

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

ORDER R7-2017-0012

POST-CLOSURE MAINTENANCE AND WASTE DISCHARGE REQUIREMENTS  
FOR

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES,  
OWNER/OPERATOR COACHELLA SANITARY LANDFILL

CLASS III MUNICIPAL LANDFILL  
North of Coachella - Riverside County

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

**Discharger**

1. The Riverside County Department of Waste Resources (Discharger) owns and operates the Coachella Sanitary Landfill (Landfill), which closed in 1997. The Landfill is assigned the California Integrated Water Quality System (CIWQS) waste discharge identification (WDID) number 7A330305061 and GeoTracker Global ID number L10003659217.
2. The Landfill is at 87-011 44th Avenue, Coachella, CA 92202, as shown on Attachments A and B, Vicinity Map and Site Map, respectively, attached hereto and made a part of this Order by reference.
3. Title 27 section 21710(a) requires any persons proposing to discharge solid waste at a waste management unit that is subject to regulation by both the California Department of Resources Recycling and Recovery (CalRecycle) and the Regional Water Quality Control Board to make all Report of Waste Discharge (ROWD) submittals (including updates to previously submitted ROWDs) in the form of a Joint Technical Document (JTD).
4. Title 27, section 21750(i) requires any ROWD/JTD to include a preliminary closure and post-closure maintenance plan.
5. On June 26, 2014, the Discharger submitted a JTD titled "Coachella Sanitary WMF Joint Technical Document (JTD), Addendum No. 1 Final Post-Closure Maintenance Plan, June 2014."
6. The Coachella WMF is currently regulated by Board Waste Discharge Requirements Order 01-098, adopted on June 27, 2001. This Order updates Order 01-098 to incorporate current laws and regulations as set forth in the California Water Code and combined State Water Resources Control Board (State Water Board) and CalRecycle Regulations, Division 2, Title 27 (Title 27), and federal regulations under the Resource Conservation and Recovery Act (RCRA), also known as Subtitle D for non-hazardous solid wastes.

## Definitions

### 7. Definitions of terms used in this Order:

- a. Waste Management Facility (WMF) - The entire parcel of property where waste discharge operations are conducted. Such a facility may include one (1) or more waste management units.
- b. Waste Management Unit (WMU) - An area of land or a portion of a Waste Management Facility where waste is or was discharged. The term includes containment and ancillary features for precipitation and drainage control and monitoring.
- c. Landfill - A Waste Management Unit where waste is discharged to land. It does not include surface impoundments, waste piles, or land and soil treatment.
- d. 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 or who is responsible for the operation of a Waste Management Unit.  
(Cal. Code Regs., tit. 27, § 20164.)

## Facility, Waste Classification, and Unit Classification

8. The WMF is on approximately 75 acres in Section 22, Township 5 South, Range 8 East, San Bernardino Baseline & Meridian that includes Assessor Parcel Numbers (APNs) 601-340-017, 601-340-018, and 601-340-019. The latitude and longitude of the site are 33 degrees 43 minutes 42.78 seconds North, 116 degrees 8 minutes 46.03 seconds West.
9. A Deed Notification for the WMF was filed with the County Recorder on June 8, 2000. The notification indicates that approximately 67 acres of the total 640 acres of the land at the Facility were used to dispose of refuse from 1972 to 1997, primarily in the northwest corner of the property. The area of refuse disposal includes the main refuse fill area and two smaller known areas. The location of these fill areas is shown in Attachment C, Landfill Footprint, which is attached hereto and made a part of this Order by reference.
10. The Deed Notification also specifies:
  - a. That the closure construction was done in accordance with all Local, State, and Federal regulations in force at the time of closure;
  - b. The boundaries, height and depth of the filled area;
  - c. The availability of the Final Closure and Post-closure Maintenance Plans for review; and
  - d. The restricted use of the site.
11. The Discharger operated the WMF from 1972 to May 18, 1997. During this time, waste was disposed using the cut-and-fill method of operation, with a fill-to-cover ratio

of 1.5 to 1.0. The waste was compacted to a density of 1,200 pounds per cubic yard, and covered with six-inches of compacted well-graded sand and silty sand.

