

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ORDER NO. 00-005

WASTE DISCHARGE REQUIREMENTS  
FOR  
BORREGO LANDFILL, INC., OWNER/OPERATOR  
BORREGO SPRINGS LANDFILL, CLASS III MUNICIPAL SOLID WASTE LANDFILL  
Borrego Springs – San Diego County

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

1. Borrego Landfill, Inc., Owner and Operator, whose address is 8514 Mast Boulevard, Santee, CA 92071, submitted a revised report of waste discharge and an application for waste discharge requirements (WDR) to the California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board) on June 29, 1999, for the operation of a Class III Municipal Solid Waste Landfill named Borrego Springs Landfill (hereinafter referred to as the Landfill).
2. Borrego Landfill, Inc., is a subsidiary of Allied Waste Industries, Inc., whose address is 15880 North Greenway – Hayden Loop, Suite 100, Scottsdale, Arizona 85260. Borrego Landfill, Inc., and Allied Waste Industries, Inc., are hereinafter collectively referred to as the Discharger.
3. The Landfill is located in the NW  $\frac{1}{4}$  of the SW  $\frac{1}{4}$  of Section 6, T11S, R7E, SBB&M. The street address of the Landfill is 2449 Palm Canyon Drive, Borrego Springs, CA 92004. The access road is shown on the site location map, (Attachment A) appended hereto and made a part of this Board Order.
4. The Landfill was owned and operated by the County of San Diego (hereinafter referred to as the County) from 1960 to 1997. On August 19, 1997, the County informed the Regional Board of the sale of the Landfill to Borrego Landfill, Inc., effective on and after November 1, 1997. The Change of Name and Ownership of the Landfill was adopted by the Regional Board on January 8, 1998, in Board Order No. 98-005.
5. On June 17, 1993, the State Water Resources Control Board (State Board) adopted Resolution No. 93-062 as the Policy for Regulation of Dischargers of Municipal Solid Waste (Policy). The Policy directs each Regional Board to revise the waste discharge requirements for each Municipal Solid Waste (MSW) landfill in its respective region to comply with Section 258, Title 40, Code of Federal Regulations (hereinafter referred to as RCRA Subtitle D).
6. On September 15, 1993, the Regional Board adopted waste discharge requirements in Board Order No. 93-071 for all municipal solid waste landfills in the Colorado River Basin Region to implement State Board Resolution No. 93-062.
7. Definitions: The following terms used in this Board Order are as defined:
  - a. Waste Management Facility (WMF) – means the entire parcel of property at which waste discharge operations are conducted. Such a facility may include one or more waste management units.
  - b. Waste Management Unit or Landfill – means an area of land or a portion of a property at which waste is discharged. The term includes containment features and ancillary features for precipitation and drainage control and monitoring.

- c. Landfill Footprint – means that area within the Waste Management Facility where MSW is permanently placed or deposited.
  - d. Working Face – means that portion of the active landfilling area where waste is not covered by daily cover.
  - e. Contact Water – means Surface/Storm Water run-on that cannot be diverted from the immediate working face area or that comes into contact with MSW.
  - f. Non-contact Water – means Surface/Storm Water that has not come into contact with MSW.
  - g. Surface/Storm Water – means any rainwater, leachate, or other liquid that drains over and from or onto any part of the waste management facility. It may serve as a monitoring medium to confirm the effectiveness of: (1) landfill cover materials, and (2) the separation of Contact Water from Non-Contact Water.
8. The discharger reports that the Landfill occupies a total area of 42 acres, the disposal area or footprint is approximately 35 acres. The expected closure date, based on the current loading rate of 6,240 tons per annum, is the year 2041.
9. The Landfill has a designed air space of 706,745 cubic yards. The total waste in place is approximately 170,555 cubic yards. The remaining capacity as of May 13, 1999, is 439,445 cubic yards. The peak daily load is approximately 50 tons.
10. The discharger reports that the Landfill is located in an area that is currently characterized by very low density land use. The nearest occupied dwelling is approximately four miles from the Landfill. Zoning of property within 1,000 feet of the Landfill is S-92, general rural. The proposed post-closure land use of the Landfill is non-irrigated open space.
11. The discharger reports that the Landfill is not located in a 100-year flood plain.
12. The Landfill is located in Borrego Valley, a sediment-filled northwest-southeast-trending structural depression created by the active Coyote Creek fault. Borrego Valley is bordered to the west by the San Ysidro Mountains, to the north and northwest by the Coyote Mountains, to the south by Yaqui Ridge and the Vallecitos Mountains, and to the east and southeast by the Borrego Badlands. Although the sediment fill is generally referred to as alluvium, it is actually made up of younger (Holocene) and older (Pleistocene) alluvium, Holocene and Pleistocene fan deposits, Holocene playa deposits, and Holocene aeolian sand deposits. Based on gravity surveys, the maximum sediment thickness is estimated to be 2,450 feet and the basement units underlying the valley at depth and the surrounding mountains are generally composed of granitic and metamorphic rock complexes. The vadose zone beneath the Landfill extends to a depth of approximately 75 to 90 feet below ground surface.

