For Water Quality Control (has the force of regulation) that applies to all municipal solid waste landfills and requires a composite liner for all portions of the landfill outside of its Existing Footprint, with rare exceptions, and requires the Regional Water Quality Control Board to apply any requirement of Title 40 of the Code of Federal Regulations Part 258 that is missing from, or broader in scope than, the State Water Resources Control Boards' landfill requirements under Title 27 of the California Code of Regulations.

"Tracking mode," for a given compliance well / Monitoring Parameter pair, means a state in which there has already been a measurably significant increase (for that Monitoring Parameter at that well) such that the focus has changed from detecting the release to tracking it. In this mode, one keeps an up-to-date concentration versus time plot used in the six-monthly report validating the effectiveness of the

Corrective Action Measures — required under Title 27 of the California Code of Regulations section 20430(h) — to demonstrate either that current Corrective Action Measures are effectively remediating the release or to identify the need for proposing additional/changed Corrective Action Measures under Title 27 of the California Code of Regulations section 20430(i or j) and Title 40 of the Code of Federal Regulations section 258.58(b). A well / Monitoring Parameter pair in this mode remains in this mode until the inception of the proof period following successful completion of corrective action.

"Time Schedule Order (TSO)" is an enforceable schedule of compliance for achieving listed milestones in the cleanup.

"Time-Versus-Concentration Plot" provides a graphical method to view changes in concentration levels at a particular monitoring location(s) over time. More than one monitoring location can be compared on the same plot to look for differences between monitoring locations. They can also be used to examine the data for indications of trends.

"Uninvolved COC (UCOC) List" means the list of COCs that are subject only to periodic every-five-years checks.

"VOC" means any of the Volatile Organic Compounds that can be identified in a water or leachate sample under United States Environmental Protection Agency Method 8260 (see SW-846). The United States Environmental Protection Agency lists a subset of 47 such constituents in its Appendix I default Monitoring Parameter list (see Appendix I to Title 40 of the Code of Federal Regulations Part 258).

"VSRLF" means a "very small rural landfill" that has demonstrated to the satisfaction of the Regional Water Quality Control Board that it meets, and continues to meet, the qualifying preconditions, under Title 40 of the Code of Federal Regulations section 258.1(f), for being exempt from the federal design criteria (see Title 40 of the Code of Federal Regulations Part 258 Subpart D) and the federal monitoring requirements (see Title 40 of the Code of Federal Regulations Part 258 Subpart E). In California, to qualify as being such a landfill, the Operating Record must include the Regional Water Quality Control Board's concurrence with the discharger's demonstration under Title 40 of the Code of Federal Regulations section 258.1(f). Such a landfill is still required to monitor pursuant to the Title 27 California Code of Regulations requirements and the federal exemptions cease to apply as soon as the landfill exhibits evidence of a release.

"Water quality protection standard (Water Standard)" means the multi-part system by which the discharger determines the compliance status of the landfill, with respect to the release of waste constituents. For each monitored medium, the term includes: the Constituent of Concern list and the Monitoring Parameter list (i.e., the subset of Constituents of Concern that are detectable in the that medium); the concentration limit for each Monitoring Parameter at each monitoring point; the monitoring points (for the ground water medium, these are the compliance wells); and, for the ground water medium, the point of compliance. A violation of this standard occurs whenever a Constituent of Concern that is detectable in that medium (i.e., an Monitoring Parameter) produces a measurably significant increase over its applicable concentration limit at any monitoring point, as indicated by an appropriate statistical or nonstatistical data analysis method meeting the requirements of Title 27 of the California Code of Regulations section 20415(e)(9). Such a violation triggers a change from detection mode to tracking mode for that well / Monitoring Parameter pair.

"Well / Monitoring Parameter (Well/MPar) pair" means a given Monitoring Parameter at a given well (typically a compliance well, unless a release is detected at a background well). The discharger tracks compliance with the Water Quality Protection Standard for each such pair; therefore, the minimum number of such pairs for the ground water medium is equal to the number of compliance wells times the number of Monitoring Parameters. At any given time, such a well and constituent combination will be either in detection mode or in tracking mode.

"WDRs" means Waste Discharge Requirements.

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. [CWC Section 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350]

2. GENERAL PROHIBITION

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code (CWC). [H&SC Section 5411, CWC Section 13263]

3. AVAILABILITY

A copy of these waste discharge requirements shall be maintained at the discharge facility and be available at all times to operating personnel. [CWC Section 13263]

4. CHANGE IN OWNERSHIP

The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on. [CWC Sections 13267 and 13263]

5. 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. [CWC Section 13260(c)]. A material change includes, but is not limited to, the following:

(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.

Standard Provisions Applicable to Waste Discharge Requirements

- (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. [CCR Title 23 Section 2210]

6. <u>REVISION</u>

These waste discharge requirements are subject to review and revision by the Regional Board. [CCR Section 13263]

7. TERMINATION

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

8. <u>VESTED RIGHTS</u>

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

9. SEVERABILITY

Provisions of these waste discharge requirements are severable. If any provision of these requirements are found invalid, the remainder of the requirements shall not be affected. [CWC Section 921]

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. [CWC Section 13263(f)]

11. HAZARDOUS 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 hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the discharger is in violation of a prohibition in the applicable Water Quality Control plan. [CWC Section 1327(a)]

12. 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. [CWC Section 13272]

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13. ENTRY AND INSPECTION

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 reasonable times, any records that must be kept under the conditions of this Order:
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the California Water Code, any substances or parameters at any location. [CWC Section 13267]

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. [CWC 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.

Unless otherwise permitted by the Regional Board Executive officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The Regional Board Executive Officer may allow use of an uncertified laboratory under exceptional circumstances, such as when the closest laboratory to the monitoring location is outside the State boundaries and therefore not subject to certification. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" [40CFR Part 136] promulgated by the U.S. Environmental Protection Agency. [CCR Title 23, Section 2230]

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. [CWC Section 13263(f)]

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

Any person discharging or proposing to discharge to navigable waters from a point source (except for discharge of dredged or fill material subject to Section 404 fo the Clean Water Act and discharge subject to a general NPDES permit) must file an NPDES permit application with the Regional Board. [CCR Title 2 Section 22357]

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. [CWC 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

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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.
- 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:

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"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. [CWC Sections 13263, 13267, and 13268]"

20. OPERATOR CERTIFICATION

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

Each plan shall be operated and maintained in accordance with the operation and maintenance manual prepared by the municipality through the Clean Water Grant Program [CWC Title 23, Section 2233(d)]

ADDITIONAL PROVISIONS APPLICABLE TO PUBLICLY OWNED TREATEMENT WORKS' ADEQUATE CAPACITY

21. Whenever a publicly owned wastewater treatment plant will reach capacity within four years the discharger shall notify the Regional Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The discharger must demonstrate that adequate steps are being taken to address the capacity problem. The discharger shall submit a technical report to the Regional Board showing flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Board, or within 120 days after receipt of notification from the Regional Board, of a finding that the treatment plant will reach capacity within four years. 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, and longer extensions may be granted by the Regional Board itself. [CCR Title 23, Section 2232]