

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION**

ORDER R7-2013-0064

**WASTE DISCHARGE REQUIREMENTS  
FOR  
UNITED STATES MARINE CORPS  
OWNER/OPERATOR  
MARINE CORPS AIR GROUND COMBAT CENTER  
CLASS III LANDFILL No. 2  
Twentynine Palms - San Bernardino County**

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board), finds that:

1. The United States Marine Corps, Natural Resources and Environmental Affairs (NREA) Division, Marine Corps Air Ground Combat Center (MCAGCC) (Discharger), with mailing address of Box 788110, Twentynine Palms, CA 92278-8110, owns and operates a Class III solid waste municipal landfill, and submitted a Report of Waste Discharge (ROWD) in the form of a Joint Technical Document (JTD) in October 2006 and an Engineered Design Report in October 2009. The reports document the construction of an additional landfill, hereinafter referred to as the Southern Expansion landfill. A Form 200 was submitted by the Discharger on October 17, 2012, to update the previously submitted reports.
2. These Waste Discharge Requirements (WDRs) regulate the Class III solid waste municipal landfill known as Landfill No. 2 (Facility) at the MCAGCC.
3. Definitions: The following terms used in this Board Order are as defined:
  - a. Discharger – Any person who discharges waste that could affect the quality of the waters of the state, and includes any person who owns a Waste Management Unit (WMU), or who is responsible for the operation of the WMU (Title 27, California Code of Regulations).
  - b. Waste Management Facility (WMF, or “Facility”) – The entire parcel of property at which waste discharge operations are conducted. Such a facility may include one (1) or more waste management units.
  - c. Waste Management Unit (WMU) – An area of land, or a portion of a WMF, where waste is discharged. The term includes containment features as well as ancillary features for precipitation and drainage control and monitoring.
  - d. Landfill – A WMU at which waste is discharged in or on land for disposal. It does not include surface impoundments, waste piles, or land and soil treatment.
  - e. Landfill footprint – That area within the WMF where solid waste is permanently placed or disposed.
  - f. Municipal Solid Waste (MSW) - as defined in Title 40 Code of Federal Regulations (CFR) Part 258.

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4. The MCAGCC, also known as Twentynine Palms Marine Corps Base, is located in south-central San Bernardino County just north of the City of Twentynine Palms as shown on Attachment No. 1, which is incorporated herein and made a part of this Board Order by reference.
5. The Facility is on 30-acre parcel located in the S 1/2 of Section 8 and NE 1/4 of Section 17, Township 2N, Range 9E, San Bernardino Base and Meridian at the end of Landfill Road. The approximate latitude and longitude of the landfill is 34.2669 degrees North and 116.0679 degrees west, respectively. It is located approximately 5 miles north of the City of Twentynine Palms, California, and approximately 2 miles north of the main camp area of MCAGCC. It is accessible from Del Valle Road by traveling northeast approximately 3,500 feet on Rifle Range Road, then north approximately 1,200 feet to the terminus of Landfill Road.
6. The phased expansion of the landfill described in the JTD includes the Southern Expansion, the Eastern Expansion, and the Vertical Expansion. The Southern Expansion will be implemented first, with the Vertical and Eastern Expansion following. The Southern Expansion landfill was constructed adjacent to the existing landfill within the WMF in 2011 - 2012, but it has not begun accepting waste. This Board Order, R7-2013-0064, updates previous Board Order 00-046 to incorporate the Southern Expansion.
7. The WMF, identified in the JTD as Landfill No. 2, contains one active WMU, the existing landfill, a 17.25 acre active unlined, Class III landfill regulated by the Board Order 00-046. The WMF also contains the 8.5 acre Southern Expansion landfill, which is a lined Class III landfill.
8. The Southern Expansion landfill is located to the south of the active landfill footprint, approximately 700 feet north of Rifle Range Road and 3200 feet northwest of Del Valle Road. The approximate latitude and longitude of the Southern Expansion landfill are 34.26214 degrees north and 116.06908 degrees west, respectively. The closest residential area to the Facility is the Ocotillo Heights military housing complex located several miles east of the site. The site is in a canyon in the Bullion Mountains as shown on Attachment No. 2, which is incorporated herein and made a part of this Board Order by reference.
9. Landfill No. 1 (approximately 4 acres) was active as an unpermitted solid waste disposal site between 1954 and 1972 and is located about one mile from Landfill No. 2. Materials disposed at Landfill No. 1 have been determined to be Class 1 waste and reportedly included municipal solid wastes, scrap metals, construction materials, waste lubrication oils, fuel, paint stripper and residues, various solvents, vehicle batteries, ammunition, radium dials, magnetron tubes, and partially filled drums of spent, and unspecified chemicals. A formal closure plan was not prepared after the landfill stopped receiving wastes in 1972. The thickness of the final cover (alluvial soil) is approximately 5 to 10 feet. Landfill No. 1 is currently under the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) site cleanup program with closure monitoring and reporting to the California Department of Toxic Substances and the Regional Water Board site cleanup units.