12. Final closure construction activities began in September 1998 and were completed in August 1999. These activities included construction of the five-foot thick monolithic WMF final cover system, and landfill gas collection system including thirty-one (31) single completion vertical gas wells. A soil moisture monitoring system and weather station were installed in accordance with the Final Cover Post Closure Maintenance CQA Plan in November 1999. Installation of twelve (12) perimeter gas monitoring probes was completed in November 2001. The final volume of waste in place at the time of closure was approximately 5,000,000 cubic yards.
13. Concrete rubble is reportedly buried to a depth of approximately 50 feet along the toe of the southern face of the WMF. The rubble is between the natural drainage course immediately south of the WMF and the waste cells within the WMF. This rubble may act as an erosion barrier to protect the WMF during flooding and runoff. The WMF footprint is shown on Attachment C.
14. The WMF is bounded to the west and by an agriculture zone of approximately 600 acres and to the north, east and south by undeveloped land.
15. Normal annual precipitation in the area of the Facility is approximately 4 inches, with normal annual surface evaporation of approximately 105 inches.
16. The WMF is unlined and has no leachate collection and removal system (LCRS). The formation of leachate at this site is minimized by the arid climate and the surface water drainage system in the WMF. The addition of the final cover cap prevents the formation of leachate further by not allowing rainfall to percolate into the refuse.
17. The WMF received the following Class III nonhazardous and inert wastes:
  - a. household waste
  - b. demolition materials
  - c. dead animals
  - d. sewage sludge residue, grit and screenings
  - e. septage
  - f. manure
  - g. plant residue
  - h. grease trap waste
  - i. chemical toilet waste
  - j. cleansed pesticide containers
18. Tires were mono-filled approximately 1,500 feet away from the working faces in the northeastern construction/demolition debris area of the WMF. After January 1, 1993, tires were temporarily stockpiled to be removed for shredding.

**Site Specific Regulatory Background**

19. The WMF became subject to Waste Discharge Requirements (WDRs) under Board Order 72-29 on May 11, 1972. The WDRs have been updated as follows:

<u>Date</u>	<u>Board Order No.</u>
November 16, 1983	83-090
September 22, 1988	88-120
March 13, 1991	91-013
September 15, 1993	93-071
June 27, 2001	01-098

20. On August 23, 1989 the Discharger submitted a Solid Waste Assessment Test (SWAT) report. As part of the SWAT investigation, the Discharger constructed two downgradient monitoring wells, MW-1 and MW-3, and one upgradient well (MW-2). Groundwater analyses from these monitoring wells indicated that constituents of concern exceeded background concentrations. The following volatile organic compounds (VOCs) constituents were present in groundwater samples:

<u>Parameter</u>	<u>1989 Result µg/l</u>	<u>Well No.</u>
1,1-dichloroethane	5 µg/l	MW-1
1,4-dichlorobenzene	7 µg/l	MW-3
tetrachloroethene	45 µg/l	MW-3
trichlorethene	10 µg/l	MW-3
trans-1,2-dichloroethene	1 µg/l	MW-1
chloroform	3 µg/l	MW-1
dichlorodifluoromethane	34 µg/l	MW-3
trichlorofluoromethane	1 µg/l	MW-1
methylene chloride	4 µg/l	MW-3

