

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

ORDER NO. R7-2009-0063

**WASTE DISCHARGE REQUIREMENTS
FOR
COUNTY OF SAN BERNARDINO, OWNER/OPERATOR
LANDERS WASTE MANAGEMENT FACILITY
CLASS III LANDFILL
CLASS II SURFACE IMPOUNDMENTS
Northwest of Joshua Tree – San Bernardino County**

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board), 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 operates the Landers Sanitary Landfill (hereinafter, Facility).
2. The United States government, with administration by the U.S. Bureau of Land Management, transferred the ownership of the Facility property to the County of San Bernardino on November 3, 2000.
3. The Discharger submitted a Report of Waste Discharge (ROWD) on November 7, 2008, describing a proposed project to increase the volume of the existing septage disposal ponds by raising the side slopes and perimeter berms five (5) feet in height (from 3318 feet above mean sea level (AMSL) to 3323 feet AMSL) and constructing a 1.2-acre lined drying area directly adjacent to the north edge of the disposal ponds.
4. The drying area, or landfarm, will enable the Discharger to remove sludge that has collected in the septage ponds and allow it to be dried before disposing of it in the unlined municipal landfill.
5. The Facility is currently regulated under Board Order No. R7-2002-0127. These Waste Discharge Requirements (WDRs) are being revised to incorporate changes to the Facility in response to a request by the Discharger.

Definitions

6. Definition 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, 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 unit.
- 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.

Facility

- 7. The Facility is a Class III unlined landfill located in southern California, San Bernardino County, approximately 10 miles northeast of Yucca Valley and four (4) miles east of Highway 247, in the SE ¼ of Section 20, SW ¼ of Section 21, NW ¼ of Section 28 and NE ¼ of Section 29, T2N, R6E, SBB&M, as shown on Attachment A.
- 8. The Facility is located on 640 acres and consists of four (4) separate WMUs as described below and shown on Attachment B:
 - a. Inactive Landfill: This 2-acre unlined portion was used as a burn site from 1965 to 1972 and as a refuse disposal site from 1972 to 1974. It stopped receiving waste in 1974 and is in compliance with the requirements for intermediate cover.
 - b. Active Landfill: This 42-acre portion started accepting waste in 1965. It is unlined and has no leachate control and removal system. Approximately 1.7 million cubic yards (yd³) of refuse and cover have been placed in the Active Landfill as of December 2006. The Facility presently receives up to 381 tons per day (tpd) of refuse. It has a total capacity of approximately three million (3,000,000) cubic yards (yd³) and is scheduled to close in year 2011.
 - c. Closed Septage Disposal Area: This portion consists of eight (8) unlined septage ponds that were constructed on 3.7 acres in 1965. These ponds were classified as Class II surface impoundments and were permitted to receive the following types of wastes:
 - 1. Septic tank pumpings
 - 2. Chemical toilet wastes
 - 3. Pumpings from grease traps
 - 4. Pumpings from garage and service station oil traps
 - 5. Crankcase oil

These unlined ponds ceased operating in November 1995 and were clean closed in 1998 in accordance with combined State Water Resources Control Board (SWRCB)/California Integrated Waste Management Board (CIWMB) Regulations, Division 2, Title 27 (hereinafter referred to as Title 27), Section 21400(a) and (b)(1).

- d. Active Septage Disposal Area: This portion of the Facility consists of two (2) lined Class II surface impoundments that were originally constructed in 1995. The Discharger will increase the volume capacity of the ponds by raising the perimeter berms five feet and constructing a drying area (Landfarm) adjacent to the ponds upon adoption of this Order. The disposal ponds and Landfarm are connected by a continuous liner and leachate collection and removal system. The ponds may receive up to 200 tpd of septage.
9. The types of waste accepted at the Active Landfill are as follows:
 - a. Residential
 - b. Commercial
 - c. Demolition/Construction
 - d. Agricultural
 10. The area-fill method is used for waste disposal operations at the Active Landfill. Refuse is spread upward in layers approximately two (2) feet thick by a landfill compactor. The working face of the Landfill is typically 10 to 15 feet high and 150 to 200 feet wide. Refuse placed during the working day is covered with soil (daily cover), which is then compacted to form a minimum six (6)-inch cover. The cover materials are from an on-site borrow source.
 11. The types of waste accepted at the Active Septage Disposal Area are as follows:
 - a. Septic tank pumpings
 - b. Chemical toilet wastes
 12. The Landfarm will provide an area for the aeration and treatment of septic sludge that is removed from the adjacent septic disposal ponds. Solid materials will be dredged from the septic ponds and placed in the adjacent landfarm area. The Landfarm liner is connected to the septage pond liner and slopes toward the septage ponds so that liquid wastes can drain directly back into the septage ponds.
 13. Only septic sludge that is removed from the Active Septic Disposal Area will be placed in or treated at the Landfarm.
 14. Treatment of the septic sludge is necessary to remove volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) from the sludge prior to landfill disposal.
 15. This order includes numerical effluent limitations for VOCs, SVOCs, and metals for residual solids of treated septic sludge that will be disposed of in the Landfill. This Order also requires the submittal and implementation of a sampling and analysis plan (SAP) to assure compliance with those effluent limitations.
 16. The Discharger has 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 customers by entrance station personnel, and
 - c. Waste inspection conducted on randomly-selected loads at the working face.
17. Any hazardous materials found at the Facility will be stored in a hazardous materials storage shed and will be removed within 90 days by a hazardous waste hauler licensed by the State of California.