13. The nearest known active faults are the Coyote Creek Fault, located approximately one mile to the northeast, and San Jacinto Fault Zone, located approximately 6.5 miles to the northwest. No faults or major structural features have been identified trending through the site or immediately adjacent to the site.
14. Borrego Valley contains three separate aquifers within the alluvium. The upper unconfined aquifer is approximately 1,000 feet thick in the northern portion of Borrego Valley, and the alluvium is primarily composed of unconsolidated sand, gravel, silt and clay with an estimated hydraulic conductivity of five feet per day. This aquifer is the principal source of ground water in Borrego Valley and yields as much as 2,000 gallons per minute in individual wells. The middle aquifer is primarily composed of moderately consolidated sand, gravel, and boulders up to 700 feet thick in the northern portion of the valley, with an estimated hydraulic conductivity of five feet per day. The lower aquifer is primarily composed of partly consolidated siltstone, sandstone and conglomerate, with an estimated hydraulic conductivity of one foot per day. Moderately compacted soil defines the boundary between the upper and middle aquifers and a discrete clay zone separates the middle and lower aquifers.
15. The location of ground water monitoring wells and most recent ground water contour map of the Landfill is shown on Attachment No. 1, appended hereto and made a part of this Board Order.
16. The discharger reports that the direction or flow of ground water beneath the Landfill is westerly. The depth to ground water is 80 to 95 feet below ground surface and an estimated range of capillary rise of 10 to 118 inches.
17. There are five detection-monitoring wells at the Landfill: one upgradient well (BSMW-3, one cross-gradient well (BSMW-1), and three downgradient wells (BSMW-2, BSMW-4, and BSMW-5). No significant detected concentrations of VOCs have occurred since ground water monitoring was initiated during the SWAT testing in 1994. VOCs have been detected at minor concentrations on a sporadic basis, and the site continues to be in detection monitoring.
18. The discharger reports that no springs exist within the Landfill or one mile of its perimeter.
19. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted November 17, 1993, and designates the beneficial uses of ground and surface waters in this Region.
20. Borrego Springs Landfill is located in the Anza-Borrego Hydrologic Unit. The beneficial uses of ground water in the Anza-Borrego Hydrologic Unit are:
  - a. Municipal supply (MUN)
  - b. Industrial supply (IND)
  - c. Agricultural supply (AGR)
21. The climate of the region is arid. The nearest weather monitoring station is located in Borrego Desert Park, six miles west of the Landfill. Precipitation measurements have been recorded here since 1948 with an annual average of 6.39 inches. The minimum and maximum annual precipitation recorded was 1.35 inches in 1953 and 18.73 inches in 1983.
22. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (U. S. EPA) on 16 November 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 NPDES permits and to implement Best

Conventional Pollutant Technology (BCT) to reduce or eliminate industrial storm water pollution.

23. The State Water Resources Control Board adopted Order No. 91-13-DWQ (General Permit No. CAS00001), as amended by Water Quality Order No. 92-12-DWQ, specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the Permit.
24. This Board Order updates Board Order No. 89-021 that was adopted in 1989 and amended by Board Order No. 93-071.
25. This Board Order updates the waste discharge requirements to comply with the current laws and regulations as set forth in the California Water Code and the California Code of Regulations.
26. On June 25, 1998, a financial assurance mechanism was established for a foreseeable release to ground water at the Borrego Springs Landfill in the total amount of \$100,595.00.
27. The Board has notified the discharger and all known interested agencies and persons of its intent to update waste discharge requirements for said discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
28. The Board in a public meeting heard and considered all comments pertaining to this discharge.
29. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these waste discharge requirements, 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 Resources Code, Section 21000 et. seq.).