21. The groundwater data indicated that the landfill was discharging the VOCs into groundwater. Consequently, the Colorado River Basin Water Board Executive Officer issued Cleanup and Abatement Order (CAO) 90-74 on September 21, 1990, which was replaced by CAO 95-097 in September 1995, both of which required additional field investigation of the WMF site and surrounding area to define the extent of groundwater contamination. The final investigation and Risk Assessment conducted by Dames & More, dated September 17, 1992, determined that groundwater contamination beneath the WMF was caused by infiltration of rainwater, water produced by chemical reactions within the landfill material, liquids contained in the landfill material and migration of VOCs in the vapor phase. The report recommended controlling exposure to the affected groundwater as the best remedial alternative for the site. An additional report completed by Law/Crandal, dated May 23, 1994, indicated that groundwater contamination beneath the site was caused by landfill gas migration. The report recommended that a gas collection system be installed at the site. On October 24, 1994 the Colorado River Regional Water Quality Control Board approved installation of a gas collection system as a remedial action for groundwater

contamination at the site. It was installed and began full operation on August 26, 1999. After reviewing cleanup data for the site for approximately 4 years after installation of the gas collection system the Water Board rescinded CAO 95-097 (April 2004) stating that the requirements of CAO 95-097 had been met.

### **Geologic Conditions**

22. The WMF is located within the Salton Trough Physiographic Province, which extends from the upper Coachella Valley to the Gulf of California. The regional structure is dominated by the San Andreas and San Jacinto Fault Zones. The San Andreas Fault Zone is located approximately 2/3 of a mile to the southwest. The San Jacinto Fault Zone is located approximately 30 miles to the west. The WMF is located on the Dillon Road Piedmont Slope, a narrow low land below the Little San Bernardino Mountains. This slope formed as a series of coalescing alluvial fans originating from the Little San Bernardino Mountains to the east. These materials are classified as the Ocotillo Conglomerate (old alluvium) of late Pleistocene to early Holocene Age, and younger alluvium of Holocene Age.
23. Geologic units at the WMF appear to consist of underlying older alluvial fan deposits, and overlying younger alluvial fan deposits. The older alluvium consists of yellowish brown to moderate brown, loose to firm, medium grained sand with gravel and silt, and trace clay and cobbles. The gravel and sands form poorly stratified layers. Channels filled with cobbles have eroded into the underlying deposits. The older alluvial fan surfaces are moderately dissected and covered by a crudely developed surface crust, commonly known as desert pavement. Younger alluvium consists of moderate yellowish brown, loose, medium to coarse-grained sand with gravel, and trace cobble, silt and clay. This unit is distinguished from the underlying older alluvium by its loose nature, minor amounts of gneissic clasts, lack of abundant grains of mica, and poor stratification.
24. The most common soil type in the WMF area is the Gilman-Coachella-Indio Association. The specific WMF site soils consist of Carrizo stony sand (SP, SM and GP), Chuckwalla very gravelly sandy clay loam (GC, GP and GM), Carsitas cobbly sand (SP and SM), and Carsitas gravelly sand (GP, GW, SP and SW) (U.S. Department of Agriculture (USDA) Soil Survey, 1980).
25. The northern portion of the WMF is within an Alquist-Priolo Earthquake Fault Zone designated by the State of California because it includes traces of suspected active faulting. Eight fault traces associated with the San Andreas Fault Zone are mapped within this zone and they extend into the WMF site. Geologic studies indicated that active Holocene faults are present in the southern portion of the WMF site and that potentially active faults may exist in the vicinity of the borrow pit. The main trace of San Andreas Fault Zone passes approximately 3,500 feet southwest of the WMF. Published information indicates that a segment of the San Andreas Fault ruptured in 1968 approximately six miles southeast of the site.
26. The design ground acceleration at the WMF was calculated based on a Maximum Credible Earthquake of Magnitude 8.0 occurring on the San Andreas Fault 3,500 feet

from the WMF. The resulting ground acceleration was calculated to be 1.085g, using the equation of Crouse, et al. (1987) for unconsolidated sediments. The WMF is not within a Liquefaction Hazard Zone, as indicated on the Seismic Geologic Map in the Riverside County Comprehensive General Plan. Landslides are not known to exist at the site.