Board Orders

18. This Board Order updates Board Order No. R7-2002-0127 to reflect changes requested by the Discharger.

Geologic Conditions

19. The site lies on the eastern side of the San Bernardino Mountains, approximately 20 miles from the crest and four (4) miles from the foothills of these mountains. The site is near the apex of a large alluvial fan that extends from the foothills across the Twentynine Palms United States Marine Corps Base. The alluvial fan is approximately 21 miles long and 198 miles wide. In the vicinity of the site, the slope of the alluvial fan is approximately 130 feet per mile. Site elevation ranges from approximately 3,200 to 3,600 feet above mean sea level.
20. The site is located in the west-central portion of the Mojave Desert geomorphic province of California. This geomorphic province consists of a wedge-shaped fault block, referred to as the "Mojave Block". The fault block is bounded by the Garlock Fault on the north and the San Andreas Fault zone on the southwest.
21. The Landfill is located in an area that is generally seismically active. Numerous active or potentially active faults occur within 30 miles of the site.
22. Bedrock beneath the site is Mesozoic and is essentially gneissic metamorphosed sediments and intrusive biotite quartz monzonite. The gneissic bedrock is fractured and jointed, with preferential weathering. Bedrock beneath the site is not only fractured and jointed, but to a lesser degree, faulted as well. A fault identified beneath the site parallels the northwest-striking faults that transect much of the Mojave Desert Region.

Surface Waters

23. The surface water in the area is derived from snowmelt and rainfall runoff in higher elevations to the west. Due to orographic effects, the greatest amount of precipitation occurs in the higher elevations of the San Bernardino Mountains. These higher-elevation mountains may act as rain barriers, diminishing the amount of precipitation that may otherwise occur near the site from the typical westerly winter storms that pass through the area.

24. A surface water drainage system for the site is designed to minimize erosion and inhibit the potential infiltration of surface run-on onto the disposal area. Engineered drainage channels are designed to contain run-off from a 24-hour, 100-year storm event.
25. Land adjacent to the Facility is zoned as rural living and rural conservation.
26. There are no springs and there is only one (1) domestic well within a one (1)-mile radius of the Landfill.

Groundwater

27. The Facility is located in the Emerson Hydrologic Unit.
28. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted on November 17, 1993, and designates the beneficial uses of ground and surface waters in this Region.
29. The beneficial uses of groundwater in the Emerson Hydrologic Unit are:
 - a. Municipal supply (MUN)
 - b. Agricultural supply (AGR)
30. Three (3) groundwater basins are adjacent to the site: the Ames Valley Groundwater Basin to the northwest, the Deadman Valley Groundwater Basin on the east and the Copper Mountain Valley Groundwater Basin on the southeast. The Ames Valley Groundwater Basin and Deadman Valley Groundwater Basin are separated by the Reche Barrier. The Reche Barrier is related to a series of northwest-trending regional faults and passes through the northeastern third of the site. The Reche Barrier is an effective barrier to groundwater flow with groundwater elevation differences on the order of several hundred feet across the barrier.
31. Depth to groundwater, within fractured bedrock blocks, ranges from 216 to 730 feet bgs at the site.
32. A localized groundwater mound in the vicinity of the inactive septage ponds exists underneath the west-portion of the site. On the north side of this mound divide, groundwater is estimated to flow west-northwest. On the south side of this mound, groundwater flows to the south-southeast.
33. The Discharger submitted a final Solid Waste Assessment Test (SWAT) on July 5, 1989. As part of the SWAT investigation, the Discharger constructed five (5) groundwater monitoring wells at the site. Well L-1 and Well L-8 are upgradient and Well L-3 is downgradient of the Active Landfill. Well L-6 is upgradient and Well L-7 is downgradient of the Inactive Landfill.

