CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2014-XXXX

WASTE DISCHARGE REQUIREMENTS
FOR
COUNTY OF TULARE
FOR
POSTCLOSURE MAINTENANCE AND CORRECTIVE ACTION
EARLIMART MUNICIPAL SOLID WASTE LANDFILL
TULARE COUNTY

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

1. The County of Tulare (hereinafter Discharger) owns and maintains Earlimart Municipal Solid Waste Landfill (facility) about two miles north of Earlimart, in Section 22, T23S, R25E, MDB&M, as shown in Attachment A, which is incorporated herein and made part of this Order by reference. The facility is a municipal solid waste (MSW) landfill regulated under authority given in Water Code section 13000 et seq.; California Code of Regulations, title 27 ("Title 27"), section 20005 et seq.; and 40 Code of Federal Regulations section 258 (a.k.a, "Subtitle D") in accordance with State Water Resources Control Board (State Water Board) Resolution 93-62.

2. The facility consists of one closed unlined waste management unit (Unit) covering 16.6 acres as shown in Attachment B, which is incorporated herein and made part of this Order by reference. The facility is comprised of Assessor's Parcel Numbers (APN) 318-130-01. The facility began operations prior to 1971 and ceased accepting waste in March 1999.

3. On 22 October 2012, the Discharger submitted an amended Report of Waste Discharge (RWD) to implement a corrective action program (CAP) for the landfill. The information in the RWD has been used in revising these waste discharge requirements (WDRs). The RWD contains the applicable information required in Title 27.

4. On 27 October 2000, the Central Valley Water Board issued Waste Discharge Requirements Order No. 5-00-236 (WDRs) in which the Unit at the facility was classified as a Class III unit that discharged municipal solid waste. This Order continues to classify the Unit as a Class III unit in accordance with Title 27.

5. On 9 October 1991, the United States Environmental Protection Agency (USEPA) promulgated federal MSW regulations under the Resource Conservation and Recovery Act (RCRA), Subtitle D. These regulations are under 40 Code of Federal Regulations section 258, and are hereafter referred to as either "Subtitle D" in reference to the RCRA federal law that required the regulations or "40 C.F.R. section 258.XX". These regulations apply to all California Class II and Class III landfills that accept MSW. State Water Board

Resolution 93-62 requires the Central Valley Water Board to implement in waste discharge requirements for MSW landfills the applicable provisions of the federal MSW regulations that are necessary to protect water quality, and in particular the containment provisions and the provisions that are either more stringent or that do not exist in Title 27.

6. This Order implements the applicable regulations for discharges of solid waste to land through Prohibitions, Specifications, Provisions, and monitoring and reporting requirements. Prohibitions, Specifications, and Provisions are listed in Sections A through H of these WDRs below, and in the Standard Provisions and Reporting Requirements for Waste Discharge Requirements For Nonhazardous Solid Waste Discharges Regulated By Subtitle D And/Or Title 27 (SPRRs) dated January 2012, which are attached hereto and made part of this Order by reference. Monitoring and reporting requirements are included in the SPRRs and in the Monitoring and Reporting Program (MRP) No. R5-2014-XXXX which is incorporated into and made part of this Order by reference. In general, requirements that are either in regulation or otherwise apply to all MSW landfills are considered to be “standard” and are therefore in the SPRRs. Any site-specific changes to a requirement in the SPRRs are included in the applicable section (A through H) of these WDRs.

7. Title 27 contains regulatory standards for discharges of solid waste promulgated by the State Water Board and the California Department of Resources Recovery and Recycling (CalRecycle). In certain instances, this Order cites CalRecycle regulatory sections. Title 27, section 20012 allows the Central Valley Water Board to cite CalRecycle regulations from Title 27 where necessary to protect water quality provided it does not duplicate or conflict with actions taken by the Local Enforcement Agency in charge of implementing CalRecycle’s regulations.

SITE DESCRIPTION

8. The facility is located in a topographically flat region of the Tulare Lake Hydrologic Basin. The facility is on the Deer Creek fluvial deposits between the fan deposits. The land surface slopes approximately 10.5 feet per mile to the west. Interbedded clays, clayey-silts, silts, sandy-silts, clayey-sands, silty-sands, sands, and some gravels underlie the facility.

