

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

ORDER R7-2013-0046

WASTE DISCHARGE REQUIREMENTS
AND CLOSURE/POST CLOSURE MAINTENANCE
FOR COUNTY OF SAN BERNARDINO, OWNER/OPERATOR
MORONGO VALLEY SANITARY CLASS III LANDFILL
Morongo Valley - San Bernardino County

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

Discharger

1. The County of San Bernardino Solid Waste Management Division (hereinafter referred to as the Discharger), 222 West Hospitality Lane, Second Floor, San Bernardino, California 92415-0017, owns and administers the operation of the Morongo Valley Sanitary Landfill (MVSL or Facility) for the disposal of municipal solid waste.
2. The Facility has been subject to the waste discharge requirements (WDRs) adopted in Board Order R7-2003-0045. The Discharger submitted a report of waste discharge (ROWD), dated March 12, 2013, to update the WDRs for the Facility as part of a statewide program to periodically review and update WDRs to comply with current laws and regulations, as set forth in the California Water Code and the California Code of Regulations, Title 27, and to incorporate changes in ownership or operation undertaken by the Discharger.

Definitions

3. Definitions of terms used in this Board Order:
 - 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.
 - b. Waste Management Facility (WMF) – The entire parcel of property at which waste discharge operations are conducted. Such a facility may include one 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 areas.
 - e. Landfill footprint – That area within the WMF where solid waste is permanently placed or disposed.

Facility

4. The WMF is located at 10780 Malibu Trail on a 75 acre parcel one mile northeast of the community of Morongo Valley in an unincorporated portion of San Bernardino County in the S ½ of the NW ¼ of Section 27, T1S, R4E, SBB&M, as shown in Attachment A, incorporated herein and made part of this Board Order.
5. The Facility began accepting Class III non-hazardous waste in 1963. The waste types accepted at the Facility included residential, commercial, demolition and construction, and agricultural wastes. The landfill footprint consists of approximately 13.2 acres.
6. The Discharger implemented a load-checking program for identifying and removing hazardous and prohibited wastes from the municipal waste stream coming to the Facility. Specific components of the program include the following:
 - a. Customer notification by signs, notices and verbal inquiries.
 - b. Surveillance through visual inspection of waste loads and questioning of customers by entrance station personnel.
 - c. Waste inspection conducted on randomly selected loads at the working face.
7. The Facility is not lined and does not have a leachate collection and removal system.
8. The Facility stopped accepting waste in June 1997. The landfill portion of the site was closed in November 1998 and a transfer station is now in operation.
9. Land within a one-mile radius of the Facility is zoned for resource conservation, rural residential, and special purposes.

Regulatory Background

10. The Facility became subject to WDRs in 1973 under Board Order 73-004. The WDRs were updated and superseded by the following Board Orders:
 - a. 88-038
 - b. 91-022
 - c. 93-071
 - d. R7-2002-0124
 - e. R7-2003-0045.
11. The Discharger performed a Solid Waste Assessment Test (SWAT) investigation in March 1988 and installed the four ground water monitoring wells listed below. The location of the monitoring wells is shown on Attachment B, incorporated herein and made a part of this Order.
 - a. MV-1 - Upgradient / Background
 - b. MV-2 - Downgradient / Compliance

- c. MV-3 - Downgradient / Compliance
- d. MV-4 - Downgradient / Compliance

12. The Discharger submitted a final SWAT report to the Regional Water Board on August 24, 1989. Analyses of water samples from downgradient Wells MV-3 and MV-4 indicated that the Facility was affecting the groundwater quality in the vicinity of the site. The following is a list of the highest concentration of the compounds detected in the groundwater during the SWAT investigation:

| <u>Parameter</u> | <u>Result ($\mu\text{g/L}^1$)</u> | <u>Well Number</u> |
|-------------------------|--|--------------------|
| Dichlorodifluoromethane | 28 | MV-3 |
| Trichlorofluoromethane | 7.7 | MV-3 |
| Tetrachloroethene | 3.3 | MV-4 |
| Vinyl Chloride | 1.7 | MV-4 |

