



Los Angeles Regional Water Quality Control Board

April 21, 2015

Mr. Frank Kiesler Ventura Regional Sanitation District 1001 Partridge Drive, Suite 150 Ventura, CA 93003-5562

RESPONSE TO COMMENTS - TENTATIVE WASTE DISCHARGE REQUIREMENTS - BAILARD LANDFILL, OXNARD, CA (FILE NO. 61-204, CI-4035, WDID NO. 4A560300001, GEOTRACKER GLOBAL ID. L10001266944)

Dear Mr. Kiesler:

Reference is made to a letter from this Regional Water Quality Control Board (Regional Board), dated March 6, 2015, transmitting tentative Waste Discharge Requirements (WDRs) for the Bailard Landfill (Landfill) in Oxnard, California (tentative Order). Comments were received from the Ventura Regional Sanitation Districts (Discharger) on April 10, 2015 on the tentative Order. Regional Board staff has considered all comments submitted, made appropriate revisions to the tentative Order accordingly, and prepared the attached Response to Comments. A redline version that includes all revisions to the tentative Order released on March 6, 2015, as well as copies of all comments received, are also attached to this letter. Note that the Standard Provisions Applicable to Waste Discharge Requirements (Attachment W) included in the tentative Order were recently updated (March 2015).

Written comments regarding the tentative Order were required by the Regional Board by 5:00PM on April 20, 2015, in order to be evaluated by Regional Board staff, be included in the Regional Board's agenda folder, and allow Regional Board members sufficient time to give full consideration to the comments and issues raised. Following review of the revisions to the tentative Order, the Discharger can raise any additional questions or comments as testimony before the Regional Board during the public meeting on May 14, 2015.

Should you have any questions, please contact Dr. Enrique Casas, Project Manager, at (213) 620-2299 or me at (213) 620-2253.

Sincerely,

Wen Yang

Senior Engineering Geologist

Land Disposal Unit

Attachments

- 1) Comments received,
- 2) Responses to comments received
- 3) Revised tentative WDRs in redline format

cc: Ms. Leslie Graves, State Water Resources Control Board

Ms. Shannon Hill, CalRecycle

Mr. Charles Genkel, County of Ventura Environmental Health Division

Mr. Reed Sate, Department of Toxic Substance Control

Mr. Ed Pert, Department of Fish and Wildlife

Mr. Mark Stuart, Chief, Department of Water Resources, Southern District

Mr. Michael Villegas, Air Pollution Control District

Commenter (Date submitted)	Summary of Comments	Response / Action
	(1) Tentative Order, Finding No. 8: Change suggested to clarify location of various land uses relative to landfill footprint. "Land uses for the surrounding area surrounding the landfill include residential to the southeast, and agricultural uses to the east, west and south, and open space to the north along the Santa Clara River."	The clarifying edits suggested were made to the tentative Order.
Ventura Regional Sanitation District (4/10/2015)	(2) Tentative Order, Finding No. 18: Change suggested to reflect most recent cost estimates. Per referenced sections of Title 27 Discharger must maintain financial assurance in the greater amount of the approved estimates for either water-related or non-water related releases. The amount noted in the suggested change reflects the higher of the two estimates which is for a non-water-related release. The cost estimates for both water-related and non-water related releases were submitted on May 24, 2013 as part of the May 2013 update to the Final Closure/PostClosure Maintenance Plans. "In accordance with Section 22220 of 27 CCR, the Discharger maintains assurance of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases (27 CCR 22220 et seq.) in the amount of 73,250 \$384,600 for a water-related and non-water-related release from the Landfill."	Staff agrees with the comment. The tentative Order was modified to clarify that corrective action financial assurance requirements in Title 27 reflect both a water-related and non-water-related component and that the cost estimate for Bailard Landfill is for a non-water-related release because it is the larger amount.
	(3) Tentative Order, Specification No. A.1: Change suggested to reflect correct date. "Waste disposal activities at the Landfill ceased as of August 24 27, 1996."	The correction was made to the tentative Order.
	(4) Tentative Order, Figure 2: Figure 2 illustrates a number of wells but does not include two of the offsite evaluations wells (EMP-1 and EMP-4) included in Table T-1. Should this figure also display wells EMP- 1S and EMP-4D? Recently the VRSD completed a survey of all wells and determined prior versions of the groundwater monitoring network were incorrectly located. Wells 30H2 and 30H3 are located to the north of EMP-4D. The attached sheet titled "Figure 2 Revised" provides the correct well locations and a PDF file of this sheet will be forwarded for your reference.	Figure 2 has been revised to include recently acquired groundwater monitoring well survey information and include the locations of wells EMP-1 and EMP-4.
	(5) Monitoring and Reporting Program Item No. 7: The section states " Table T-2, includes several inorganic "Metal Surrogates" which take the place of the fifteen federal metallic constituent MPARS ", however the Table T-2 still lists the metals, should these metal constituents remain in the table? Reference is made to "Item No. 14.e.ii of this MRP." Appears this should read "Item 43 12.e.ii of this MRP."	Metals in Table T-2 are listed as "Other COCs" and not as Monitoring Parameters. Thus, metals are only required to be monitored during a Five-Yearly COC Scan. Table T-2 was not modified per the comment. The reference to Item No. 14.e.ii has been corrected to Item No. 12.e.ii.

Commenter (Date submitted)	Summary of Comments	Response / Action
Ventura Regional Sanitation District (4/10/2015)	(6) Monitoring and Reporting Program Item No. 12.a: The result reporting directives in this section are based on ML (MDL) and RL (PQL) as "functionally equivalent" [Derivation of both are subject to laboratory accreditation and Standard Methods]. Using reference definitions, PQL is a multiplier factor larger than the MDL. However, results are to be reported "less than the numeric values of the MDL/PQL" (either/both? A less than the PQL hides a less than MDL). Also, "Nominal MDL and PQL values (2 different values?) shall be reported with all data" which is confused by the "functionally equivalent" premise. Result reporting must replace "any reference to 'detections at or above the trace level' shall be substituted with 'detections at or above the Method Detection Limit"." This means trace is equivalent to greater than the MDL, but does it apply above the PQL? The following language is provided in an effort to address the above outlined questions pertaining to this section of the draft: a. For the purposes of this MRP, the Minimum Level (ML) is the Method Detection Limit (MDL) and the Reporting Limit (RL) is the Practical Quantitation Limit (PQL) for reporting and statistical evaluation requirements. For this purpose, MLs and RLs are derived by the laboratory for each analytical procedure, according to the State Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (the State Implementation Policy (SIP) and the State of California's laboratory accreditation procedures. Sample results greater than or equal to the MDL shall be reported as "trace level" (and laboratory flagged) until values equal or exceed the PQL - therein as "measured". Values observed, less than the PQL can be reported as less than the numeric value of the PQL. Nominal MDL and PQL values shall be reported with all data. The statistical value and/or graphical quantities - for display purposes - are assigned one-half of the reporting PQL.	Staff agrees with the comment. The tentative Order has been modified to delete Item No. 12.a. The purpose of the item is to allow a discharger flexibility in reporting trace level results (i.e. Minimum Level and Reporting Limit) based on California Toxics Rule methods. Deleting the items is warranted because it is not applicable to Bailard Landfill. Moreover, trace reporting procedures are included in Item Nos. 14 and 16 of the MRP.
	(7) Monitoring and Reporting Program Item No. 12.c. Change suggested to correct an apparent typo in last line on page T-3. Also, in this section on page T-4, there is the following reference: "Item 15.b. of this MRP". There is no 15.b., it appears this is meant to refer to Item 13.b.	The correction was made to the tentative Order. The reference to Item No. 15.b. has been corrected to Item No. 13.b.
	(8) Monitoring and Reporting Program Item No. 12.c Changes suggested for the following reference: "Item 15.b. of this MRP". There is no 15.b., it appears this is meant to refer to Item 13.b.	The reference to Item No. 15.b. has been corrected to Item No. 13.b.
	(9) Monitoring and Reporting Program Item No. 12.f.ii Reference is made to "Item No. 15 of this MRP." Appears this should read "Item 13 of this MRP."	The reference to Item No. 15 has been corrected to Item No. 13.