9. The closest Holocene fault is approximately 32 miles to the northeast near Success Lake. Recorded magnitudes of seismic events along this fault range between 4.5 and 4.9 on the Richter Scale. The maximum credible acceleration for the site is estimated to be 0.1g.

10. Land uses within one mile of the facility include agriculture and residences.

11. According to the 1987 Solid Waste Assessment Test (SWAT) submitted by the Discharger, there are more than 100 municipal, domestic, industrial, or agricultural groundwater supply wells within one mile of the facility. No surface springs or other sources of groundwater supply have been observed.

12. The measured hydraulic conductivity of the native soils underlying the landfill unit is approximately $1x10^{-4}$ centimeters per second (cm/s).

13. The facility receives an average of 8.2 inches of precipitation per year as estimated from an isohyetal map prepared by the California Department of Water Resources. The mean pan evaporation is 78.0 inches per year as measured at the Delano Government Camp Station.

14. The 100-year, 24-hour precipitation event for the facility is approximately 2.7 inches, as estimated from an isopluvial map prepared by the National Oceanic and Atmospheric Admiration (Figure 43, NOAA Atlas2, Volume XI).

15. The southern portion of the waste management facility is within a 100-year flood plain based on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, Community-Panel Number 065066 1925 E. The facility constructed engineered berms around the facility to prevent flooding.

16. A storm water percolation/evaporation basin is located northeast of the Unit as shown on Attachment B. The storm water percolation/evaporation basin captures runoff from the facility and retains it on-site.

WASTE CLASSIFICATION AND UNIT CLASSIFICATION

17. The Discharger previously disposed of MSW, which is defined in §20164 of Title 27. The Unit stopped accepting waste in 1999 and final closure was completed in 2011.

18. The site characteristics where the Unit is located (see Finding No. 12) do not meet the siting criteria for a new Class III landfill contained in §20260(a) and (b)(1) of Title 27. As such, the site is not suitable for operating new Units or lateral expansions of existing Units for the discharge and containment of wastes as described in Finding No. 17, without the construction of additional waste containment features in accordance with §20260(b)(2) of Title 27 and State Water Resources Control Board Resolution 93-62.

SURFACE WATER AND GROUNDWATER CONDITIONS

19. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin.

20. Surface water drainage from the site is to Deer Creek (intermittent) in the Tule Delta Hydrologic Area (558.20) of the Tulare Lake Hydrologic Basin.

21. Deer Creek is categorized as "Valley Floor Water." The designated beneficial uses of surface water on the valley floor, as specified in the Basin Plan, are agricultural supply; industrial service supply; industrial process supply; water contact recreation; non-contact

water recreation; warm fresh water habitat; wildlife habitat; preservation of biological habitats of special significance; and groundwater recharge.

22. The first encountered groundwater ranges from about 84 feet to 93 feet below the native ground surface. Groundwater elevations range from about 180 feet MSL to 190 feet MSL. The groundwater is unconfined. The depth to groundwater fluctuates seasonally by approximately 5 feet.

23. According to the latest self-monitoring report (First Semi-Annual 2013), monitoring data indicate background groundwater quality for first encountered groundwater has electrical conductivity (EC) ranging between 530 and 880 micromhos/cm, with total dissolved solids (TDS) ranging between 350 and 560 milligrams per liter (mg/L).

24. According to the latest self-monitoring report (First Semi-Annual 2013), the direction of groundwater flow is generally toward the northwest. The estimated average groundwater gradient is approximately 0.0060 feet per foot. The estimated average groundwater velocity is 17.4 feet per year.

25. The facility is in Detailed Analysis Unit 243 of the Tulare Lake Basin Plan. The designated beneficial uses of the groundwater, as specified in the Basin Plan, are domestic and municipal water supply, agricultural supply, industrial service supply, and industrial process supply.

GROUNDWATER AND UNSATURATED ZONE MONITORING

26. The existing groundwater monitoring network for the landfill units consists of background monitoring wells M-1, M-1B, M-1C, and M-5; and detection monitoring wells M-3A, M-3B, M-3C, M-6A, M-6B, M-7, and M-7B as shown on Attachment B. Wells M-1, M-1B, M-3A, M-6A, and M-7 are currently dry. Wells M-1C, M-3C, and M-7B were installed in May 2012.