10. On September 15, 1993, Board Order 93-071 amended all municipal solid waste landfill Board Orders to comply with federal regulations that were adopted by the Regional Water Board. In 1995 the Facility became subject to WDRs under Board Order 95-006 updating Board Order 93-071. Board Order 95-006 was updated to incorporate requirements of combined State Water Resources Control Board (SWRCB)/California Integrated Waste Management Board (now known as Department of Resources Recycling and Recovery) regulations, Division 2, Title 27, California Code of Regulations (Title 27) and federal municipal solid waste regulations set forth in Title 40 Code of Federal Regulations, Part 258, Subpart F, which implements the Resources Conservation and Recovery Act, Subtitle D (RCRA Subtitle D).
11. The existing landfill in the Landfill No. 2 was opened in 1972 and has received only wastes generated at the MCAGCC. The landfill is not open to the public. The Discharger reports that the landfill operates five days a week.
12. The existing landfill presently receives about 142 cubic yards per day of non-hazardous solid waste, as defined in Title 27, including domestic waste, and construction/demolition waste.
13. The designed volume of materials to be disposed of at the Southern Expansion landfill is about 1.1 million cubic yards. The estimated landfill life of the expansion is approximately 2040.
14. The Southern Expansion landfill incorporates a composite liner that consists of two (2) feet of clay and a 60-mil High Density Polyethylene (HDPE) liner and a Leachate Collection and Removal System (LCRS). A Leachate Storage Tank (LST) of 10,600 gallon capacity, aboveground, single-wall fiberglass, within concrete secondary containment structure, has been installed near the southern end of the landfill footprint. Leachate from the landfill will be stored in the LST.
15. Waste disposal at the site is by the trench method. Lifts are formed by covering trash with fill from the adjacent borrow area. The discharger reports that lifts are built up to approximately 50 feet. Daily cover consists of one to two feet of soil applied to the 150 foot working face.
16. A Septage Dump Station (SDS) is located near the eastern most limits of the landfill footprint. The SDS consists of 10-foot by 20-foot concrete pad containing a 60-inch-diameter manhole. The Dump Station is connected to the base's sanitary sewer line. A fenced and gated, 40-foot by 48-foot concrete pad Wet Garbage Containment Area with water supply and drain is also located in this area just south of the SDS. A 2,000 gallon capacity single wall Sewage Surge Tank is also connected to the Wet Garbage Containment Area via underground piping to Wastewater Treatment Plant. Access to the tank is provided by a manhole. The SDS is part of operation of Wastewater Treatment Plant regulated under Board Order R7-2012-0002.
17. Land within 1,000 feet of this Facility is natural desert.
18. The Facility lies on the southern boundary of the Mojave Desert in San Bernardino County and is considered part of the Mojave Desert Geomorphological Province. The Facility is bounded on the northeast by the northwest-trending Bullion Mountain Range,

on the south by the Pinto and Little San Bernardino Mountains, on the west by the San Bernardino and San Gabriel Mountains, and on the north by numerous northwest-trending smaller ranges and faults. Elevation of the Facility is approximately 2,200 feet above mean sea level.