Commenter (Date submitted)	Summary of Comments	Response / Action
Ventura Regional Sanitation District (4/10/2015)	(10) Monitoring and Reporting Program Item No. 13 Throughout this section there are several references to "item No. 15". Appears these references should read "Item No. 13".	The references to Item No. 15 have been corrected to Item No. 13.
	(11) Monitoring and Reporting Program Item No. 13.b.ii References made to "Item No. 15(a)(ii)". Appears this should read "Item 13(a)(ii)". Reference is made to "Item No. 14(f)(ii)". Appears this should read "Item 12.(f)(ii)". Reference is made to "Item No. 15(a)(i)". Appears this should read "Item 13(a)(i)".	The references to Item No. 15(a)(ii) have been corrected to Item No. 13(a)(ii). The reference to Item No. 14(f)(ii) has been corrected to Item No. 12(f)(ii).
	(12) Monitoring and Reporting Program Table T-1 We propose to remove well 30K1 from both the lists of semi-perched aquifer wells (2002 WDR) and Oxnard aquifer wells since well 30K1 is an active water production well. Consequently, we are not proposing any changes or additions to the two (2) Oxnard monitoring wells including the upgradient well 30A5 and downgradient well 30C4.	Well 30K1 has been deleted from Table T-1, staff concurs that an active water production well is not ideal for conducting groundwater monitoring and wells 30A5 and 30C4 allow for continued monitoring of the Oxnard Aquifer.
	(13) Monitoring and Reporting Program Table T-3 VRSD has already been evaluating both inorganic and organic constituents (including VOCs) detected at or above the trace trigger level (TTL) in the site monitoring well network in accordance with the California Non-Statistical data analysis method as shown in the past monitoring reports. The DMP should utilize the long term statistical values for those constituents that already exceeded the Thresholds as the base line for detection of a release.	Staff agrees with the comment, however modification of Table T-3 is not necessary. Table T-3 includes prediction limits recently reported by the Discharger based on statistical evaluation of long term monitoring at the Landfill. The threshold values / prediction limits in Table T-3 are required to be updated in each corresponding semi-annual report per Item 13 of this MRP and will be the "base line for detection of a release" as described in the comment. Table T-3 was not modified.
	(14) Monitoring and Reporting Program Figure 1: Recently the VRSD completed a survey of all wells and determined prior versions of the groundwater monitoring network were incorrectly located. Well 30H3 is located to the north of EMP-40. The attached sheet titled "Figure 1 Revised" provides the correct well locations and a PDF file of this sheet will be forwarded for your reference.	Staff agrees with this comment. Figure 1 has been revised to include recently acquired groundwater monitoring well survey information.

STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

ORDER NO. R4- 2015-XXXX

FOR POSTCLOSURE MAINTENANCE AND DETECTION MONITORING PROGRAM

VENTURA REGIONAL SANITATION DISTRICT (BAILARD LANDFILL) (FILE NO. 61-204)

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

BACKGROUND

- 1. The Ventura Regional Sanitation District (Discharger) owns and manages the closed Bailard Landfill (Landfill), located at 4105 West Gonzales Road in an unincorporated area of Ventura County, California (Figure 1), under waste discharge requirements (WDRs) in Regional Board Order No. R4-2002-0190, adopted on December 12, 2002.
- 2. The following is a condensed chronologic history of the development of the Landfill.
 - a. On February 14, 1962, the Regional Board adopted Resolution No. 62-9, which included WDRs for disposal of municipal waste at Landfill site. Previously, the Ventura County Planning Commission issued a conditional use permit (CUP) for the Landfill in 1961.
 - b. The Landfill operator was Mr. W. R. Bailard.
 - c. On June 24, 1964, the Regional Board adopted Resolution No. 64-27, which amended Resolution No. 62-9.
 - d. In 1974, the Ventura Refuse Disposal Company (formed by several individuals including W. R. Bailard) assumed the responsibility for operating the Landfill.
 - e. In 1975, the Ventura County Planning Commission revoked the Landfill CUP because of improper operation of the Landfill and directed the Ventura Refuse Disposal Company to correct deficiencies at the site including grading and drainage control facilities.
 - f. In 1978, the Discharger reached a lease agreement with the Ventura Refuse Disposal Company to reopen and operate the Landfill. The proposed reactivation plan prepared by the Discharger was designed to accomplish proper drainage, using refuse and cover material for initial grading.

- g. On December 7, 1978, the Ventura County Planning Commission granted CUP No. 3650 to the Ventura Refuse Disposal Company to reopen the site for refuse disposal and to undertake remedial work to immediately correct deficiencies.
- h. Subsequently, the Discharger filed a report of waste discharge (ROWD) with the Regional Board to assume operation of the Landfill under the lease contract with Ventura Refuse Disposal Company and to correct existing deficiencies.
- i. On July 23, 1979, the Regional Board adopted Order No. 79-130 which included WDRs for disposal of municipal waste at Landfill under the operation of the Discharger.
- j. At a public hearing held on January 25, 1988, the Regional Board supported the Landfill reactivation plan presented by the Discharger before the Ventura County Board of Supervisors which addressed the mitigation of existing groundwater problems and the prevention of potential migration of landfill gas and leachate from the Landfill into underlying groundwater. The mitigation plan included a requirement that a barrier be constructed between each lift to inhibit the potential migration of landfill gas and leachate. All barriers would have a maximum hydraulic conductivity of 1x10⁻⁵ centimeters per second (cm/sec) and have a minimum thickness of one foot.
- k. On May 23, 1988, the Regional Board adopted Order No. 88-054 to reactivate disposal activities at the Landfill. Order No. 88-05 rescinded Resolution No. 62-9, Resolution No. 64-27, and Order No. 79-130.
- I. On October 24, 1988, the Regional Board adopted Order No. 88-106 for the use of wastewater as landscape irrigation and dust control at the Landfill. The wastewater was from multiple sources, including the Landfill heavy equipment washwater recycling facility, shallow industrial Well No. 2N/22W-30L2, purge water from Landfill monitoring wells, as well as the adjacent Coastal Landfill, and a proposed groundwater extraction well. Order No. 88-106 was adopted for wastewater reuse at both the Landfill and nearby Coastal Landfill.
- m. On December 2, 1991, the Regional Board adopted Order No. 91-121 to amend the expiration date for Order No. 88-054 from May 1, 1993, to December 7, 1993.
- n. On September 27, 1993, the Regional Board adopted Order No. 93-060. As the result of operational refinements at the Landfill, the final design elevation of 119 feet above mean sea level (specified in CUP No. 3650) would not be reached by December 7, 1993. These operational refinements increased the volume capacity from approximately 6.7 million to 7.5 million cubic yards, the solid waste tonnage from 1.9 million to 3.15 million tons, and increase the cover volume material from an estimated 2.0 million to 3.4 million cubic yards. Order No. 93-060 allowed for continued landfilling to the final contours included in CUP No. 3650 and rescinded Order No. 88-054 and Order No. 91-121.
- o. A waste processing facility, privately owned and operated, under a separate CUP, by VenVirotek was located within the boundaries of the Bailard Landfill under a lease agreement with the Discharger. The VenVirotek facility used the Chemfix® process of chemical fixation for waste treatment. The facility was permitted to receive and process non-hazardous drilling muds and cuttings, wastewater from oil field water tanks and water

treatment, oil field tank bottom sediments, oil field sulfur dioxide scrubber waste, and dewatered municipal sewage sludge. VenVirotek ceased accepting waste on August 15, 1993. All structures and equipment within the six-acre facility were removed by VenVirotek prior to January 1, 1994.