27. Previously, the Discharger conducted semiannual soil-pore gas monitoring from the unsaturated zone wells. Samples were analyzed for methane and volatile organic compounds (VOCs). Since: 1) it is infeasible to install soil-pore liquid sampling devices beneath the closed Unit; 2) the final cover over the Unit and an LFG extraction system will minimize the LFG migration of VOC constituents to groundwater; and 3) a corrective action monitoring program is in operation for VOCs, unsaturated zone detection monitoring is infeasible and unnecessary for the early detection of a release.

28. The Discharger's detection monitoring program for groundwater at the landfill satisfies the requirements contained in Title 27.

29. Volatile organic compounds are often detected in a release from a MSW landfill and are often associated with releases of LFG rather than leachate. Since VOCs are not naturally occurring and thus have no background value, they are not amenable to the statistical analysis procedures contained in Title 27 for the determination of a release of wastes from

a landfill unit. Title 27, Sections 20415(e)(8) and (9) allows the use of a non-statistical evaluation of monitoring data that will provide the best assurance of the earliest possible detection of a release from a landfill unit in accordance with Title 27, Sections 20415(b)(1)(B)2.-4. However, Title 27 does not specify a specific method for non-statistical evaluation of monitoring data.

30. The Central Valley Water Board may specify a non-statistical data analysis method pursuant to Title 27, Section 20080(a)(1). Water Code Section 13360(a)(1) allows the Central Valley Water Board to specify requirements to protect groundwater or surface waters from leakage from a solid waste site, which includes a method to provide the best assurance of determining the earliest possible detection of a release.

31. In order to provide the best assurance of the earliest possible detection of a release of non-naturally occurring waste constituents from a landfill unit, the SPRRs specify a non-statistical method for the evaluation of monitoring data for non-naturally occurring compounds. The specified non-statistical method for evaluation of monitoring data provides two criteria (or triggers) for making the determination that there has been a release of non-naturally occurring waste constituents from a landfill unit. The presence of two non-naturally occurring waste constituents above their respective method detection limit (MDL), or one non-naturally occurring waste constituent detected above its practical quantitation limit (PQL) [a.k.a, laboratory reporting limit (RL)], indicates that a release of waste from a landfill unit has occurred. Following an indication of a release, verification testing must be conducted to determine whether there has been a release from the landfill unit or the detection was a false detection. The detection of two non-naturally occurring waste constituents above the MDL as a trigger is appropriate due to the higher risk of false-positive analytical results and the corresponding increase in sampling and analytical expenses from the use of one non-naturally occurring waste constituent above its MDL as a trigger.

32. For a naturally occurring constituent of concern, the Title 27 requires concentration limits for each constituent of concern be determined as follows:

    a. By calculation in accordance with a statistical method pursuant to Title 27, section 20415(e)(8); or

    b. By an alternate statistical method meeting the requirements of Title 27, section 20415(e)(8)(E).

33. The Discharger submitted a Water Quality Protection Standard (WQPS) report in September 2000. The WQPS report proposed statistical data analysis methods to calculate concentration limits for each monitored constituent in accordance with Title 27. After several revisions to the Discharger's WQPS plan, Central Valley Water Board staff approved the WQPS plan in August 2002. The WQPS and approved data evaluation methods are included MRP No. R5-2014-XXXX.

GROUNDWATER DEGRADATION AND CORRECTIVE ACTION

34. Volatile organic compounds that are not naturally occurring have been detected in groundwater along the Point of Compliance. The VOCs detected in groundwater included 1,1-dichloroethane (1,1-DCA); trichloroethene (TCE); tetrachloroethene (PCE); trichlorfluoromethane (CFC11), and dicholorodifluoromethane (CFC12). No VOCs were detected in groundwater during the last two semiannual monitoring periods (1 July 2012 to 31 December 2012 and 1 January 2013 to 30 June 2013), indicating a downward trend in VOC concentrations.

35. Inorganic waste constituents detected in Point of Compliance groundwater monitoring wells at concentrations statistically exceeding their respective background concentrations include lead, cadmium, copper, nickel, manganese, silver, selenium, beryllium, and cobalt. The latest self-monitoring report (First Semiannual Monitoring Report 2013) detected no inorganic waste constituents that statistically exceeded their respective background concentrations. Additionally, statistical exceedences of calcium, magnesium, and bicarbonate were detected in groundwater after the initial statistical exceedences of the nine inorganic constituents. These exceedences were later determined to be erroneous after the implementation of stricter statistical protocols.