19. Water supply to the community is from 11 groundwater production wells located in the Surprise Springs subbasin located 10 miles northwest of the Facility. Total Dissolved Solids (TDS) concentration for the water supply ranges from 150 to 245 mg/L with an average of 180 mg/L.
20. The geologic setting of the landfill is the contact between Mesozoic bedrock of granitic composition (quartz monzonite) of the Bullion Mountains, and dissected debris and fan deposits of the low mountain pass in which the site is located. The Facility is underlain by basement rock with overlying Quaternary alluvial and playa deposits. The lithology of the Facility consists of highly to moderately permeable alluvial silty sands, and the crystalline quartz monzonite bedrock. The surface of the quartz monzonite, typical of that found in canyons, forms a system of troughs leading to a primary valley trough.
21. The crystalline bedrock near the landfill appears to be fractured but unfaulted. There is visible evidence of the northwest-trending West Bullion Mountain fault south-southwest of the landfill.
22. The Discharger reports that there are no Holocene faults within 200 feet of the existing landfill footprint.
23. The average annual precipitation in the area of the Facility was reported by the Discharger to be 4.11 inches with an average annual evaporation rate of 120 inches.
24. The Basin Plan designates beneficial uses and establishes water quality objectives for ground and surface waters in the Region, and contains implementation programs and policies to achieve objectives. In addition, State Water Resources Control Board (State Water Board) Resolution 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.
25. The Water Quality Control Plan for the Regional Water Board Colorado River Basin Region Basin Plan, which was adopted on November 17, 1993, and amended on November 16, 2012, designates the beneficial uses of ground and surface waters in this Region.
26. The landfill is located in the Dale Hydrologic Unit. The beneficial uses of groundwater in the Dale Hydrologic Unit are:
  - a. Municipal supply (MUN)
  - b. Industrial supply (IND)
  - c. Agricultural supply (AGR)
27. The landfill lies within a steep-walled canyon which drains to the south onto a broad alluvial fan. The alluvial valley fill that overlies the crystalline bedrock is a major water-bearing unit in the area. These units yield water freely to wells when saturated.

28. During April and May 2012, the Discharger installed down-gradient groundwater monitoring wells (MW-15-7 and MW-15-8) to the south of Southern Expansion landfill. Monitoring well MW-15-7 was damaged during development and was abandoned. Monitoring well MW-15-8 was drilled to replace damaged well MW-15-7. During development of this well, groundwater was measured at 432 feet below ground surface (bgs). The Discharger submitted a final installation and sampling report for monitoring wells MW-15-7 and MW-15-8 on October 17, 2012. Groundwater sampling results of MW-15-8 in May 2012 provide baseline groundwater quality for the background condition.
29. Landfill leachate, if any, will be collected in the Leachate Storage Tank (LST) before being directed to the sanitary sewer outlet. The volume of leachate will be measured and leachate samples will be collected and analyzed for various constituents to determine the condition of the leachate. The laboratory analytical data for the leachate and total volume will be reported to personnel of the NREA Wastewater Treatment Plant (WWTP) for approval before discharge to the sanitary sewer line.
30. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (USEPA) (40 CFR Parts 122, 123, and 124) on November 16, 1990. The regulations require that specific categories of facilities, which discharge storm water associated with industrial activity, obtain a National Pollutant Discharge Elimination System (NPDES) Permit and implement Best Conventional Pollutant Technology (BCT) to reduce or eliminate industrial storm water pollution.
31. The SWRCB adopted Order 97-03-DWQ, NPDES General Permit No. CAS000001 (Industrial General Permit), specifying WDRs for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent (NOI) by industries to be covered under the Permit. The Discharger has submitted an NOI and has obtained coverage under the Industrial General Permit.
32. The monitoring and reporting requirements in Monitoring and Reporting Program (MRP) R7-2013-0064 are necessary to determine compliance with these WDRs. The State's electronic database, GeoTracker Information Systems facilitates the submittal and review of monitoring and reporting.
33. Virtually all MSW landfills produce several volatile organic compounds (VOCs). VOCs exist in detectable concentrations in the gas and leachate produced by the landfill, and very little attenuation occurs after being released from a landfill; therefore, the federal municipal solid waste regulations (Title 40 Code of Federal Regulations Parts 257 and 258) require the testing of VOCs as monitoring parameters.
34. The Discharger proposes to conduct a study of soil stabilizer products at the Southern Expansion landfill. The study will evaluate the products for efficiency and their ability to control erosion of exterior slopes of the landfill. The study will last a period of one year to ensure the products are exposed to all potential weather conditions at the landfill. Based on the results of the study, the Discharger may select a product to be used as a Best Management Practice for slope stabilization and erosion control at the landfill.
35. In December 2006, the Discharger prepared an Environmental Assessment (EA) document entitled "Environmental Assessment Landfill No. 2 Expansion and Proposed

Material Recovery and Recycling Facility Report” in accordance with the requirements of the National Environmental Policy Act (NEPA) and Council on Environmental Quality (CEQ) regulations. On January 31, 2007, the MCAGCC Commanding General certified the EA report. The report states:

- a. The proposed landfill would not change the current limits of the approximate 30-acre landfill footprint.
  - b. There is no significant impact in the Finding of Joint Technical Document Landfill No. 2 and proposed Materials Recovery and Recycling Facility at the Marine Corps Air Ground Combat Center, Twentynine Palms, California.
  - c. Pursuant to CEQ regulations (40 Code of Federal Regulations [CFR] §§ 1500-1508) implementing procedural provisions of NEPA, the U.S. Department of the Navy (U.S. Navy) gives notice that an Environmental Assessment (EA) has been prepared and an Environmental Impact Statement (EIS) is not required for environmental impacts associated with implementation of a Joint Technical Document Landfill No.2 and proposed Materials Recovery and Recycling Facility at the Marine Corps Air Ground Combat Center (MCAGCC), Twentynine Palms, California.
36. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
37. The Regional Water Board has notified the Discharger and all known interested agencies and persons of its intent to update waste discharge requirements for this waste management facility.
38. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order 00-046 is rescinded, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. Prohibitions

1. The discharge of the following wastes, as defined in Title 27, Chapter 3 of the California Code of Regulations (CCR) into Landfill No. 2 is prohibited:
  - a. The discharge of any hazardous wastes, as defined in CCR, Title 22, Division 4.5.
  - b. The discharge of liquid or semi-solid waste (moisture content more than 50%) other than dewatered sewage or water treatment sludge, as described in CCR, Title 27, section 20220(c).

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- c. The disposal of designated wastes, as defined by Water Code section 13173 and CCR, Title 27, section 20210, unless otherwise authorized by this Order.
  - d. The disposal of wastes containing greater than one percent (>1 percent) friable asbestos.
  - e. The disposal of shredded automobile bodies, household appliances, and sheet metals (shredder waste).
  - f. The disposal of containerized liquids.
  - g. The disposal of decommissioned material/wastes from decommissioned sites into Class III and unclassified WMUs.
2. The Discharger shall neither cause nor contribute to the following conditions:
    - a. Contamination or pollution of groundwater via the release of waste constituents in either the liquid or gaseous phase.
    - b. Increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil or other geologic material outside of the WMU, if such waste constituents could migrate to waters of the state, in either liquid or gaseous phase, and cause contamination, pollution, or nuisance.
  3. The direct discharge of any wastes to any surface waters or surface water drainage courses or to groundwater is prohibited.
  4. The disposal of incompatible wastes is prohibited.
  5. The discharge of wastes, which have the potential to reduce or impair the integrity of the containment structure or which, if commingled with other wastes, could produce violent reactions, heat or pressure, fire or explosion, toxic byproducts, or reaction products are prohibited.
  6. The discharge of waste shall not exceed the acreages, volumes, types, and locations specified in Finding Nos. 6, 7, and 11.
  7. The project shall not cause significant adverse impacts upon the quality of surface waters in a local, state, or federal wildlife preserve or sanctuary, or other surface waters of significant local, regional, statewide or national importance.

B. Specifications

1. The Discharger shall implement the attached Monitoring and Reporting Program R7-2013-0064, and revisions thereto, in order to detect, at the earliest opportunity, any unauthorized discharge waste constituents from the landfill, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the landfill.

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2. The treatment or disposal of wastes at this landfill shall not cause pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the California Water Code.
3. Waste materials shall be confined to the Facility as described on the attached site map – Attachment 2, which is incorporated herein and made a part of this Board Order by reference.
4. The Discharge shall not cause degradation of any water supply.
5. The Discharger is the responsible party for the waste discharge requirements and the monitoring and reporting program for the facility. The Discharger shall comply with all conditions of these waste discharge requirements. Violations may result in enforcement actions, including Regional Water 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 Water Board.
6. The WMU shall be protected from any washout or erosion of wastes or covering material and from inundation due to rainfall.
7. The Facility shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods having a predicted frequency of once in 100 years, 24-hour, storm event.
8. Surface drainage from tributary areas and internal site drainage from surface and subsurface sources shall not contact or percolate through waste and shall either be contained onsite or be discharged in accordance with applicable storm water regulations.
9. The Discharger shall implement a self-monitoring and reporting program in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the WMU, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the WMU.
10. Wastes shall not be discharged on any ground surface that is less than five (5) feet above the highest anticipated groundwater level.
11. Pursuant to Title 27, CCR, each WMU of this Facility shall have:
  - a. A liner
  - b. A leachate collection and removal system (LCRS);
  - c. A gas collection/removal system; and
  - d. A vadose zone leachate and gas monitoring system, if technically feasible.