¹ micrograms per liter

- 13. The Discharger submitted an Evidence of a Release Notification to the Regional Water Board on April 5, 1995. The notification stated that there was evidence of a non-statistical release at the Facility, and listed Dichlorodifluoromethane at a concentration of 6.3 $\mu\text{g/L}$ as being detected in MV-3.
- 14. The Discharger submitted an Evaluation Monitoring Program (EMP) workplan on June 28, 1995, and a supplemental Report for the EMP on September 24, 1996.
- 15. Cleanup and Abatement Order 95-096, addressing soil and groundwater pollution at the Facility, was issued to the Discharger on September 1, 1995.
- 16. The Discharger submitted a Closure and Post-Closure Maintenance Plan (PCPMP) on October 27, 1994, and a revised PCPMP on August 18, 1995, which was approved by the Regional Water Board Executive Officer.
- 17. The Discharger installed an additional downgradient groundwater monitoring well, MV-5, at the Facility on November 3, 1995. MV-5 was installed to determine the extent of the ground water pollution. Monitoring well MV-5 has been dry since December 2000 and is no longer used for groundwater sampling at the site.
- 18. Three combination piezometers/soil pore gas probes were installed in 1996. The location of the monitoring wells and soil gas probes is shown on Attachment B.
- 19. Cleanup and Abatement Order 95-096 was revised to incorporate the Discharger's request for schedule modifications, and Cleanup and Abatement Order 97-144 was issued by the Regional Water Board Executive Officer on November 21, 1997.
- 20. As part of the Discharger's Corrective Action Plan, a final cover was put on the Morongo Landfill on October 21, 1998. The cover consists of the following layers, in accordance with Title 27, Section 21090 regulations regarding alternative cover systems:

- a. Foundation layer - two foot thick layer composed of select soil materials, a minimum of one foot of which has been determined to be in-place existing cover.
 - b. Hydraulic barrier layer - Geosynthetic Clay Layer (GCL) composed of a bentonite layer between two geotextiles.
 - c. Protective soil layer - two foot thick layer of select soil material which also comprises the vegetative cover layer.
21. Cleanup and Abatement Order 97-144 was rescinded by the Regional Water Board Executive Officer on January 19, 2000. All of the actions required by Order 97-144, including completion of the final cover system, had been accomplished.

Geologic Conditions

22. The Facility is located on the northwestern flank of the Little San Bernardino Mountains between the Mojave Desert and Transverse Ranges geomorphic provinces along the Morongo Valley Fault.
23. Geologic units in the area include sheared and deformed metamorphic rocks that form the core of the Little San Bernardino Mountains, Mesozoic plutonic rocks, and relatively recent valley-filling alluvial fan and river deposits.
24. Alluvium under the Landfill consists of poorly graded to well graded sand containing minor interbeds of gravel, silt and clay.
25. The Landfill is located in an area that is generally seismically active. Numerous active or potentially active faults occur within 20 miles of the site. The Morongo Valley Fault trends northeast to southwest and appears to bisect the site as shown in Attachment D, appended herein and made a part of this Board Order. The Pinto Mountain Fault is located approximately two miles north of the site and the Mission Creek Fault is located approximately four miles south of the site. Both of these faults are considered active showing evidence of movement within Holocene time.

Surface Waters

26. The hydrogeology within the Morongo Valley is dominated by the Big Morongo Creek, which flows southwesterly through the length of the Valley.
27. The nearest surface water to the Facility is a spring about 1/2 mile southwest of the Facility at Big Morongo Regional Park. Surface water runoff in the vicinity of the site occurs during and shortly after periods of precipitation.
28. The Facility is at an elevation of about 2680 feet at the mouth of a steep, narrow canyon that drains approximately 210 acres of watershed with a low infiltration rate. The County of San Bernardino has constructed a 100-year drainage channel that begins at the upper end

of the disposal area and diverts drainage water to the next arroyo to the south. The channel bottom is excavated in native soil and is designed to prohibit drainage from contacting or percolating through the wastes.

29. Annual averages for evaporation and precipitation in the area are 104 inches and 7.3 inches, respectively. The 100-year, 24-hour precipitation event for the site is 6.5 inches.
30. The Facility is not within a 100-year floodplain.