36. In response to a Notice of Violation for the VOC release and statistical exceedence of the nine inorganic constituents, dated 8 May 2009, the Discharger initiated an evaluation monitoring program (EMP). The purpose of the EMP was to determine the nature and lateral and vertical extent of the inorganic waste constituent and VOC release. The VOC plume extends approximately 180 feet hydraulically downgradient (northwesterly) and 95 feet to the southwest of the M-3 monitoring well cluster. The vertical extent of the VOC plume was determined to be limited to the uppermost groundwater zone, approximately 90 feet bgs. Off-site domestic wells in the vicinity of the facility were sampled as part of the EMP. Groundwater samples collected in the spring of 2012 determined that total VOC concentrations in hydraulically downgradient off-site domestic supply wells did not exceed 0.1 microgram per liter (µg/L). The lowest Primary Maximum Contaminant level for the VOCs detected is 5.0 µg/L.

37. The EMP demonstrated that the source of VOC release was due to a buildup of landfill gas (LFG). The LFG extraction system was off-line from October 2008 until September 2010 during closure construction. The LFG, in addition to the VOC content, is typically 30% carbon dioxide. The disassociation of the carbon dioxide gas into groundwater caused an increase in pH. The increase of pH was then buffered by the dissolution of carbonate minerals into groundwater, which caused the release of calcium, manganese, and the bicarbonate anion. The Discharger hired an engineering consulting firm to develop a Standard Protocol that implemented the use of additional statistical routines in the Sanitas™ software program. It was concluded that the nine inorganic exceedences were artifacts of statistical analysis and not evidence of release, pursuant to Section 20420(k)(7) of Title 27. Since implementation of the Standard Protocol, there have been no statistical exceedences of lead, cadmium, copper, nickel, manganese,

silver, selenium, beryllium, or cobalt. The final EMP report was approved by Central Valley Water Board staff on 20 July 2012.

38. The Discharger submitted an initial updated engineering feasibility study (EFS) for a corrective action program (CAP) on 22 October 2012, in accordance with Section 20425(c) of Title 27. A revised EFS for a CAP was submitted on 13 January 2013. Central Valley Water Board staff, in a letter dated 21 December 2012, concurred with the Discharger's EFS for a CAP proposal. Subsequently, the Discharger submitted an amended Report of Waste Discharge (RWD) for the CAP on 1 May 2013, which was deemed adequate by Central Valley Water Board staff in a letter dated 22 April 2013. The EFS for a CAP concluded that the most technically and economically feasible corrective action alternative for VOCs is monitored natural attenuation and source control through operational changes to the LFG extraction system.

39. The Discharger proposes an increase in the frequency of the operation of the LFG extraction system from one day per month to four hours per week and to monitor both on-site and off-site wells for VOCs on a quarterly basis. Progress reports on the natural attenuation and source control would be submitted semi-annually.

40. The Discharger proposes to submit a CAP evaluation report after two years of the start-up of the monitored natural attenuation process. If monitoring data indicates that natural attenuation is not effectively reducing the VOC concentrations, the Discharger would implement other corrective action measures. The CAP was implemented by the Discharger in October 2012.

LANDFILL CLOSURE

41. The Discharger completed construction of an engineered alternative final cover system in 2011. The final cover system consists of the following, in ascending order: a two-foot thick soil foundation layer, a geosynthetic clay liner (GCL), a geosynthetic drainage layer (on slopes greater than 10%), and a two-foot thick vegetated soil layer. Central Valley Water Board staff approved the final cover system construction quality assurance report on 2 April 2011.

LANDFILL POSTCLOSURE MAINTENANCE

42. The Discharger submitted a revised *Final Closure and Postclosure Maintenance Plan*, dated May 2009, for closure and postclosure maintenance of the Unit. The plan includes inspection, maintenance, and monitoring of the landfill during the postclosure maintenance period, and includes a postclosure maintenance cost estimate for the entire facility. Inspection and maintenance will include the condition of the final cover, drainage features, groundwater monitoring wells, unsaturated zone monitoring points, access roads, landfill gas system, and site security. The plan will be implemented for a minimum period of 30 years or until the waste no longer poses a threat to environmental quality, whichever is greater.