- p. On January 24, 2002 the Regional Board adopted Order No. R4-2002-024 to terminate Order No. 88-106 because the Discharger had terminated the waste discharge and the requirements were no longer applicable.
- q. On July 5, 2000, the Regional Board adopted Order No. 00-78 to update postclosure maintenance and monitoring requirements for the Landfill. Order No. 00-078 rescinded Order No. 93-060.
- r. On December 12, 2002, the Regional Board adopted Order No. R4-2002-0190 to implement an assessment evaluation monitoring program (EMP) and corrective action program in response to low-level concentrations of volatile organic compounds (VOCs) detected at the Landfill. Order No. R4-2002-0190 rescinded Order No. 00-78.
- 3. The lease area for the Landfill is 223 acres. Of this total, 64.6 acres are located in the adjacent Santa Clara River channel and were dedicated to the Ventura County Watershed Protection District (WPD) by the previous land owners. The remaining area, which encompasses the entire Landfill, is 158.4 acres. A Southern California Edison (SCE) easement, covering 19.3 acres, runs diagonally across the Landfill from the southwest corner to the northeast corner. The SCE easement was not used by the Discharger for refuse disposal; however refuse was placed in this area by the previous owners as part of older landfilling operations. The areas used by the Discharger for landfilling totaled 139.1 acres.

ENVIRONMENTAL SETTING

- 4. The Landfill is located within the Oxnard Hydrologic Subarea of the Oxnard Plain Hydrologic Area in the Santa Clara-Calleguas Hydrologic Unit. The existing beneficial uses of waters identified in the Water Quality Control Plan for the Los Angeles Region (Basin Plan) for the Oxnard Hydrologic Subarea are industrial service and process supply, agricultural supply, groundwater recharge, freshwater replenishment, water contact and non-contact recreation, warm and cold freshwater habitat, wetland habitat, wildlife habitat, rare, threatened and endangered species habitat, and migration of aquatic organisms habitat. Municipal and domestic supplies are identified as potential beneficial uses.
- 5. The Landfill is underlain by water-bearing sediments, including undifferentiated alluvium, alluvial flood plain deposits, of the San Pedro Formation and a portion of the Santa Barbara Formation. These water-bearing deposits, 1,000 to 1,300 feet thick, contain aquifers consisting of lenses and layers of sand and gravel, interbedded with fine-grained and relatively impermeable silty or clayey aquitards of variable thickness. Underlying these rocks are non-water bearing deposits consisting of unconsolidated or cemented sedimentary rocks. The uppermost "semi-perched" aquifer is known to have poor water quality due to historically agricultural practices in the Oxnard Plain area and from contamination from the upgradient Coastal and Santa Clara landfills. The Basin Plan identifies beneficial uses for unconfined and perched aquifers in the Oxnard Plain as municipal, domestic and agricultural supply, and industrial service supply as a potential beneficial use.

- 6. There are no known active faults within the Landfill area. Active faults are defined as Holocene epoch faults that have exhibited movement in the last 11,000 years. The Oak Ridge Fault, located approximately two miles north of the Landfill, and the McGrath Fault, located approximately one mile north of the Landfill, are believed to have been active during the late Quaternary period. There is no evidence of more recent activities of these faults.
- 7. The site is located within a liquefaction hazard zone as indicated on the preliminary Oxnard 7.5 minute quadrangle map (released 21 June 2002) produced by the California Division of Mines and Geology Seismic Hazards Mapping Program (incorporated herein by reference). Landslides hazards have not been identified in the area of the Landfill.
- 8. Land uses for the area surrounding the Landfill include residential to the southeast, and agricultural uses to the east, west and south, and open space to the north along the Santa Clara River.
- 9. Climatic conditions at the Landfill are semi-arid. Rainfall typically occurs between November and April with little rainfall during the summer months. Average annual precipitation in the area is approximately 14.82 inches [Information from the Western Regional Climate Center's Oxnard weather station (#046569) based on weather recordings between July 1948 to December 2001]. Average annual evaporation in the area is considerably higher than precipitation as evidenced by data from the Touchtone #28 weather station in Santa Paula, California, operated by the University of California Statewide Integrated Pest Management Project where annual pan evaporation is approximately 48.4 inches.
- 10. The Landfill is not within the 100-year flood plain of the Santa Clara River according to the Federal Emergency Management Agency (FEMA Digital Q3 Flood Data for the Santa Clara River Watershed) because the area is protected by a levee constructed and maintained by the WPD.

ENVIRONMENTAL CONTROL SYSTEMS

- 11. A Solid Waste Assessment Test (SWAT) analysis for the Landfill was conducted in 1987 and 1988 and was approved by the Regional Board's Executive Officer (Executive Officer) on February 18, 1988. Results of the SWAT investigation indicated the presence of organic compounds and changes in inorganic chemistry of groundwater within the uppermost semi-perched aquifer at the downgradient monitoring wells that were believed to be associated with the Landfill. However, the SWAT did not detect any groundwater quality impacts to the deeper Oxnard aquifer. As required by Regional Board WDRs, groundwater monitoring at the Landfill has been conducted since 1988. Groundwater monitoring wells at the site are located upgradient, sidegradient, and downgradient of the Landfill and allow for sampling of both the semi-perched and Oxnard aquifers (Figure 2).
- 12. When the Landfill was reopened in 1988 under the control of the Discharger, a clay barrier was installed at the base of the vertical Landfill expansion to segregate new waste placement from older wastes placed on unlined ground by previous owners. A landfill gas and condensate collection system was constructed immediately above the clay barrier. This gas migration control and recovery system extends to the existing refuse fill, and may serve to collect representative leachate samples at the Landfill.

- 13. A three layer final cover system was constructed at the Landfill consisting of a two-foot foundation layer of sand, a one-foot low permeability layer of fine-grained soils with a hydraulic conductivity of 1x10⁻⁶ cm/sec or less, and a one-foot thick vegetative layer of soil. Closure certification for the Landfill was approved by the California Integrated Waste Management Board (now the California Department of Resources Recycling and Recovery, or CalRecycle) on July 16, 1998. Thereafter, the Landfill has been undergoing postclosure maintenance in accordance with a Postclosure Maintenance Plan (dated April 1995 and last updated on May 24, 2013) prepared by the Discharger. Postclosure maintenance occurs over the entire158.2 acres Landfill footprint where refuse disposal has occurred and includes the SCE easement.
- 14. Landfill gas monitoring probes are located along the boundary of the Landfill (Figure 3). These probes are currently monitored on a monthly basis.
- 15. The groundwater table at the Landfill area is generally at about thirty feet below ground surface. Because of the very shallow depth of groundwater in the area of the Landfill, vadose zone monitoring at the Landfill is not required.
- 16. On February 20, 2015, the Discharger submitted a ROWD to the Regional Board, summarizing historic groundwater monitoring results.