IT IS HEREBY ORDERED, that Board Order No. 89-021 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 direct discharge of any wastes to any surface waters or surface drainage courses is prohibited.
2. The discharge or deposit 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 Board's Executive Officer.
4. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) to the waste management units is prohibited unless approved by the Regional Board's Executive Officer.
5. The disposal of incompatible wastes is prohibited.

B. Specifications

1. 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.
2. The Borrego Springs Landfill shall be protected from any washout or erosion of waste or covering material, and from any inundation which could occur as a result of floods having a predicted frequency of once in 100 years.
3. The discharge shall not cause degradation of any water supply.
4. Waste materials shall be confined to the waste management facility as described on the attached site maps.
5. Waste material shall not be discharged on any ground surface that is less than five feet above the highest anticipated ground water level.
6. The waste management 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.
7. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources, shall not contact or percolate through the wastes discharged at this site.
8. 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.
9. The discharger shall implement the attached Monitoring and Reporting Program No. 00-005, 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.
10. 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, pollution, or nuisance.

11. 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.C.4. of the attached Monitoring and Reporting Program No. 00-005, and revisions thereto.
12. 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 No. 00-005, and revisions thereto.
13. The discharger shall comply with the Water Quality Protection Standard (Standard) for Detection Monitoring. The five parts of the Water Quality Standard (Standard) of Section 20390 of Title 27 of Article 5 are as follows:
  - a. Constituents of Concern (Section 20395 of Title 27). The list of Constituents of Concern (1) for water-bearing media (i.e., ground water, surface water, and soil-pore liquid) consists of the combined listing of all constituents in Appendices I and II to 40 CFR Part 258 in addition to TDS, Sulfate, Carbonate, pH, and Chloride and (2) for soil-pore gas, consists of all volatile organic constituents (VOCs) detectable via gas chromatography. Constituents of Concern, and many other terms of art used in this Board Order, are defined in Part I.C.4. of the attached Monitoring and Reporting Program No. 00-005, and revisions thereto which program is hereby incorporated by reference.
  - b. Concentration Limits (Section 20400 of Title 27). For each Monitoring Point assigned to a Detection Monitoring Program (M&R Part II.C.4.), the Concentration Limit for each Constituent of Concern (or Monitoring Parameter) shall be its background value as obtained during that Reporting Period (defined in M&R Part I.C.9.) as follows:
    1. If 10% or more of the samples taken during a given Reporting Period from the Background Monitoring Points for a monitored medium exceed their respective Facility-Specific Method Detection Limit (MDL) – see M&R Part I.C.7. – for a given constituent, then the Concentration Limit for that medium and constituent shall consist of the mean (or median, as appropriate) and the standard deviation (or other measures of central tendency, as appropriate) of all the background data obtained from that constituent from the medium during that Reporting Period; otherwise
    2. The Concentration Limit for that medium and constituent shall be its MDL.
  - c. Monitoring Points and Background Monitoring Points for Detection Monitoring (Section 20405 of Title 27) shall be those listed in Part II.C.4. of the attached Monitoring and Reporting Program No. 00-005 and revisions thereto, and shown on Attachment No. 1.
  - d. Points of Compliance (Section 20405 of Title 27). The Point of Compliance is shown on Attachment 1, and extends down through the Zone of Saturation (Section 20164 of Title 27.)

- e. Compliance Period (Section 20410 of Title 27). The estimate duration of the Compliance Period for this Landfill is 30 years. Each time the standard is broken (i.e., a release is discovered, the Landfill begins a Compliance Period on the date the Regional Board directs the discharge to begin an Evaluation Monitoring Program. 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 is automatically extended until the Landfill has been in continuous compliance for at least three consecutive years (Section 20410 (c) of Title 27).