43. Once every five years during the postclosure maintenance period, iso-settlement maps will be prepared to determine the amount of differential settlement occurring over the previous five years. Pursuant to Title 27, section 21090(e)(2), this Order requires iso-settlement maps to be prepared and submitted every five years.

44. The completed final cover will be periodically tested for damage or defects by monitoring surface emissions pursuant to California Code of Regulations, title 17, section 95471(c) and Title 27, section 21090(a)(4)(A). Defects will be repaired and tested for adequacy based on the closure CQA Plan.

FINANCIAL ASSURANCES

45. Title 27, sections 21840 and 22211 requires a cost estimate for landfill postclosure maintenance. The *Final Closure and Postclosure Maintenance Plan* includes a cost estimate for landfill postclosure maintenance. The amount of the cost estimate for postclosure maintenance in 2012 dollars is $1.99 million. This Order requires that the Discharger maintain financial assurance with CalRecycle in at least the amount of the postclosure maintenance cost estimate adjusted annually for inflation.

46. Title 27, section 22221 requires a cost estimate for corrective action of all known or reasonably foreseeable releases. The Discharger submitted a 29 November 2012 cost estimate of $729,576 for corrective action of all known or reasonably foreseeable releases. This Order requires that the Discharger maintain financial assurance with CalRecycle in at least the amount of the cost estimate adjusted annually for inflation.

CEQA AND OTHER CONSIDERATIONS

47. The action to revise waste discharge requirements for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resource Code Section 21000, et seq., and the CEQA guidelines, in accordance with Title 14, Section 15301.

48. This order implements:

    a. *The Water Quality Control Plan for the Tulare Lake Basin, Second Edition*;

    b. The prescriptive standards and performance goals of California Code of Regulations, Title 27, Section 20005 et seq., effective 18 July 1997, and subsequent revisions;

    c. State Water Board Resolution 93-62, *Policy for Regulation of Discharges of Municipal Solid Waste*, adopted 17 June 1993, and revised on 21 July 2005; and

    d. The applicable provisions of Title 40 C.F.R. Section 258 “Subtitle D” federal regulations as required by State Water Board Resolution 93-62.

49. Based on the threat and complexity of the discharge, the facility is determined to be classified 2-B as defined below:

    a. Category 2 threat to water quality, defined as, “Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance.”

    b. Category B complexity, defined as, “Any discharger not included in Category A that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal), or any Class 2 or Class 3 waste management units.”

50. Water Code section 13267(b) provides that: "In conducting an investigation specified in subdivision (a), the Regional Board may require that any person who has discharged, discharges, or is suspected of having discharge or discharging, or who proposed to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who had discharged, discharges, or is suspected of having discharged or discharging, or who proposed to discharge waste outside of its region that could affect the quality of the waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

51. The technical reports required by this Order and the attached "Monitoring and Reporting Program No. R5-2014-XXXX" are necessary to assure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharged the waste subject to this Order.

PROCEDURAL REQUIREMENTS

52. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution, and to protect public health have approved the use of this site for the discharges of waste to land stated herein.

53. The Central Valley Water Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

54. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

55. Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date that this Order

becomes final, except that if the thirtieth day following the date that this Order becomes final 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 to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

IT IS HEREBY ORDERED, pursuant to California Water Code sections 13263 and 13267, that Order No. 5-00-236 is rescinded except for purposes of enforcement, and that the County of Tulare, its agents, successors, and assigns, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. The discharge of any additional waste is prohibited.

2. The Discharger shall comply with all applicable Standard Prohibitions listed in Section C of the SPRRs.

B. DISCHARGE SPECIFICATIONS

1. The Discharger shall comply with all Standard Discharge Specifications listed in Section D of the SPRRs.

C. FACILITY SPECIFICATIONS

1. The Discharger shall comply with all Standard Facility Specifications listed in Section E of the SPRRs.

D. CLOSURE AND POST-CLOSURE MAINTENANCE SPECIFICATIONS

1. The Discharger shall comply with all applicable Standard Closure and Post-Closure Specifications listed in Section G of the SPRRs.