### **Surface Water**

27. The Discharger reports that the WMF is not located in a 100-year flood plain.
28. Natural surface drainage at the WMF is to the southwest. Surface water bodies in the vicinity of the site consist mostly of unnamed dry washes. A dry wash that runs just north of the site is protected against erosion with rip rap. The Coachella Canal, a man-made canal to convey imported irrigation water, is located approximately ¼-mile southwest of the site.
29. The surface water drainage system on the WMF collects and transports stormwater runoff from the WMF into the existing drainage courses. The surface water drainage system consists of asphalt ditches and berms to collect storm water runoff, asphalt ditches and splash pads to transport collected runoff, and concrete energy dissipators to reduce runoff velocity. These asphalt ditches discharge to energy dissipators at the toe of the WMF slope faces. The peak runoff flow on-site is approximately 44.8 cubic feet per second (cfs). All ditches discharge runoff into concrete energy dissipators, which reduce the runoff velocity before entering existing drainage courses. Offsite surface water drainage is generally to the north west into an unnamed dry wash which terminates in a flat alluvial area approximately ½ mile from the WMF.

### **Unsaturated Zone and Groundwater**

30. The WMF is within the Coachella Groundwater Basin, which occupies over 690 square miles and extends from the San Gorgonio Pass on the west to the Salton Sea on the southeast. Defined by structural and formational limits, the Coachella Groundwater Basin is divided further into four subbasins. The WMF is in the Desert Hot Springs Subbasin, in the northeastern portion of the Coachella Groundwater Basin (California Department of Water Resources ((CDWR), 1964). Groundwater in the Desert Hot Springs Subbasin generally occurs as an unconfined aquifer contained within alluvial fan deposits of the Ocotillo Formation and recent-age sediments. These deposits consist of coarse-grained and poorly sorted sediment that contain occasional interbeds of fine-grained material. The recent-age alluvium extends to depths of over 100 feet, and the Ocotillo Formation has an estimated thickness of over 700 feet. Within the WMF vicinity, the Ocotillo and recent- age formations are bisected by the San Andreas Fault system, which likely influences the flow of groundwater in the vicinity of the WMF.
31. Hydrologic studies indicate that the site is separated into two major groundwater flow regimes by a north/south trending fault that transects the WMF. East of the fault, groundwater is postulated to flow southwest from the Little San Bernardino Mountains turning south at the fault. West of the fault, groundwater flows to the southwest. Groundwater is unconfined and occurs at approximately 160 feet and 130 feet below

the ground surface east and west of the fault, respectively. Abundant fault splays occur throughout the WMF possibly causing further aquifer compartmentalization.

32. Analyses of ground water samples collected from the groundwater-monitoring wells indicate the total dissolved solid concentrations range between 256 mg/l to 2,570 mg/l.
33. Seven groundwater-monitoring wells are currently installed around the WMF as shown in Attachment C, Landfill Footprint.

Groundwater samples collected from the following down-gradient wells during the 4th Quarter 2015 monitoring period indicate the presence and concentration of the following monitoring parameters:

<u>Parameter</u>	<u>Result µg/l</u>	<u>Well No.</u>
Tetrachloroethene (MCL <sup>1</sup> = 5.0 µg/l)	20 µg/l	MW-3
Tetrachloroethene (MCL = 5.0 µg/l)	3.4 µg/l	MW-6
Trichloroethene (MCL = 5.0 µg/l)	4.0 µg/l	MW-3
Trichloroethene (MCL = 5.0 µg/l)	0.31 µg/l	MW-6
cis-1,2-Dichloroethene (MCL = 6.0 µg/l)	2.1 µg/l	MW-3
1,1-Dichloroethane (MCL = 5.0 µg/l)	0.84 µg/l	MW-3
1,4-Dichlorobenzene (MCL = 5.0 µg/l)	0.18 µg/l	MW-3
1,4-Dichlorobenzene (MCL = 5.0 µg/l)	0.40 µg/l	MW-6
Trichlorofluoromethane (MCL = 150 µg/l)	0.6 µg/l	MW-3
Dichlorodifluoromethane (MCL = 1,000 µg/l)	1.3 µg/l	MW-1
Dichlorodifluoromethane (MCL = 1,000 µg/l)	3.8 µg/l	MW-3
Dichlorodifluoromethane (MCL = 1,000 µg/l)	0.92 µg/l	MW-4
Dichlorodifluoromethane (MCL = 1,000 µg/l)	6.1 µg/l	MW-6