REGULATORY REQUIREMENTS

- 17. The USEPA under title 40 of the code of federal regulations (40 CFR) section 257 and section 258 (Subtitle D) revised existing regulations for municipal solid waste disposal facilities in response to the 1984 Hazardous and Solid Waste Amendments of RCRA and added new detailed requirements addressing the issues of location restriction, facility operation and design criteria, groundwater monitoring and corrective action, closure and postclosure maintenance, and financial assurance. USEPA delegated the responsibility for implementing these regulations to states with a fully approved landfill regulatory program. As responsible agencies for an approved state, the State Board and the Regional Board adopted the federal Subtitle D regulatory requirements (State Board Resolution No. 93-62 and Regional Board Order No. 93-062, respectively). Regional Board Order No. 93-062 was adopted on September 27, 1993.
- 18. In accordance with Section 22220 of 27 CCR, the Discharger maintains assurance of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases (27 CCR 22220 et seq.) from either a water-related or non-water related release. The Discharger submitted cost estimates for both water-related (\$73,260) and non-water related (\$384,600) releases on May 24, 2013 as part of updated Final Closure and PostClosure Maintenance Plans. The financial assurance mechanism for corrective action for the Landfill reflects the higher of the two estimates, which is for a non-water related release in the amount of \$73,260 for a water-related release from the Landfill.

ADMINISTRATIVE

19. The Regional Board adopted a revised Basin Plan on June 13, 1994. The Basin Plan contains beneficial uses and water quality objectives for groundwater in the Santa Clara River

watershed. The requirements in this Order, as they are met, are in conformance with the goals of the Basin Plan.

- 20. The State Water Resources Control Board (State Water Board) has adopted regulations that require the electronic submittal of information (ESI) for Groundwater Cleanup programs (section 3890 et seq. of title 23 of the California Code of Regulation [23CCR] and division 3 of 27 CCR). Starting in 1 January 2005, electronic submittal of these items and a portable data format (PDF) copy of full reports was extended to include all State Water Board groundwater cleanup programs, including the Land Disposal Program. The requirements contained in this Order, as they are met, conform to ESI reporting regulations.
- 21. California Water Code (CWC) section 13263, 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. The WDRs for the Landfill are being revised to include updated findings for closure and postclosure maintenance, as well as to update water quality monitoring programs.
- 22. 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 California Environmental Quality Act (Public Resources Code section 21000 et seq.).
- 23. The Regional Board has notified interested agencies and all known interested parties of its intent to issue requirements for postclosure maintenance of the Landfill. The Regional Board in a public meeting heard and considered all comments pertaining to postclosure maintenance for the Landfill.
- 24. Any person aggrieved by this action of the Regional Board may petition the State Water Board to review the action in accordance with CWC section 13320 and 23CCR section 2050 and following. The State Water Board must receive the petition by 5:00 p.m., thirty days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable filing petitions found the Internet may be http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

IT IS HEREBY ORDERED that the Discharger shall comply with the following requirements pertaining to the Landfill:

A. SPECIFICATIONS

- 1. Waste disposal activities at the Landfill ceased as of August, <u>27–24</u>, 1996. No MSW or any other wastes may be received at the Landfill for the purpose of disposal.
- 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 corresponding 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 to a facility legally permitted to accept such wastes.

B. PROHIBITIONS

- 1. The discharge of waste to land as a result of inadequate postclosure maintenance practices, that have not been specifically described to the Regional Board, and for which valid WDRs are not in force, is prohibited.
- 2. Wastes received during operating life of the Landfill 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 water quality objectives for groundwater or surface water as established in the Basin Plan to be exceeded; and
 - g. Cause pollution, contamination, or nuisance, as defined in CWC section 13050, or adversely affect beneficial uses of groundwater or surface water as established in the Basin Plan.
- 3. Odors, vectors, and other nuisances of waste origin beyond the limits of the Landfill are prohibited.
- 4. The discharge of waste to surface drainage courses or to groundwater is prohibited.
- 5. The Discharger shall conduct postclosure 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 constituent of concern (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 non-statistical data analysis method (including that method's retesting approach).
- 6. All applicable 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. Postclosure maintenance of the Landfill shall be conducted in accordance with the Final Closure and Postclosure Maintenance Plans (Plans) approved by the Executive Officer. The last update to the Plans was approved by the Executive Officer on May 24, 2013.
- 2. The Landfill post-closure maintenance period shall continue until the Regional Board determines that remaining wastes at the site will not threaten water quality.
- All containment structures and erosion and drainage control systems at the Landfill shall be designed and constructed under direct supervision of a California-registered civil engineer or certified engineering geologist, and shall be certified by the individual as meeting the prescriptive standards and/or performance goals of 27 CCR.
- 4. The Discharger shall install 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 are subject to review and approval by the Executive Officer prior to any construction.
- 5. The Discharger shall submit detailed preliminary plans, specifications, and descriptions for all proposed containment structures and construction features for Executive Officer approval at least 60 days prior to construction. The preliminary plans shall contain detailed quality assurance/quality control for the proposed construction. As-built plans shall be submitted within 60 days after the completion of construction. If the as-builts are virtually identical to the approved preliminary plans and specifications, only change sheets need be submitted in lieu of complete as-built plans.
- 6. 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 section 20365 and section 21090(b)(1) of 27 CCR. When necessary, temporary structures shall be installed as needed to comply with this requirement.
- 7. 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.
- 8. 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 byproducts (i.e., leachate or gas condensate) to off-site surface drainage courses or to groundwater is prohibited.
- 9. No wastewater shall leave the Landfill except as permitted by a National Pollutant Discharge Elimination System (NPDES) permit issued in accordance with the federal Clean Water Act and the California Code of Regulations.
- 10. 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. 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.

- 11. The Discharger shall develop/maintain permanent survey monuments at the Landfill throughout the development, closure and postclosure maintenance periods. 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.
- 12. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) installed or used to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, and adequate laboratory and process controls including appropriate quality assurance procedures.
- 13. The Discharger shall conduct periodic inspections at the Landfill to ensure the compliance of this Order. The inspections shall cover the final cover system, the water quality monitoring system, drainage system, landscaping, and any other systems at the site that may have an impact to water quality at the Landfill. Such inspections shall be documented and reported to the Regional Board in accordance with monitoring and reporting program (MRP) requirements.
- 14. The Discharger shall report any noncompliance or any incident resulting from Landfill operations that are in violation of this Order. 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 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.
- 15. Section 22220 of 27 CCR requires municipal solid waste landfills to maintain assurance of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the Landfill (27 CCR 22220 et seq.). On December 10, 2008, the Discharger submitted a revised cost estimate of \$73,260 for financial assurance for all known or reasonably foreseeable water-related releases from the Landfill to the Regional Board. The proposed cost estimate is for the design, installation, and maintenance of landfill gas extraction wells because it has been concluded that the most probable mechanism for a future impact to groundwater at the Landfill is associated with landfill gas migration. The corrective action cost estimate is approved through adoption of this Order.

D. REQUIREMENTS FOR GROUNDWATER MONITORING

 The Discharger shall implement the attached MRP No. CI-4035 (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 caused by discharges of waste to the Landfill. MRP No. CI-4035 is designed to satisfy both federal and state regulatory monitoring requirements for the Landfill.