E. FINANCIAL ASSURANCE SPECIFICATIONS

1. The Discharger shall obtain and maintain assurances of financial responsibility with CalRecycle for postclosure maintenance for the landfill in at least the amount described in Finding No. 45, adjusted for inflation annually. A report regarding financial assurances for postclosure maintenance specifically for this facility shall be submitted to the Central Valley Water Board by **1 October of each year**. This may be the same report that is submitted to CalRecycle for this purpose. If CalRecycle determines that either the amount of coverage or the mechanism is inadequate, then

within 90 days of notification, the Discharger shall submit an acceptable mechanism to CalRecycle and the Central Valley Water Board for at least the amount of the approved cost estimate.

2. The Discharger shall obtain and maintain assurances of financial responsibility with CalRecycle for initiating and completing corrective action for all known or reasonably foreseeable releases from the facility in at least the amount of the annual inflation-adjusted cost estimate described in Finding No. 46. A report regarding financial assurances for corrective action specifically for this facility shall be submitted to the Central Valley Water Board by **1 October of each year**. This may be the same report that is submitted to CalRecycle for this purpose. If CalRecycle determines that either the amount of coverage or the mechanism is inadequate, then within 90 days of notification, the Discharger shall submit an acceptable mechanism to CalRecycle and the Central Valley Water Board for at least the amount of the approved cost estimate.

3. The Discharger shall comply with all Standard Financial Assurance Specifications listed in Section H of the SPRRs.

F. MONITORING SPECIFICATIONS

1. The Discharger shall comply with the provisions of Title 27 for the groundwater detection monitoring program and for groundwater corrective action monitoring**,** in accordance with MRP No. R5-2014-XXXX and the Standard Monitoring Specifications listed in Section I of SPRRs.

2. The Discharger shall comply with the WQPS as specified in this Order, MRP No. R5-2014-XXXX, and the SPRRs.

3. The concentrations of the constituents of concern in waters passing the Point of Compliance (defined pursuant to Title 27, Section 20164 as a vertical surface located at the hydraulically downgradient limit of the landfill unit that extends through the uppermost aquifer underlying the unit) shall not exceed the concentration limits established pursuant to MRP No. R5-2014-XXXX.

4. For each monitoring event, the Discharger shall determine whether the landfill is in compliance with the WQPS using procedures specified in MRP No. R5-2014-XXXX and the Standard Monitoring Specifications in Section I of the SPRRs.

5. The Discharger shall comply with all Standard Monitoring Specifications and Response to a Release specifications listed in Sections I and J of the SPRRs.

G. CORRECTIVE ACTION SPECIFICATIONS

1. **By 15 June 2015**, the Discharger shall submit a CAP evaluation report that determines whether monitored natural attenuation is effective in reducing VOC

concentrations in both the off-site wells and the point of compliance wells and should continue, or whether additional corrective action methods should be utilized.

2. **By 15 September 2015,** if the CAP evaluation report determines that natural attenuation is unsuccessful in remediating VOCs in groundwater (see Corrective Action Specification G.1), the Discharger shall submit an amended RWD for Executive Officer approval to make appropriate changes to the EFS for a CAP that includes a detailed work plan for the use of other corrective action methods.

3. The Discharger shall sample the four off-site wells listed in the EFS on a quarterly basis for VOCs. The quarterly sampling results, as well as the operating frequency of LFG extraction system, shall be reported and discussed in semi-annual monitoring reports. Sampling frequency can be reduced after a period of one year with Executive Officer approval. Sample collection and analysis shall coincide with Groundwater Detection Monitoring A.1 of MRP R5-2014-XXXX.

4. Corrective action measures may be terminated when the Discharger demonstrates to the satisfaction of the Executive Officer that the concentrations of VOCs are reduced to levels below their respective concentration limits throughout the entire zone affected by the release.

5. After suspending the corrective action measures, the Discharger shall demonstrate that the concentration of each VOCs in each sample from each monitoring point remained at or below its concentration limit for at least three consecutive years, beginning immediately after the suspension of corrective action measures.

6. Upon completion of corrective action, the Discharger shall certify, in writing, that corrective action has been completed in compliance with Title 27 and the WDRs. The certification shall be signed by a California Registered Civil Engineer or Professional Geologist.

7. If at any time, either the Discharger or the Executive Officer determines that the natural attenuation coupled with the LFG extraction is unsuccessful in remediating VOCs in groundwater, the Discharger shall, **within 90 days of making the determination**, **or of receiving written notification from the Executive Officer of such determination**, submit an amended RWD for Executive Officer approval, to make appropriate changes to the EFS for a CAP that includes a detailed work plan for the use of other alternative correction action methods to remediate VOCs.