The nature and extent of the vadose zone leachate and gas (if applicable) monitoring system shall be reviewed, when appropriate, to determine whether expanded or reduced monitoring requirements shall be implemented based on actual operating experience. The burden of demonstrating the appropriateness of any reduced monitoring requirements is placed upon the Discharger.

12. The Discharger shall provide interim cover to the MSW as follows:



- a. Daily cover – a minimum of six (6) inches of compacted soil, or alternative material, shall be placed over the exposed waste at least once in every 24 hours.
- b. Intermediate cover – a minimum of 12 inches of compacted soil, or equivalent, shall be placed over the waste area that has been inactive for a period greater than 180 days. Existing daily cover may be used as part of the intermediate cover.

13. The intermediate and daily covers for the WMU shall:

- a. Control disease vectors pursuant to 40 CFR Section 258.22;
- b. Minimize infiltration into the WMU;
- c. Control erosion and convey run-off to the storm water management system at manageable, non-scouring flow rates;
- d. Control and contain landfill gas; and
- e. Minimize the potential for windblown litter and particulates.

14. Any alternative materials used for daily or intermediate cover that may have a different characteristic and thickness, compared to the requirements of Specifications 12 and 13 of this Board Order, shall be approved by the Regional Water Board's Executive Officer prior to use. The Discharger shall demonstrate that the alternative material and thickness will control disease vectors without presenting a threat to human health and the environment.

15. All LCRS's shall be operated to:

- a. Function without clogging throughout the active life of the WMF and during the post-closure maintenance period.
- b. Maintain less than 1-foot depth of leachate over any of the landfill liners, except for conditions where the first lift of the MSW has not been placed in a segment.
- c. Remove twice the maximum anticipated daily volume of leachate from the landfill.
- d. Be of sufficient strength and thickness to prevent collapse under the pressures exerted by the overlying waste, waste cover material, and by any equipment used at the landfill.

16. The Discharger shall conduct LCRS Gravel Hydraulic Conductivity Tests on an annual basis. A detailed plan for testing the LCRS performance shall be submitted to the Regional Water Board's Executive Officer for approval. The discharger shall submit the test results to the Regional Water Board.

17. Any monitoring and reporting of the leachate shall be done as specified in the self-monitoring program and revisions thereto.
18. The Discharger shall place any leachate removed from the LCRS sumps into a leachate management system as specified below in Specification 19 of this Board Order.
19. Prior to operation, the Discharger shall submit a detailed Leachate Management Plan for the Facility acceptable to the Regional Water Board's Executive Officer. This plan shall estimate the quantity of leachate produced and stored, and describe the ultimate disposal point of the leachate. The report shall evaluate the quantity of the leachate produced from each WMU and determine the maximum safe operating level for the leachate containment facilities.
20. The Discharger shall ensure that the foundation of the WMU and the structures which control leachate, surface drainage, erosion and gas mitigation for the WMU are constructed and maintained to withstand conditions generated during a Maximum Probable Earthquake (MPE) event without damage that is not readily repairable. Leachate sumps and interim and final berms shall be designed and constructed to withstand the MPE at the Facility.
21. For any material used for all or any portion of the leachate detection/monitoring system, base liner, LCRS, horizontal and vertical gas collection/removal systems, and daily, intermediate, and final cover, the Discharger must demonstrate to the satisfaction of the Regional Water Boards' Executive Officer that the material is compatible chemically and biologically with the MSW leachate. The Discharger must also demonstrate, to the satisfaction of the Regional Water Board's Executive Officer, that material used for any portion of the WMU has proper shear strength to withstand all the applicable normal and shear forces exerted onto these materials during and after the closure of the Facility.
22. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the Facility inoperable.
23. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources, shall not contact or percolate through the waste discharged at this WMU. Storm water drainage ditches shall be constructed to ensure that all non-contact surface water runoff is diverted away from the disposal area, such that it does not contact the MSW or leachate (except for contact surface water, which shall be contained).
24. The Discharger shall follow the Water Quality Protection Standards (WQPS) for detection monitoring established by the Regional Water Board in this Board Order pursuant to Title 27, Section 20390. The following are five (5) parts of WQPS as established by the Regional Water Board (the terms used in this Board Order regarding monitoring are defined in Part 1 of the attached Monitoring and Reporting Program R7-2013-0064 and revisions thereto, which are hereby incorporated by this reference.):
  - a. The Discharger shall test for the monitoring parameters and Constituents of Concern (COCs) listed in Monitoring and Reporting Program R7-2013-0064, and revisions thereto, from any samples taken from the following:

1. Water bearing media (i.e., groundwater, surface water, and liquids in the vadose zone)
  2. Perimeter gas monitoring system
- b. Concentration Limits – The concentration limits for each monitoring point assigned to a detection monitoring program (Monitoring and Reporting Program Part II), and the concentration limit for each COC (or monitoring parameters) shall be the background values as obtained during that reporting period (defined in Monitoring and Reporting Program Part I).
  - c. Monitoring points and background monitoring points for detection monitoring shall be those listed in Part II of the attached Monitoring and Reporting Program R7-2013 0064, and any revised Monitoring and Reporting Program approved by the Regional Water Board's Executive Officer.
  - d. The point of compliance is the property boundary or as otherwise approved by the Regional Water Board's Executive Officer, and extends down (vertically) through the zone of saturation.
  - e. Compliance period – The estimated duration of the compliance period for the Landfill No. 2 is 6 years. Each time a release is discovered, the WMU shall begin a compliance period on the date the Regional Water Board directs the Discharger to begin an Evaluation Monitoring Program (EMP). If the Discharger's Corrective Action Program (CAP) has not achieved compliance with the Standard by the scheduled end of the compliance period, the compliance period shall be automatically extended until the WMU has been in continuous compliance for at least three (3) consecutive years.
25. The Discharger shall report monitoring parameters from the constituents listed in Monitoring and Reporting Program R7-2013-0064 and future revisions thereto. These monitoring parameters are subject to the most appropriate statistical or non-statistical tests under Monitoring and Reporting Program R7-2013-0064, Part III A, and any revised Monitoring and Reporting Program approved by the Regional Water Board's Executive Officer.
26. The Discharger shall, for any future expansion, install devices to monitor groundwater, soil-pore liquid, or leachate to comply with the Monitoring and Reporting Program R7-2013-0064 and revisions thereto for any future expansion. The Discharger shall submit a plan for these installations to the Regional Water Board's Executive Officer 120 days prior to construction.
27. Methane, carbon dioxide, and other landfill gases shall be adequately vented, removed from each WMU of the Facility, or otherwise controlled to prevent the danger of explosion, underground fires, nuisance conditions, or the impairment of beneficial uses of water due to the migration of gas through the vadose zone.
28. A periodic load-checking program shall be implemented to ensure that hazardous waste is not discharged at the Facility. The program must be submitted to the Regional Water Board's Executive Officer for approval. The program includes, but is not limited to:

- a. Random loads to be checked;
- b. Description of training program for on-site personnel;
- c. Record keeping and reporting program;
- d. Program implementation schedule; and
- e. Disposal options for waste found not to be in compliance with the Board Order.

Hazardous wastes shall be properly manifested and transported off-site within 90 days for disposal at an appropriate permitted facility.

29. Waste shall not be disposed in the Facility where it can be discharged into waters of the United States.
30. Wastes shall not be placed in or allowed to remain in ponded water from any source.
31. In order to minimize the potential for windblown litter and particulates from the Facility that would pollute surface waters off the Facility, the MSW:
  - a. Shall be compacted into the working face of the WMU as soon as practicable and covered with a daily cover promptly, and in any event within 24 hours of placement,
  - b. Shall have a minimum of 6 inches of compacted soil or approved alternatives used as a daily cover,
  - c. Shall have a daily litter pickup and disposal program implemented and in adjacent off-site areas; and
  - d. Shall have litter control fencing installed around the Facility and the landfill footprint. A standard of "zero" escape of litter from the permitted Facility shall be established through the use of appropriate control systems and the collection of any escaped litter from the working face.
32. The Discharger shall remove and relocate any waste that is discharged at the Facility in violation of these requirements in the Board Order R7-2013-0064.
33. Public contact with MSW and/or leachate shall be prevented through such means as fences, signs, and other acceptable physical barriers.
34. MSW shall be confined to the Facility as described on the attached site map.
35. Water used for dust control and for fire suppression shall be limited to amounts necessary for these purposes so as to minimize any potential for infiltration of these waters into the WMU.
36. Petroleum fuels, recovered solvents, and other liquids shall be stored in appropriate containers within the facility and managed and maintained in accordance with applicable federal, state and local regulations. The Discharger shall establish procedures, acceptable to the Regional Water Board's Executive Officer, for rapid remediation of

minor petroleum hydrocarbon spills from vehicles used for construction or MSW handling at the Facility.