34. Storm events during the operational period of the landfill caused the landfill to leak wastes, which caused some groundwater degradation. The landfill was capped in 1998 to 1999. Although VOCs have been consistently detected in the down-gradient wells, concentration trends are decreasing as a result of the installed cap, which is preventing storm water runoff from infiltrating into the landfill, and as a result of the WMF gas collection and flare system, which is described below.
35. In addition to the groundwater monitoring wells associated with the WMF, five groundwater supply wells have been identified within one mile of the property as follows:
  - a. A well on the property was used to supply water for dust control purposes at the WMF.

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<sup>1</sup> MCL = Maximum Contaminant Level pursuant to 22 CCR.

- b. A well approximately 0.7 miles west of the southwestern corner of the WMF property boundary, and approximately 0.7 miles southwest of the WMF, is reportedly used for domestic purposes.
- c. One agricultural well is located approximately 0.5 mile west of the WMF.
- d. Two agricultural wells are reported at unknown locations approximately 0.7 to 1.7 miles south of the southern boundary of the property.

### **WMF Gas Collection and Flare System**

- 36. The Discharger installed and operates an active WMF gas collection and flare system. The system consists of many vertical wells that extract gas generated by waste decomposition and treat it through a flare at low pressure, where it is ignited. The construction of the gas collection and flare system was completed on August 23, 1999.
- 37. The Discharger has installed 12 multi-level gas probes around the perimeter of the site, as shown on Attachment D, Gas Probes, attached to and made a part of this Order by reference.
- 38. The Discharger continues gas monitoring at the WMF. At the end of the Post-Closure Maintenance Period and with the approval of the Local Enforcement Agency, the South Coast Air Quality Management District (SCAQMD) and Regional Water Quality Control Board, the gas collection system, flare, and monitoring equipment will be abandoned. Instantaneous surface monitoring and gas migration sampling will be performed if necessary, or as required by the SCAQMD.

### **Concurrent Land Use**

- 39. A transfer/recycling station is located between the north WMF property boundary and the northeast corner of the landfill footprint. The total leased area is approximately 14.47 acres. The station is an enclosed structure including a 120-foot by 120-foot tipping floor and transfer loadout area. The facility also has a Household Hazardous Waste (HHW) storage box and an aboveground waste oil storage tank. The transfer/recycling station is not operated by the Discharger.
- 40. The Coachella Valley Composting Facility is located on the southern portion of the WMF, occupying approximately 35.27 acres. The compost management unit is lined with a 40-mil thick high density polyethylene (HDPE) liner system and has monitoring devices at several locations underneath the liner to monitor for a potential release beneath the liner.
- 41. The compost facility is regulated and operated under separate Waste Discharge Requirements, Board Order R7-2008-0003. On October 19, 2010 the Discharger transferred operations of the composting facility to a private party operator, Burrtec Waste Industries, Inc.
- 42. The State Water Board adopted General Waste Discharge Requirements for Composting Operations Board Order WQ 2015-0121-DWQ (Composting GO) on August 4, 2015. A WMF, including the Coachella WMF, is subject to the Composting GO if the facility has composting operations within its boundaries. If the compost



operator chooses to continue composting at the WMF, it is then required to submit the Notice of Intent (NOI) contained within Board Order WQ 2015-0121-DWQ to obtain regulatory coverage.