14. Monitoring Parameters for Detection Monitoring

- a. The monitoring parameters for water samples include:
  - 1. pH, Total Dissolved Solids (TDS), Chloride, Nitrate Nitrogen, Sulfate, and each VOC that exceeds its respective (facility-specific) MDL in at least ten percent of the background samples from a given water body (surface water body, aquifer, perched zone, or soil-pore liquid) during that Reporting Period. These Monitoring Parameters are subject to the most appropriate statistical test under M&R Part III.A.1.; and
  - 2.  $VOC_{water}$ , a composite parameter that encompasses a variety of constituents (VOCs). The constituents addressed by the  $VOC_{water}$  Monitoring Parameter and the special non-statistical analyses it uses are both described in M&R Part III.A.2.a.; whereas
- b. The Monitoring Parameters for soil-pore gas samples include:
  - 1. Methane,  $CO_2$ , and each VOC that exceeds its respective MDL in at least ten percent of the background samples during a given Reporting Period. These Monitoring Parameters are subjected to the most appropriate statistical test under M&R Part III.A.1.; and
  - 2.  $VOC_{spg}$ , a composite parameter that encompasses a variety of gaseous-phase VOCs. The constituents addressed by the  $VOC_{spg}$  Monitoring parameter and the special non-statistical analysis it uses are both described in M&R Part III.a.2.b.

C. Provisions

- 1. The discharger shall provide a final cover for closure of the Landfill in conformance with the requirements of Title 27.
- 2. The discharger shall immediately notify the Regional 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.
- 3. The discharger shall maintain visible monuments identifying the boundary limits of the entire waste management facility.

4. One year prior to the anticipated closure of the Landfill or any portion thereof, the discharger shall submit to the Regional Board, for review and approval by the Regional Board's Executive Officer, a closure and post-closure maintenance plan in accordance with Section 21769 of Title 27.
5. The discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Board Order.
6. Annually, prior to the first day of November, any necessary erosion control measures shall be implemented and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the site; and the report thereon shall be submitted to the Regional Board by April 30 of the following year.
7. Water used for site maintenance shall be limited to amounts necessary for dust control.
8. 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.
9. The discharger shall maintain in good working order, and operate as efficiently as possible, any facility or control system installed by the Discharger to achieve compliance with the waste discharge requirements.
10. This Board Order is subject to Regional Board review and updating, as necessary, to comply with changing State or Federal laws, regulations, policies, or guidelines, or changes in the discharge characteristics.
11. The property owner shall have a continuing responsibility for correcting any problems that may arise in the future as a result of this waste discharge.
12. 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 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.
13. The discharger shall comply with all prohibitions, specifications and provisions of this Board Order immediately upon adoption of this Board Order.
14. At any time, the discharger may file a written request (including appropriate supporting documents) with the Regional Board's Executive Officer, proposing 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); or

- 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 report, the Regional Board's Executive Officer may reject the proposal for reasons listed, or 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 Board's Executive Officer upon receipt of a revised Monitoring and Reporting Program. The report due date is within two months of realizing that a change is appropriate, or of being notified by the Regional Board's Executive Officer.

- 15. The discharger, within 48 hours of a significant earthquake event shall inform the Regional Board's Executive Officer by telephone of any physical changes to the containment features and ground water monitoring facilities and within 15 working days submit to the Regional Board a detailed post-earthquake report describing any physical damages to the containment features, ground water monitoring and/or leachate control facilities and a corrective action plan to be implemented at the Landfill.
- 16. 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 Board.
- 17. 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.
- 18. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- 19. The discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the 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.
- 20. The discharger shall comply with all of the conditions of this Board Order. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and is grounds for enforcement action.
- 21. 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.
- 22. The discharger may be required to submit technical reports as directed by the Regional Board's Executive Officer.

23. The discharger shall develop and implement a Storm Water Pollution Prevention Plan for this Landfill. The Plan must be submitted to the Regional Board's Executive Officer for review and approval no later than 90 days after adoption of this Board Order.
24. All storm water discharges from this Landfill must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm water drain systems or other course under their jurisdiction.
25. Storm water discharges from the Landfill shall not cause or threaten to cause pollution or contamination.
26. The discharger shall submit to this Regional Board and to the California Integrated Waste Management Board (CIWMB), evidence of Financial Assurance for Closure and Post Closure, pursuant to Section 22206 of 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.
27. The discharger shall submit to this Regional Board and to the California Integrated Waste Management Board (CIWMB), evidence of reasonably foreseeable release bond pursuant to Section 22220 of Title 27.

I, Philip A. Gruenberg, 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 April 12, 2000.

original signed by/  
Executive Officer