Other Regulatory Considerations

34. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (USEPA) (40 CFR, Parts 122, 123, and 124). The

regulations require that specific categories of facilities, which discharge storm water associated with industrial activity, obtain a NPDES Permit and implement Best Conventional Pollutant Technology (BCPT) to reduce or eliminate industrial storm water pollution.

35. The SWRCB adopted Order No. 97-03-DWQ (General Permit No. 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. The Discharger has submitted an NOI and has obtained coverage under Order No. 97-03-DWQ (WDID No. 736I005246).
36. The Discharger has submitted to this Regional Water Board, and to the CIWMB, evidence of Financial Assurance for Closure and Post-Closure, pursuant to Sections 22207 and 22212 of Title 27.
37. The monitoring and reporting requirements in Monitoring and Reporting Program No. R7-2009-0063 are necessary to determine compliance with these WDRs and to determine the facility's impacts, if any, on groundwater.

California Environmental Quality Act (CEQA)

38. The County of San Bernardino, Advance Planning Division of the Land Use Services Department (LUSD) is the Lead Agency, as that term is defined in the California Environmental Quality Act (CEQA) (Cal. Pub. Resources Code § 21000 et seq.), for conducting the environmental review required under CEQA for the Landers Sanitary Landfill Solid Waste Facility Permit Revision Project (Project). As Lead Agency, the SWMD prepared an Initial Study and Environmental Checklist (State Clearinghouse Number 2005011034) for the Project and determined that no significant environmental impacts would result from the Project. Accordingly, the SWMD prepared a Negative Declaration and filed a Notice of Determination with the County Clerk on April 15, 2005. On August 21, 2008, the SWMD certified Addendum No. 1 of the Negative Declaration to address the increased capacity of the septage ponds and addition of the Landfarm. Addendum No. 1 concluded that no new environmental issues would be introduced as a result of the currently proposed modifications and that the previously adopted Negative Declaration was adequate. The Regional Water Board has reviewed the Initial Study, Negative Declaration, Addendum No. 1, and relevant Project documents and has concluded that compliance with these WDRs should prevent, or mitigate to a less than significant level, any potential water quality impacts associated with the Project.
39. The 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.
40. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order No. R7-2002-0127 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. Residual solids of sludge treated at the Landfarm and disposed of in the Landfill shall not contain hazardous concentrations of VOCs, SVOCs, or metals as determined by an approved Sampling and Analysis Plan (SAP) (see Provision C.2).
2. The discharge of hazardous waste as defined in Title 27 at this site is prohibited.
3. The discharge or deposit of designated waste as defined in Title 27 at this site is prohibited unless approved by the Regional Water Board's Executive Officer.
4. The co-disposal of incompatible wastes is prohibited.
5. The direct discharge of any waste to any surface waters or surface drainage courses is prohibited.
6. The discharge of waste to land not owned or controlled by the Discharger is prohibited.
7. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) to the Landfill is prohibited.
8. The discharge of septic waste or grease trappings containing Total Petroleum Hydrocarbon (TPH) is prohibited at the WMF.
9. The discharge of any sludge other than that which is generated by the septic impoundments is prohibited.

B. 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 Active WMF, as defined in Finding No. 6b, described in Finding No. 8b, and shown on the attached site maps.
3. Prior to disposal in the Landfill, all residual solids of treated sludge shall be characterized in accordance with an approved SAP in order to demonstrate conformance with the numerical acceptance criteria.
4. Residual solids of treated sludge transported to the landfill for disposal shall be greater than or equal to 50 percent solids by weight.
5. Waste materials shall not be discharged on any ground surface which is less than five (5) feet above the highest anticipated groundwater level.
6. The Discharger shall maintain a minimum of two (2) feet of freeboard in the two (2) lined surface impoundments.