Groundwater

31. Groundwater occurs within the alluvium and fractured bedrock at depths of approximately 26 to 85 feet below ground surface. Ground water flow is toward the northwest in the central portion of the site and toward the west in the south portion of the site. Groundwater is unconfined beneath the Facility and is interpreted to flow through the alluvium and fractured bedrock toward Big Morongo Creek.
32. A total of 50 wells are located within a one (1)-mile radius of the Facility. Water use from these wells is primarily municipal.
33. The Water Quality Control Plan for the Colorado River Basin Region of California (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.
34. The Facility is located in the Morongo Hydrologic Subunit. The beneficial use of ground waters in the Morongo Hydrologic Subunit is:
 - a. Municipal supply (MUN)

Storm Water

35. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (USEPA) on November 16, 1990 (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge storm water associated with industrial activity to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCPT) to reduce or eliminate industrial storm water pollution.
36. The State Water Resources Control Board (SWRCB) adopted Order 97-03-DWQ (General Permit CAS000001) 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 (General Industrial permit).
37. The Facility is not subject to the federal requirements for regulation of storm water discharges associated with industrial activities since it is not one of the industrial activities listed in 40 CFR 122.26(b)(14). Therefore, the Discharger is not required to obtain coverage under Order 97-03-DWQ (General Permit CAS000001) for the Facility.

CEQA and Public Participation

38. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resource Code, Section 21000 et seq.).
39. 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.
40. The monitoring and reporting requirements in Monitoring and Reporting Program R7-2013-0046, attached herein and made a part of this Order by reference, and revisions thereto, are necessary to determine compliance with these WDR's and to determine the Facility's impacts, if any, on receiving waters.
41. The Regional Water Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for this discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
42. The Regional Water Board in a public meeting heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order R7-2003-0045 is rescinded, except for enforcement purposes, 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. Specifications

1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Section 13050 of Division 7 of the California Water Code.
2. Waste materials shall be confined to the existing footprint of the WMF as defined in Finding No. 3.e and as described in the attached site maps.
3. The discharge shall not cause degradation of any water supply.
4. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes discharged at this site.
5. The exterior surfaces of the disposal area, including the final landfill cover, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.

6. The Discharger shall use the constituents listed in Monitoring and Reporting Program R7-2013-0046 and revisions thereto, as "monitoring parameters". These monitoring parameters are subject to the most appropriate statistical or non-statistical tests under Monitoring and Reporting Program No. R7-2013-0046, Part III, and any revised Monitoring and Reporting Program approved by the Regional Water Board Executive Officer
7. The Discharger shall implement the attached Monitoring and Reporting Program R7-2013-0046 and revisions thereto to detect at the earliest opportunity any unauthorized discharge of waste constituents from the Facility, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the Facility.
8. The discharge shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any Monitoring Point assigned to Detection Monitoring pursuant to Part II.A.7. of the attached Monitoring and Reporting Program R7-2013-0046 and revisions thereto.
9. 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 of the California Code of Regulations. The WQPS for this facility is as follows (monitoring terms are defined in Part 1 of the attached Monitoring and Reporting Program R7-2013-0046 and revisions thereto, hereby incorporated by reference):
 - a. The Discharger shall test for the monitoring parameters and the constituents of concern listed in Monitoring and Reporting Program R7-2013-0046.
 - b. The concentration limits for each monitoring parameter and constituents of concern for each monitoring point (as stated in detection Monitoring Program Part II) shall be its background value.
 - c. Monitoring points and background monitoring points for detection monitoring shall be those listed in Part II.A.7 of the attached Monitoring and Reporting Program R7-2013-0046, and any revised Monitoring and Reporting Program approved by the Regional Water Board's Executive Officer.
 - d. Points of Compliance are those Monitoring Points listed in Part II.A.7ii of the attached Monitoring and Reporting Program R7-2013-0046.
 - e. Compliance Period – Each time the WQPS is not met (i.e., a release is discovered), the Facility begins a compliance period on the date the Regional Water Board directs the Discharger to begin an Evaluation Monitoring Program (EMP) and develop and implement an approved Corrective Action Program (CAP) based on the results of the EMP. If the Discharger's CAP has not achieved compliance with the WQPS by the scheduled end of the compliance period, the compliance period is automatically extended until the Facility has been in continuous compliance for at least three (3) consecutive years.