37. The corrective action plan shall be applicable as long as the release poses a threat to groundwater quality.
38. The Discharger shall maintain legible records on the volume and type of each waste discharged at the Facility. These records shall be available for review by representatives of the Regional Water Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Water Board.
39. The Discharger shall maintain visible monuments identifying the boundary limits of the entire Facility.
40. The exterior surfaces of the disposal area, including the intermediate and final landfill covers, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.
41. The Discharger shall remove and relocate any wastes discharged at this site in violation of these requirements within 90 days of the date of discharge.
42. The Discharger shall obtain written approval from the Regional Water Board's Executive Officer prior to using any treated contaminated soil as daily cover material at the landfill.
43. The Discharger shall submit for consideration and approval by the Regional Water Board's Executive Officer, a closure and post-closure maintenance plan (or a suitable modification to a pre-existing plan) one year prior to closure. The closure and post - closure maintenance plan shall comply with Section 21769 of Title 27.

#### C. Provisions

1. The Discharger shall comply with all applicable regulations of Title 27 and RCRA Subtitle D that are not specifically referred to in this Board Order.
2. The Discharger shall comply with all Specifications, Prohibitions, and Provisions of this Board Order immediately upon its adoption.
3. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
4. The Discharger is the responsible party for the WDRs, and MRP R7-2013-0064, and revisions thereto, for the WMU; and must comply with all of the conditions of the Board Order. Any noncompliance with the Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and is grounds for enforcement actions, including Regional Water Board Orders or court orders, requiring corrective action or imposing civil monetary liability or modification or revocation of these WDRs by the Regional Water Board.

5. The Regional Water Board considers the property owner to have a continuing responsibility for correcting any problems that may arise in the future as a result of this waste discharge.
6. The Discharger shall ensure that all WMU operating personnel are familiar with the content of this Board Order, and shall maintain a copy of the Board Order at the Facility.
7. The Discharger shall notify the Regional Water Board of any material change or proposed change in the characteristics and volume of the wastes discharged. This notification shall be accompanied by an amended report of waste discharge and any additional information as may be required by the Regional Water Board's Executive Officer.
8. The Discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Board Order.
9. The Discharger shall allow the Regional Water Board, or any authorized representative, upon presentation of credentials and other documents as may be required by law:
  - a. To enter upon the premises regulated by the Board Order, or the place where records are kept under the conditions of the Board Order;
  - b. To have access to and be able to copy , at reasonable times, any records that must be kept under the conditions of the Board Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under the Board Order; and
  - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with the Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this Facility.
10. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
11. The Discharger shall immediately notify the Regional Water Board of any flooding, slope failure, or other change in site conditions that could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
12. The Discharger shall maintain a legible record using a reporting form approved by the Regional Water Board's Executive Officer of the volume and weight (in tons) of MSW received at the Facility, and the manner and location of disposal of such MSW.
13. All containment structures, LCRS, monitoring systems, and erosion and drainage control systems shall be designed and constructed under supervision of a registered civil engineer or certified engineering geologist and shall be certified by the individual as meeting the requirements of the Board Order.