7. The Discharger shall not cause degradation of any water supply.
8. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources, shall not contact or percolate through the wastes discharged at the site.
9. 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.
10. The Discharger shall use the constituents listed in Monitoring and Reporting Program No. R7-2009-0063 and revisions thereto, as "monitoring parameters". These monitoring parameters are subject to the most appropriate statistical or non-statistical test under Monitoring and Reporting Program No. R7-2009-0063, Part III, and any revised Monitoring and Reporting Program approved by the Regional Water Board's Executive Officer.
11. The Discharger shall implement the attached Monitoring and Reporting Program No. R7-2009-0063 in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the WMF, or any unreasonable impairment of the beneficial uses of surface water or groundwater associated with (caused by) discharges of waste to the WMF.
12. 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.B.4. of the attached Monitoring and Reporting Program No. R7-2009-0063.
13. 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 WQPS for this Facility is as follows (monitoring terms are defined in Part 1 of the attached Monitoring and Reporting Program No. R7-2009-0063 and revisions thereto, hereby incorporated by reference):
 - a. The Discharger shall test for the monitoring parameters and constituents of concern listed in Monitoring and Reporting Program No. R7-2009-0063.
 - b. Concentration Limit - 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 the 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 No. R7-2009-0063, 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.7. of the attached Monitoring and Reporting Program No. R7-2009-0063.

- e. Compliance Period - Each time the WQPS is violated (i.e., releases are discovered), the Facility begins a compliance period on the date the Regional Water Board directs the Discharger to begin an Evaluation Monitoring Program and to develop and implement an approved Corrective Action Program (CAP) based on the results of the Evaluation Monitoring Program. If the Dischargers' 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.
14. The Discharger shall remove and relocate any wastes that are discharged at this site in violation of these requirements.
15. Water used for site maintenance shall be limited to the amount necessary for dust control.
16. The Discharger shall maintain a hazardous waste load-checking program at the Facility. The Discharger shall report the results in accordance with Monitoring and Reporting Program No. R7-2009-0063 and revisions thereto.
17. The Landfill shall be designed to prevent any washout or erosion of wastes or covering material, and from any inundation which could occur as a result of floods having a predicted frequency of once in 100 years.
18. The Discharger 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 No. R7-2009-0063.

C. Provisions

1. The Discharger shall comply with Monitoring and Reporting Program No. R7-2009-0063, and future revisions thereto, as specified by the Regional Water Board's Executive Officer.
2. Prior to the discharge of residual solids from treated sludge, the Discharger shall submit a Landfarm Sampling and Analysis Plan (SAP) for approval by the Regional Water Board's Executive Officer, to ensure compliance with Prohibition A.1. The Landfarm SAP shall include, at a minimum:
 - a. The methodology used to treat septage sludge in the Landfarm prior to disposal in the Landfill including a detailed description of each phase of the treatment process;
 - b. The sampling methodology;
 - c. A description of the analyses to be performed on the residual solids including analytical methods and detection limits; and
 - d. An estimate of the total amount of residual solids that will be disposed of in the landfill annually.

3. Prior to any modifications in the Facility which would result in a material change in the quality or quantity of liquid waste discharged to the septage ponds, the Discharger shall report all pertinent information in writing to the Regional Water Board and obtain revised requirements before any modifications are implemented.
4. 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.
5. 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.
6. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
7. 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;
 - 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.
8. The Discharger shall neither cause nor contribute to the contamination or pollution of groundwater via the release of waste constituents in either liquid or gaseous phase.
9. 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.
10. 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 California Department of Public Health, where applicable. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.
11. All regulated disposal systems shall be readily accessible for sampling and inspection.
12. 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.

13. The Discharger is the responsible party for the WDRs and the Monitoring and Reporting Program for the Facility. The Discharger shall comply with all conditions of these WDRs. 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 WDRs by the Regional Water Board.
14. 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.
15. 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.
16. The Regional Water Board considers the property owner to have a continuing responsibility for correcting any problems, which may arise in the future as a result of this waste discharge.
17. 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, groundwater monitoring and/or leachate control facilities and a corrective action plan to be implemented at the Landfill.
18. The Discharger shall immediately notify the Regional Water Board of any flooding, slope failure or other change in site conditions, which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
19. 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 at any time, during the Landfill operation hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Water Board.
20. The Discharger shall maintain visible monuments identifying the boundary limits of the entire WMF.
21. The Discharger shall comply with the approved load checking program.
22. The Discharger shall maintain coverage under the Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, Order No. 97-03-DWQ, NPDES No. CAS000001. The Discharger shall comply with all the discharge prohibitions, receiving water limitations, and provisions of the General Permit.
23. Within 180 days of the adoption of this Board Order, the Discharger shall submit to the Regional Water Board, in accordance with Section 20380(b) of Title 27, assurance 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.

24. One (1) year prior to the anticipated closure of the Facility or any unit (portion) thereto, the Discharger shall submit to the Regional Water Board, for review and approval by the Regional Water Board's Executive Officer, a final closure and post-closure maintenance plan in accordance with Section 21769 of Title 27.
25. 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.

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 17, 2009.


ROBERT PERDUE
Executive Officer