10. The Discharger shall remove and relocate any wastes that are discharged at this site in violation of these requirements.
11. Water used for site maintenance shall be limited to amounts necessary for dust control.
12. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the Facility inoperable. The Facility shall be protected from any washout or erosion of waste or covering material from any inundation which could occur as a result of floods having a predicted frequency of once in 100 years.
13. The discharge shall not cause the release of pollutants or waste constituents in a manner which could cause a condition of contamination or pollution to occur, as indicated by the most appropriate statistical (or non-statistical) data analysis method and retest method listed in Part III of the attached Monitoring and Reporting Program R7-20013-0046 and revisions thereto.

B. Prohibitions

1. The discharge or deposit of any solid waste at this site is prohibited.
2. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) to the Facility is prohibited.
3. The discharge or deposit of designated waste (as defined in Title 27) at this site is prohibited.
4. The discharge of waste to land not owned or controlled by the Discharger is prohibited.
5. The direct discharge of any waste to surface waters or surface drainage courses is prohibited.
6. The discharge shall neither cause nor contribute to the contamination or pollution of ground water via the release of waste constituents in either liquid or gaseous phase.
7. The discharge shall not cause any increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, or other geologic materials outside of the landfill if such waste constituents could migrate to waters of the State, in either the liquid or the gaseous phase, and cause a condition of contamination or pollution.

C. Provisions

1. The Discharger shall comply with Monitoring and Reporting Program R7-2013-0046, and revisions thereto, as specified by the Regional Water Board's Executive Officer.
2. Prior to any modifications in this facility which would alter the performance of the final cover or drainage facilities, the Discharger shall report all pertinent information in writing to

- the Regional Water Board and obtain written approval or revised requirements before any modifications are implemented.
3. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board.
 4. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
 5. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
 6. The Discharger shall allow the Regional Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;
 - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
 7. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
 8. Unless otherwise approved by the Regional Water Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency (USEPA).
 11. The Discharger is the responsible party for the WDRs and the monitoring and reporting program for the WMF. The Discharger shall comply with all conditions of these WDRs. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and may result in enforcement actions, including Regional Water Board Orders or court orders that require corrective action or impose civil monetary liability, or in modification or revocation of these WDRs by the Regional Water Board.
 12. The Discharger shall furnish, under penalty of perjury, technical monitoring program

reports, and such reports shall be submitted in accordance with the specifications prepared by the Regional Water Board's Executive Officer. Such specifications are subject to periodic revisions as may be warranted.

13. All containment structures and erosion and drainage control systems 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 performance goals of Title 27.
14. The Discharger shall, within 72 hours of a significant earthquake event, submit to the Regional Water Board a detailed post-earthquake report describing any physical damages to the containment features, ground water monitoring and/or drainage control facilities. The report shall contain a corrective action plan to repair the damages that will be implemented at the Facility.
15. 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 the final cover or of precipitation and drainage control structures.
16. The Discharger shall maintain legible records on the volume and type of each waste discharged at the site. These records shall be available for review by representatives of the Regional Water Board at any time during normal business hours throughout the post-closure maintenance period.
17. The Discharger shall maintain visible monuments identifying the boundary limits of the entire waste management facility.
18. The Discharger shall submit to the Regional Water Board and to the California Department of Resources Recycling and Recovery (CalRecycle) evidence of Financial Assurance for Closure and Post Closure, pursuant to Title 27. The post-closure period shall be at least 30 years. However, the post-closure maintenance period shall extend as long as the waste poses a threat to water quality.
19. 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 the discharge characteristics.
20. Within 180 days of the adoption of this Board Order, the Discharger shall submit to the Regional Water Board, pursuant to Section 20380(b) 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.
21. 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 the discharge characteristics.

County of San Bernardino, Owner/Operator
Morongo Valley Sanitary Landfill

Board Order R7-2013-0046

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 May 16, 2013.

Ordered By:



ROBERT PERDUE
Executive Officer