- 2. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer, proposing modifications to MRP No. CI-4035. The Discharger shall implement any changes to the revised MRP approved by the Executive Officer upon receipt of a signed copy of the revised MRP.
- 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 MRP No. CI-4035, as directed by the Executive Officer.
- 4. The effectiveness of all monitoring wells, monitoring devices, and leachate and gas collection systems shall be maintained throughout the Landfill's closure, and postclosure maintenance periods in accordance with acceptable industry standards. The Discharger shall maintain a groundwater 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 shall be so informed in writing within seven 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 approval of the Executive Officer at least 30 days prior to implementing the change(s).
- 5. If a 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 monitoring wells at the Landfill during sampling. Water purged from a monitoring well shall not be returned to that well (or any other Landfill well).
- 7. Any abandoned wells or bore holes under the control of the Discharger, and situated within the Landfill boundaries, must be located and properly modified or sealed to prevent mixing of any waters between adjacent water-bearing zones. A notice of intent to decommission a well must be filed with the appropriate regulatory agencies prior to decommissioning. Procedures used to decommission these wells, or to modify wells still in use, must conform to the specifications of the local health department or other appropriate agencies.
- 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 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.
- 9. The compliance point(s) where water quality protection standards (WQPS) apply shall be located along downgradient edges of the Landfill or an alternate location approved by the Executive Officer.
- 10. The compliance monitoring wells at the Landfill shall consist of those wells listed in Table T-1 of-MRP No. CI-4035. All compliance monitoring wells shall be monitored pursuant to this Order and as directed by the Executive Officer through future revisions of MRP No. CI-4035.
- 11. As of the effective date of this Order, the Landfill's COCs are those listed in Table T-2 in the MRP.
- 12. In accordance with 27 CCR section 20390, the WQPS for the Landfill is established as natural background groundwater quality at the site.
- 13. In accordance with 27 CCR section 20390(a), the WQPS shall apply during the postclosure maintenance period of the Landfill, and during any Landfill compliance period.
- 14. If necessary, the Discharger shall install additional groundwater, soil pore liquid, soil pore gas, or leachate monitoring devices necessary to comply with MRP No. CI-4035, as adopted or as revised by the Executive Officer.
- 15. Pursuant to 27 CCR section 20415(d)(5), unsaturated zone groundwater monitoring at the Landfill is exempt.

E. REQUIREMENTS FOR ON-SITE USE OF WATER

1. No water shall be routinely applied to refuse fill areas except for landscape irrigation, surface dust control, winter deck construction, road construction, final cover construction or non-emergency uses approved by the Executive Officer. Any water used at the Landfill, except for potable water, recycled water, and any other water allowed by the Executive Officer, shall be subject to these WDRs. Water used for these purposes shall be applied















only in quantities not to exceed that necessary to reduce immediate dust hazards, support plant life, or to achieve desired compaction. Overflow or runoff caused by the overapplication or improper management of irrigation or dust control systems is prohibited.

- 2. No wastewater shall leave the Landfill except as permitted by an NPDES permit issued in accordance with the federal Clean Water Act (CWA) and CWC.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. All uses of potable, recycled, or waste water shall be within the boundaries of the Landfill property. During an emergency, this water may be used for fighting fires on the Landfill or on undeveloped areas off and adjacent to the Landfill.

F. 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.
- 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.
- 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 seven days of its discovery of the omission.
- 4. The Regional Board shall be notified of any incident resulting from Landfill operations that may endanger the environment, by telephone within 24 hours, and in writing within fourteen days. The written notification shall fully describe the incident including what occurred, when it occurred, the duration of the incident, when correction occurred (or when correction will occur if it is a continuing incident), and the steps taken or planned to reduce, eliminate, and/or prevent recurrence. All instances of noncompliance with this Order shall also be reported to the Regional Board in the same manner as stated above.





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- 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 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 is liable from the transfer date on. The agreement shall include an acknowledgement that the new owners accept responsibility for compliance with this Order.
- 6. The Discharger shall notify the Regional Board of changes in information submitted in the latest Postclosure Maintenance Plan and supplementary information, including any material change in the types, quantities, or concentrations of wastes discharged; or Landfill operations and features. The Discharger shall notify the Regional Board at least 120 days before any material change is made at the Landfill.
- 7. The Discharger shall report (on a semi-annual basis) the total volume of all irrigation water used at the Landfill each month and the area(s) where it is applied.
- 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:





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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."

G. GENERAL PROVISIONS

- 1. This Order does not authorize violation of any federal, state, or local laws or regulations.
- 2. The Discharger shall comply with all the other applicable provisions, requirements, and procedures contained in the most recent version of 27 CCR and any future amendments.
- 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 and do not affect 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 (Standard Provisions), adopted 7 November 1990dated March 2015 (Attachment W), which are incorporated herein by reference.















- 8. The requirements adopted herein do not 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 and any MRP for the Landfill. 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 with 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 Bailard Landfill site, or as measured as a VI on the Modified Mercalli Scale.
- 13. The Discharger shall immediately notify the Regional Board of any flooding, slope failure or other change in Landfill conditions which 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 CalRecycle evidence of financial assurance for postclosure maintenance, pursuant to 27 CCR, division 2, chapter 6. The postclosure period shall be at least 30 years. However, the postclosure 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. F.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 rescission or modification. 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 contained 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.

H. TERMINATIONS

- 1. Except for violation enforcement purposes, Regional Board Order No. R4-2002-0190, adopted December 12, 2002, is hereby terminated.
- 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.







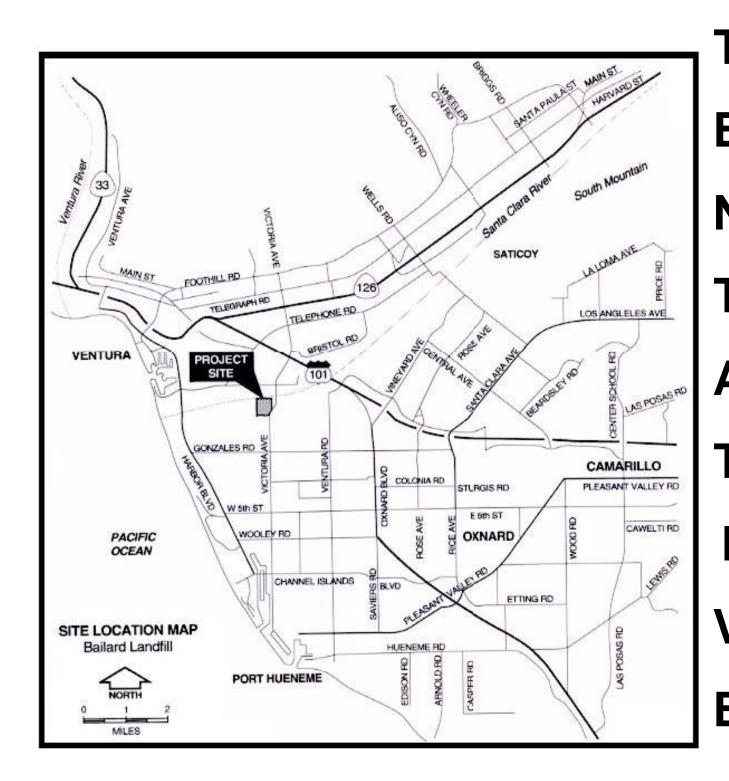
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I, Samuel Unger, Executive Officer, do certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on May 14, 2015.