14. Two years prior to the anticipated closure of the Facility, or any portions thereof, the discharger shall submit to the Regional Water Board, for review and approval by the Regional Water Board Executive Officer, a closure and post-closure maintenance plan in accordance with Section 21769 of Title 27.
15. The closure plan shall include:
  - a. Facility location map;
  - b. Topographic maps;
  - c. Maximum extent of closures;
  - d. Current monitoring and control systems;
  - e. Land uses;
  - f. Estimated closure date and schedule;
  - g. General closure description;
  - h. Other special requirements;
  - i. Revised closure cost estimates (if appropriate); and
  - j. Any other applicable requirements as specified in Title 27.
16. The post-closure maintenance plan shall include:
  - a. Security and fencing;
  - b. Survey monuments;
  - c. Final cover;
  - d. Storm water management system;
  - e. Leachate collection and removal system (LCRS);
  - f. Leachate management system;
  - g. Active gas extraction system, if necessary;
  - h. Vadose zone leachate monitoring system;
  - i. Vadose zone soil-pore gas monitoring system, if necessary; and
  - j. Groundwater quality monitoring system.
17. The Discharger shall submit a detailed post-earthquake inspection and corrective action plan to be implemented in the event of any earthquake generating significant ground shaking (i.e., Modified Mercalli Intensity V or greater) at or near the Facility. The Plan shall describe the containment features, groundwater monitoring, leachate control facilities, storm water management system, and gas monitoring facilities, potentially impacted by the static and seismic deformations of the WMU. The plan shall provide for reporting results of the post-earthquake inspection to the Regional Water Board within 15 working days of the occurrence of the earthquake. Immediately after an earthquake event causing damage to the Facility, the corrective action plan shall be implemented, and this Board shall be notified of any damage.
18. Unless otherwise approved by the Regional Water Board's Executive Officer, all water quality monitoring analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guidance Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.
19. The Discharger shall furnish, under the penalty of perjury, technical monitoring program reports. These reports shall be submitted in accordance with specifications prepared by

the Regional Water Board's Executive Officer. Such specifications are subject to periodic revision as may be warranted.

20. The Discharger shall comply with all the discharge prohibitions, receiving water limitations, and provisions of the Industrial General Permit.
21. The Discharger shall submit a revised sampling and monitoring plan for storm water discharges to the Regional Water Board's Executive Officer for review and approval not less than 90 days prior to commencement of construction of future expansions to the Facility. The plan shall meet the minimum requirements of Section B, Monitoring and Reporting Program Requirements of the Industrial General Permit.
22. This Board Order is subject to Regional Water Board review and updating, as necessary, to comply with changing State or Federal laws, regulations, policies or guidelines, or changes in discharge characteristics.
23. At any time, the Discharger may file a written request (including appropriate supporting documents) with the Regional Water Board's Executive Officer to propose appropriate modifications to the Monitoring and Reporting Program. The request may address changes:
  - a. To any statistical method, non-statistical method, or retest method used with a given constituent or parameter;
  - b. To the manner of determining the background value for a constituent or parameter;
  - c. To the method for displaying annual data plots;
  - d. To the laboratory analytical method used to test for a given constituent or parameter;
  - e. To the media being monitored (e.g., the addition of soil-pore gas to the media being monitored);
  - f. To the number or placement of monitoring points or background monitoring points for a given monitored medium; or
  - g. To any aspect of monitoring or QA/QC.

After receiving and analyzing such a request, the Regional Water Board's Executive Officer shall either reject the request for reasons listed, or shall incorporate it, along with any necessary changes, into the attached Monitoring and Reporting Program. The Discharger shall implement any changes in the Monitoring and Reporting Program proposed by the Regional Water Board's Executive Officer upon receipt of a revised Monitoring and Reporting Program. The report due date is due within two (2) months of realizing that a change is appropriate, or of being notified by the Regional Water Board's Executive Officer.

24. The Discharger shall submit information requested by the Executive Officer and the self-monitoring and other reports electronically over the Internet to the State Water Resource Control Board's GeoTracker database. Electronic submission of reports containing soil, vapor or groundwater data are required for subsurface investigation and remediation at sites in the leaking Underground Storage Tank (UST); Spills, Leaks, Investigation and Cleanup (SLIC); Department of Defense (DOD); and Land Disposal Programs, according to Chapter 30, Division 3, Title 23 of the California Code of Regulations. The GeoTracker facility identification number for Landfill No.2 is L10002424662.



25. The Discharger shall submit to the Regional Water Board and the California Department of Resources Recycling and Recovery (CalRecycle) evidence of Financial Assurance for Closure and Post-Closure pursuant to Section 20950 of Title 27.
26. Financial assurances for post-closure shall be as determined by CalRecycle in accordance with appropriate regulations. The post-closure maintenance period shall be at least 30 years, or as long as the waste poses a threat to water quality.
27. Within 180 days of the adoption of this Board Order, the Discharger shall submit to the Regional Water Board, in accordance with Section 20430 of Title 27, assurances of financial responsibility acceptable to the Regional Water Board's Executive Officer for initiating and completing corrective action for all known or reasonably foreseeable releases from the Facility.

I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on September 19, 2013.

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ROBERT PERDUE  
Executive Officer