   At a minimum, a determination that the CAP is unsuccessful in remediating VOCs may result if one of the following conditions is met:

   a) Waste constituent concentrations in Point of Compliance groundwater monitoring wells exhibit an increasing trend not originally predicted after implementation of corrective action; or

b) Point of Compliance groundwater monitoring wells exhibit significant waste constituent concentration increases indicative of a new or renewed release; or

c) Significant waste constituent concentrations are identified in the monitored off-site wells; or

d) Waste constituent concentrations are not decreasing at a sufficient rate to meet the remediation objectives.

The amended RWD shall include the following:

a) A discussion as to why existing corrective action measures have been ineffective or insufficient.

b) A revised evaluation monitoring plan if necessary to further assess the nature and extent of the release.

c) A discussion of corrective action needs and alternatives.

d) Proposed alternative corrective action measures, as necessary, for:

1) Source control, and/or

2) Groundwater cleanup.

e) A plan to monitor the progress of corrective action measures consistent with MRP R5-2014-XXXX.

8. **Within one year** of Executive Officer approval of the amended RWD to make appropriate modifications to the EFS for the CAP or propose an alternate CAP, the Discharger shall implement the modified CAP or the proposed CAP to remediate VOCs.

H. PROVISIONS

1. The Discharger shall maintain a copy of this Order at the facility, including the MRP No. R5-2014-XXXX and the SPRRs dated January 2012 which are part of this Order, and make it available at all times to facility personnel, who shall be familiar with its contents, and to regulatory agency personnel.

2. The Discharger shall comply with all applicable provisions of Title 27 and Subtitle D that are not specifically referred to in this Order.

3. The Discharger shall comply with MRP No. R5-2014-XXXX, which is incorporated into and made part of this Order by reference.

4. The Discharger shall comply with the applicable portions of the Standard Provisions and Reporting Requirements for Waste Discharge Requirements For Nonhazardous Solid Waste Discharges Regulated By Subtitle D And/Or Title 27 (SPRRs), dated January 2012, which are attached hereto and made part of this Order by reference.

5. If there is any conflicting or contradictory language between the WDRs, the MRP, or the SPRRs, then language in the WDRs shall supersede either the MRP or the SPRRs, and language in the MRP shall supersede the SPRRs.

6. All reports required by this Order shall be submitted pursuant to Water Code section 13267.

7. The Discharger shall complete the tasks contained in these waste discharge requirements in accordance with the following time schedule:

A. Corrective Action

Task	Compliance Date
1. Submit a CAP evaluation report that determines whether monitored natural attenuation is effective in reducing VOC concentrations in both the off-site wells and the point of compliance wells and should continue, or whether alternative or additional corrective action methods should be utilized. (see Corrective Action Specification G.1)	**By 15 June 2015**
2. If the CAP evaluation report determines that natural attenuation is unsuccessful in remediating VOCs in groundwater (see Corrective Action Specification G.1), the Discharger shall submit an amended RWD for Executive Officer approval to make appropriate changes to the EFS for a CAP that includes a detailed work plan for the use of other corrective action methods. (see Corrective Action Specification G.2)	**By 15 September 2015**
3. Submit an amended RWD for Executive Officer approval, to make appropriate changes to the EFS for a CAP and/or propose alternative correction action methods to remediate VOCs, if it is determined by either the Discharger or	**Within 90 days of making a determination or of receiving written notification of such a determination**

the Executive Officer, that natural attenuation corrective action methods are unsuccessful. (see Corrective Action Specification G.7)	
4. Implement the modified CAP or alternative CAP to remediate VOCs. (see Corrective Action Specification G.8)	**Within one year of Executive Officer approval of the amended RWD to make appropriate changes to the EFS for a CAP**

B. Financial Assurance Review

Task	Compliance Date
1. Annual Review of Financial Assurance for postclosure maintenance. (see Financial Assurance Specification E.1)	**1 October of each year**
2. Annual Review of Financial Assurance for initiating and completing corrective action. (see Financial Assurance Specification E.2)	**1 October of each year**

8. The Discharger shall comply with all General Provisions listed in Section K of the SPRRs.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

_____
PAMELA C. CREEDON, Executive Officer

KP