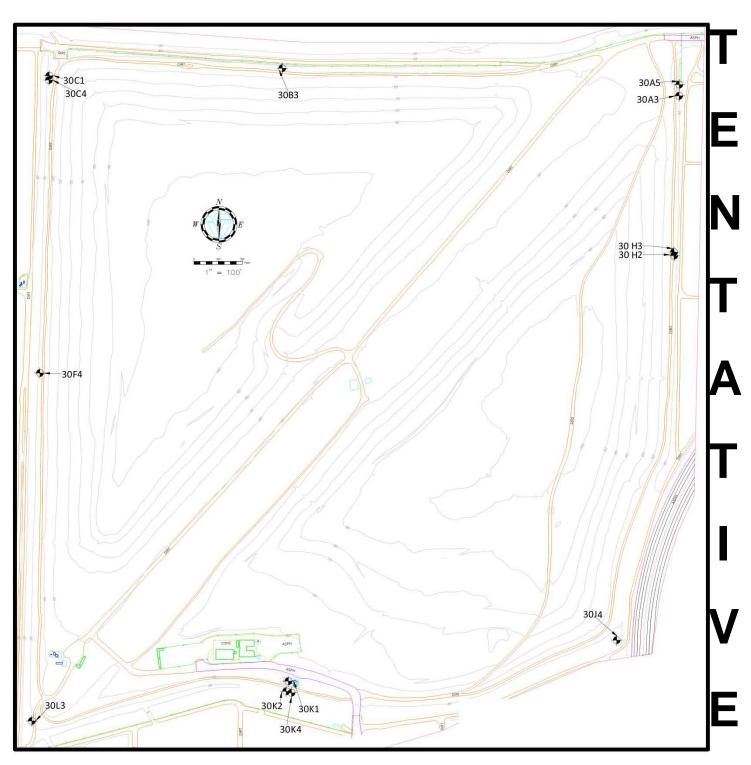
Samuel Unger, P.E. Executive Officer

FIGURE 1: BAILARD LANDFILL - LOCATION MAP



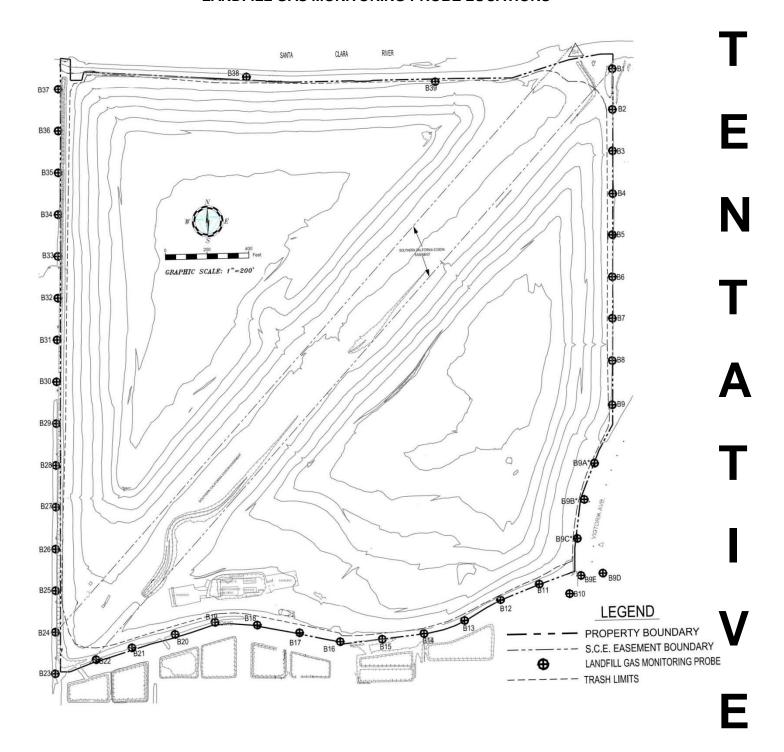
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FIGURE 2: BAILARD LANDFILL - GROUNDWATER MONITORING WELL LOCATIONS



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FIGURE 3: LANDFILL GAS MONITORING PROBE LOCATIONS



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

MONITORING AND REPORTING PROGRAM NO. CI-4035 FOR VENTURA REGIONAL SANITATION DISTRICT (BAILARD LANDFILL)

(File No. 61-204)

GENERAL

- 1. Monitoring responsibilities of the Ventura Regional Sanitation District (Discharger) for the Bailard Landfill (Landfill) are specified in California Water Code (CWC) section 13225(a), section 13267(b) and section 13387(b), and State Water Resources Control Board (State Board) 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. R4-2015-XXXX (Order). The principal purposes of a self-monitoring program by a waste discharger are:
 - a. To document compliance with discharge requirements and prohibitions established by the Regional Board;
 - b. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge; and
 - c. To prepare water quality analyses.
- The Discharger shall implement this monitoring and reporting program (MRP), as described in section D (Requirements for Groundwater Monitoring) of the Order. The Discharger shall implement this MRP during the first monitoring period immediately following adoption of the Order.
- 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 developed to satisfy 27 CCR section 20420, section 20425, or section 20430 and the requirements of the Order. Groundwater monitoring shall meet the requirements of 27 CCR section 20415(b) and 40 CFR section 258.51 (a, c, and d);

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 change in site conditions.
- 5. Unless otherwise approved by the Executive Officer, groundwater monitoring at the Landfill shall be conducted semi-annually, starting in May and November of each year. 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 semi-annual report submitted to the Regional Board.

- 6. Constituents of Concern (COCs) As of the effective date of the Order, the Landfill's COCs are listed in Table T-2 and consist of constituents for which the Regional Water Board would require a corrective action response, if they are included in a release, plus every constituent in Appendix I and Appendix II to 40 CPR Part 258.
- 7. Monitoring Parameter (Mpar) List This list, which is identified as a portion of the COCs in Table T-2, includes several inorganic "Metals Surrogates" which take the place of the fifteen federal metallic constituent Mpars [as allowed by 40 CFR section 258.54(a)(2)], all volatile organic compounds (VOCs) that are COCs, and any Mpar that is in Tracking Mode per Item No. 1412.e.ii of this MRP.
- 8. Concentration Limits In accordance with 27 CCR section 20400(a)(1), the concentration limit of each COCs 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 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 COCs is its respective background data set. One applies an appropriate statistical or non-statistical data analysis method to this group of background data points to determine its "Threshold Value" (do-not-exceed concentration). An 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). The "Threshold Value" for a COCs 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).
- 9. 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 the corresponding semi-annual report submitted to the Regional Board for the Landfill in accordance with Item 13 of this MRP.
- 10. Five-Yearly COCs Scan Every five years, starting in 2017, the Discharger shall analyze a sample from each groundwater monitoring point and test for all "Other COCs" in Table T-2 that are present at a concentration in excess of their respective Threshold Value. The threshold value is the upper-85th-percentile-concentration of eight or more data points of background data). This constitutes the means by which the Discharger continues to meet the requirements of 40 CFR 258.55(b)-(d). During each such COCs scanning event, the Discharger shall obtain and analyze a minimum of one sample from each monitoring well (sufficient to obtain a datum for each COCs that is subject to the scan). Upon detecting a COCs 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 COCs 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).

DATA ANALYTICAL METHODS

11. Moving Window Concentration Limits - Unless otherwise directed by the Executive Officer, all well/COCs 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 in July 2015, the Discharger shall develop concentrations limits for all Mpars at all groundwater monitoring wells using data obtained in the past five (5) years. Thereafter, the concentration limits shall be updated semi-annually by adding monitoring data obtained in the past two years and retiring 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 corresponding seim-annual monitoring report required in this MRP. Concentration limits for new well/COCs pairs shall be developed when eight or more data points are available for the well/Mpar pair. During the semi-annual update of constituent concentration limits, the Discharger shall conduct a statistics-based trend analysis for all monitoring parameters (MPars) that are in Tracking Mode. If the results of the analysis indicate an increasing trend for an MPar, the Discharger may submit a technical report to the Regional Board, for the approval of the Executive Officer, prior to the next semi-annual monitoring event if there is evidence that the increasing trend is the result of natural variability in groundwater and not related to a Landfill release. Otherwise, the Discharger shall increase the monitoring interval for the MPar to quarterly and shall report monitoring results in the subsequent semi-annual report submitted to the Regional Board.

12. Statistical Data Analysis Methodology

- a. For the purposes of this MRP, Minimum Level (ML) and Reporting Limit (RL) 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 State Board'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 method detection limit (MDL) or practical quantitation limit (PQL) shall be reported "as measured" by the laboratory. Sample results less than the MDL/PQL shall be reported as less than the numeric values of the MDL/PQL. Nominal MDL and PQL 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 Method Detection Limit".
- 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).
- e.b. Retest is Part of the Method In the event that an approved data analysis method provides a preliminary indication that a given COCs 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)(l), 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 no retest pass-1-of-1 approach). Nevertheless, any approved non-statistical method used for data analysis shall use a pass-1-of-2 retesting approach as provide in Item 15.b of this MRP. The retest is part of the data analysis method, therefore, a measurably significant increase 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.c.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.d. 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 Mpars 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 placed into Tracking Mode, its pre-tracking mode Concentration Limit shall be plotted as a horizontal line on all corresponding concentration-versus-time plots. The Concentration Limit for the well/Mpar pair shall not be recalculated while the well/Mpar pair is in Tracking Mode. The goal is to indicate when the applied corrective action measures have brought the Mpar concentration down to, or below, this concentration. These plots shall be the primary input for the Discharger's semi-annual analysis of the effectiveness of the corrective action measures.
- f.e. A Detection Mode Data Analyses The following applies to all detection mode data analyses (i.e., this provision does not apply 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. 45-13 of this MRP.

13. California Non-statistical Data Analysis Method

- a. 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. 4513(a)(i) of this MRP (or, for each retest sample, the modified scope list of Item No. 4513(b)(ii)).
 - i. Scope List Within 90 days of the effective date of the 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. 4513(a)(i), above, for an initial test (or, for a retest, the modified scope list under Item No. 4513(b)(ii) 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. Three 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. 4513(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 samples only for those constituents indicated in that well's original test, under Item No. 4513(a)(ii) of this MRP, and these indicated constituents shall comprise the well's "modified scope list." As soon as the retest data are available, the Discharger shall apply the same test (under Item No. 4513(a)(ii) above, but using this modified scope list) to separately analyze each of the two suites of retest data at that compliance well.
- iii. If the retest sample triggers either (or both) of the triggers under Item No. 4513(a)(ii), above, 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. 4412(f)(ii), above) at that well; shall eliminate it from the "scope list" [under Item No. 4513(a)(i), above] for that well during future runs of this non-statistical 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.
- 14. 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 summary and the report shall include an explanation for the change that is approved by the owner/director of the analytical laboratory.
- 15. 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 MRP.

SAMPLING AND ANALYTICAL PROCEDURES

16. Unless otherwise approved by the Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Board's Division of Drinking Water. 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 MRP, 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 preparation and analytical methods, instrument, analytical detection limits, dilution factors, units, the recovery rates, an explanation (corrective action) of any QA/QC measure that is outside the laboratory control limits, the results of 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 unless otherwise specified by the reference method.
- 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 that describes the methodology for identifying and estimating concentrations for tentatively identified compounds.

- 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.
- 17. Proper chain of custody procedures shall be used in all sampling activities at the Landfill.
- 18. All compliance groundwater monitoring system wells shall be equipped with dedicated sampling pumps, unless otherwise approved by the Executive Officer.
- 19. 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.
- 20. 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.
- 21. Ninety-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 ninety 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 semi-annual report.
- 22. 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)(l3)]; 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. 3429(a)(i) of this MRP. All field parameter measurements shall be included in the semi-annual reports submitted to the Regional Board.
- 23. Records to be maintained- Written reports shall be maintained by the Discharger or its laboratory and shall be retained for a minimum of five year. 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







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Order No. R4-2013-XXXX

f. Results of analyses, and the MDL and PQL for each analysis.

REPORTS TO BE FILED WITH THE REGIONAL BOARD

24. Semi-annual monitoring reports shall be submitted pursuant the following schedule.

Report Period Reporting Date
Winter/Spring May July15

Summer/Fall (Annual) November January 15

The semiannual and annual reports shall include all information that is routinely required in the Order and this MRP.

- 25. All groundwater monitoring reports shall be prepared under the supervision of a Californiaregistered 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.
- 26. 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.
- 27. Signature, certification, and perjury statement requirements All letters transmitting monitoring reports shall follow the signature, certification, and perjury statement requirements provided in Requirement F.9 of the Order.
- 28. The Discharger shall submit all scheduled reports required in the Order and this MRP electronically, in accordance with 23 CCR section 3890 et seq., or as directed by the Regional Board Executive Officer. Until directed otherwise by the Regional Board Executive Officer, all reports shall be submitted to the State Board GeoTracker data system in searchable Portable Document Format (PDF) files (GeoTracker Global ID. L10001266944). In addition, all groundwater analytical data and monitoring well locations shall be submitted to GeoTracker in Electronic Deliverable Format (EDF). Documents that cannot be conveniently reviewed in electronic format, such as large maps or drawings, shall be submitted as hard copies to the Regional Board office as instructed by Regional Board staff. All hard copy reports required in this MRP shall be addressed to: 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-4035) shall be clearly displayed on the cover pager of each report.

29. **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 noncompliance with discharge requirements.
 - v. A separate appendix containing any revised COCs List (showing its then-current 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/COCs pair, the then-current Concentration Limit (i.e., the source of the background data and a list of the then current background data [concentrations]). (For the first report under this MRP, all background data for all well/COCs pairs listed in Tables T-1 and the "Indicator Parameters" in T-2 shall be included. In subsequent reports, only the data for recalculated Concentration Limits need be included).
 - 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.
- A map or aerial photograph showing the locations of observation stations and monitoring points;
- c. Laboratory results for groundwater and any wastewater type reused at the Landfill, shall be summarized in the report. For each report, include laboratory statements of results of all analyses demonstrating compliance with <a href="https://linear.ncbi.nlm.ncbi.n
- d. A summary and certification of completion of the routine inspections required in section C.13 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. A summary of any wastewater reuse applied each month 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.



















Ventura Regional Sanitation District Bailard Landfill Monitoring And Reporting Program No. 4035

- 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. The Summer/Fall semiannual report shall include and annual summary of the following information:
 - i. 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. 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:
 - ii. A written summary of the groundwater analyses, indicating any changes made since the previous annual report;
 - iii. A discussion of any routinely-revised intra-well background monitoring data;
 - iv. An evaluation of the effectiveness of the run on/run -off control facilities, pursuant to section 21090(b)(1) and 20365;
- 30. 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 F.4 of the Order.
- 31. The Discharger may submit additional data to the Regional Board not required by this program in order to simplify reporting to other regulatory agencies.
- 32. If the Discharger performs analyses for any parameter more frequently than required by this MRP using approved analytical methods, the results of those analyses shall be included in the monitoring program.

Ordered by		
,	Sam Unger, P.E.	
	Executive Officer	
	May 14, 2015	

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Table T-1 – Groundwater Monitoring Wells

Location	Monitoring Wells
Semi-Perched Aquifer – Upgradient	30H3, 30J4, EMP-1S, EMP-4D
Semi-Perched Aquifer – Downgradient	30C1, 30F4, 30L3
Oxnard Aquifer – Upgradient	30A5
Oxnard Aquifer – Downgradient	30C4 , 30K1

Table T-2. Landfill Constituents of Concern

M	anitarina Daramatara (Mas			
Monitoring Parameters (Mpa Indicator Parameters*		Supplemental Parameters	Other COCs	
Inorganic Parameters: Ammonia, nitrogen Chemical oxygen demand (COD), soluble Chloride Nitrate-N Nitrite-N Sulfate Total dissolved solids (TDS) Total organic carbon (TOC) Biochemical Oxygen Demand (BOD), soluble Appendix I VOCs: 1,1,2- Tetrachloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2,3- Trichloropropane 1,2-Dibromo-3- chloropropane 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,4-Dichlorobenzene 2-Butanone 2-Hexanone 4-Methyl-2- Pentanone Acetone Acrylonitrile	Bromochloromethane Bromodichloromethane Bromoform Bromomethane c-1,2-Dichloroethene c-1,3-Dichloropropene Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane Dibromochloromethane Dibromomethane Dichlorodifluoromethane Ethylbenzene lodomethane Methylene chloride o-Xylene p/m-Xylene Styrene t-1,2-Dichloroethene t-1,3-Dichloropropene t-1,4-Dichloro-2-Butene Tetrachloroethene Toluene Trichlorofluoromethane Vinyl Acetate Vinyl Chloride Other Organics: 1,4-Dioxane	Alkalinity, total Bicarbonate (as HCO ₃) Boron, total Calcium, Hardness Phenolics Total Organic Halides (TOX) Field Parameters: pH Electrical conductivity Temperature Turbidity Dissolved oxygen Redox	Metals: Antimony Arsenic Barium Beryllium Cadmium Chromium, total Cobalt Copper Lead Mercury Nickel Selenium Silver Thallium Vanadium Zinc Appendix II VOCs. Any other pollutants detected and confirmed in the annual Non- COCs scan or added by the Regional Board Executive Officer	

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

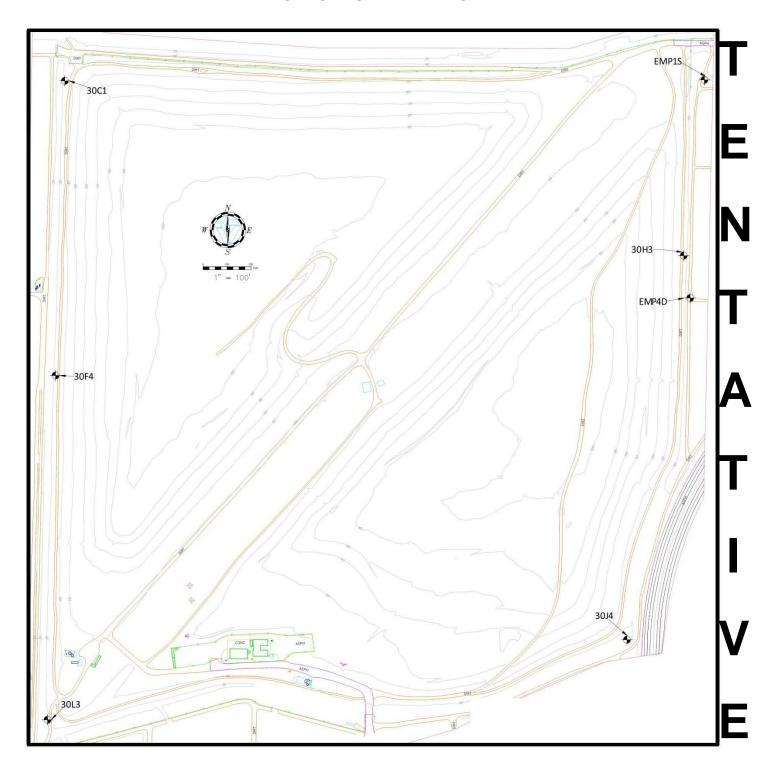
Table T-3. Threshold Values for Wells in Detection Mode*

Constituent	30H3	30J4	EMP1S	EMP4D	
Total Dissolved Solids	2506	1920	2631	2337	
Chloride	282.9	125.6	439.4	201	
Sulfate	750	900	873.6	620.7	
Ammonia Nitrogen	ı	-	-	-	
Nitrate Nitrogen	ı	-	-	-	
Biochemical Oxygen Demand	ı	-	-	-	
Chemical Oxygen Demand	47	15	50.22	43.45	
Total Organic Carbon	10.3	4.205	12.42	10.4	
Appendix I VOCs	Laboratory practical quantitation limits (PQLs)				

Constituent	30C1	30F4	30L3		
Total Dissolved Solids	2127	2003	1800		
Chloride	230.5	192.8	116.8		
Sulfate	760	780	780		
Ammonia Nitrogen	1	-	-		
Nitrate Nitrogen	1	-	-		
Biochemical Oxygen Demand	1	-	-		
Chemical Oxygen Demand	72.37	68.57	8.9		
Total Organic Carbon	14.19	11.77	4.067		
Appendix I VOCs	Laboratory practical quantitation limits (PQLs)				

^{*}Numerical values in the table are concentration limits in milligrams per liter.

FIGURE 1: MONITORING WELL NETWORK



STANDARD PROVISIONS APPLICABLE TO WASTE DISCHARGE REQUIREMENTS

1. <u>DUTY TO COMPLY</u>

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. [California Water Code (CWC) sections 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, & 13350.]. Failure to comply with any waste discharge requirement, monitoring and reporting requirement, or other order or prohibition issued, reissued or amended by the Los Angeles Water Board or State Water Resources Control Board is a violation of these waste discharge requirements and the Water Code, which can result in the imposition of civil liability. (CWC section 13350, subd. (a).)

2. GENERAL PROHIBITION

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

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 forward. (CWC section 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, subd. (c).) A material change includes, but is not limited to, the following:

Standard Provisions Applicable to Waste Discharge Requirements

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

6. <u>REVISION</u>

These waste discharge requirements are subject to review and revision by the Regional Board. (CWC section 13263.)

7. NOTIFICATION

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information. (CWC sections13260 & 13267.)

8. VESTED RIGHTS

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

9. <u>SEVERABILITY</u>

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

10. OPERATION AND MAINTENANCE

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

11. NOTIFICATION REQUIREMENT

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

12. OIL OR PETROLEUM DISCHARGE

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.)

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

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

- (a) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order:
- (b) Have access to and copy, at 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 section13267.)
- (e) Except for material determined to be confidential in accordance with applicable law, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the office of the Los Angeles Water Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.

14. MONITORING PROGRAM AND DEVICES

The discharger shall furnish, under penalty of perjury, technical or 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 Officer a written statement, signed by a registered professional engineer, certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

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

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Board Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board's Division of Drinking Water. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40CFR Part 136) promulgated by the U.S. Environmental Protection Agency.

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, subd. (f).)

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

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

17. ENDANGERMENT TO HEALTH AND ENVIRONMENT

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

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

18. MAINTENANCE OF RECORDS

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

Records of monitoring information shall include:

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



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(3) The written authorization is submitted to the Executive Officer.

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

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

20. OPERATOR CERTIFICATION

Supervisors and operators of municipal wastewater treatment plants and privately owned facilities with advance treatments shall possess a certificate of appropriate grade in accordance with California Code of Regulations, title 23, section 3680. State Boards may accept experience in lieu of qualification training. (23 CCR, sections 3680 & 3680.2.) 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 Board where reclamation is involved. (23 CCR, 3670.1, subd. (b).)

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 (23 CCR, section 2233, subd. (d).)