### **Closure**

43. The former California Integrated Waste Management Board approved the WMF Final Closure Plan in a letter dated April 28, 1997. The Local Solid Waste Enforcement Agency for Riverside County, the Riverside County Department of Environmental Health (LEA), reviewed and approved an alternative monolithic final cover for the WMF on March 16, 1998.
44. Construction of the WMF final cover began on September 8, 1998 and was completed on August 23, 1999. The final cover consisted of individual layers of compacted soil materials including from bottom to top: a minimum one-foot thick foundation layer composed of existing cover or non-selected fill materials, and a minimum four-foot thick soil layer composed of selected on-site granular (screened and moisture conditioned) borrow soils.
45. Final cover on the top of the landfill was designed with a minimum five-percent slope. Side slopes of the completed cover were designed with a minimum inclination ratio of three horizontal to one vertical.
46. Landfill settlement is monitored through the use of the survey monuments installed on-site. The landfill settlement is expected to be 17 feet, for a maximum waste height of 160 feet in the southern portion of the landfill. Differential settlement is expected to be up to one foot per 50 horizontal feet. Differential settlement may result in local depressions of the ground surface, which could cause ponding of surface water runoff. Topographic maps will be generated from the aerial surveys at a scale of one inch to 100 feet with a maximum contour interval of two feet. From the topographic maps, iso-settlement maps will be produced showing changes in elevation from the base topographic map.
47. The Discharger completed the installation of a soil moisture monitoring system and a weather station in 1999, in accordance with the Final Closure/Post Closure Maintenance Plan. The system was capable of measuring soil moisture at 6-inch intervals between the depths of 6-inches through 72-inches below the ground surface. The moisture measurements were recorded each hour as specified in the Construction Quality Assurance Plan.
48. The Discharger inspects the WMF monthly. The inspection includes the following areas: Final grade, final cover, cover vegetation, drainage control system, WMF gas monitoring system, WMF gas collection system, groundwater monitoring system, nuisance control measures for litter, vector, and fire control. The Discharger also inspects the security measures, signs, access restrictions, and all locks for monitoring and control systems.
49. The Discharger inspects the WMF monthly for erosion and settlement throughout the post-closure maintenance period. Any erosion and settlement of the cover system will

be appropriately mitigated in a manner acceptable to the Colorado River Basin Water Board's Executive Officer.

### **Financial Assurance**

50. The Discharger provided the estimated cost for post-closure maintenance of the WMF. The post-closure cost estimate is \$44,768/year or \$1,343,040 for the 30-year post-closure maintenance period. The inflation factor to calculate the annual increase in the post-closure maintenance cost estimate may be derived from the Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce.
51. Title 27, sections 20950(f) and 20380(b) require that the Discharger establish a formal financial mechanism to fund Site closure; post-closure maintenance; and remediation of the known or reasonably foreseeable releases from the facility.
52. Title 27 requires operators of solid waste landfills to demonstrate financial responsibility to CalRecycle and to maintain appropriate financial assurance mechanisms to cover all expenses related to the following:
  - a. Closure Activities (CCRs, tit. 27, § 22206) – in at least the amount of the current closure cost estimate;
  - b. Post Closure Maintenance (CCRs, tit. 27, § 22211) – in at least the amount of the current post closure cost estimate;
  - c. Operating Liability (CCRs, tit. 27, § 22216) – to compensate third parties for bodily injury and property damage caused by any accidental occurrences; and
  - d. Corrective Action (CCRs, tit. 27, § 22221) – for initiating and completing corrective action for all known or reasonably foreseeable corrective action from the landfill.
53. The Discharger maintains an enterprise fund in accordance with Title 27 Section 22241, a pledge of revenue agreement in accordance with Title 27 Section 22245, and a Certificate of Insurance in accordance with Title 27 Section 22251.

### **Storm Water**

54. 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 (BCT) to reduce or eliminate industrial storm water pollution.
55. The State Water Board adopted Water Quality Order 2014-0057-DWQ (NPDES No. CAS000001), General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Storm Water Permit), which became effective on July 1, 2015. Order 2014-0057-DWQ specifies 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 Industrial General Storm Water Permit. Landfills, land application sites, and open dumps that

receive or have received any industrial wastes are required to submit an NOI unless the permitting authority determines that storm water discharges from the area are no longer associated with the previous landfill activity because the site has been stabilized or required closure activities have been completed (see Attachment A of the Industrial Storm Water Permit; pages 12-13 of the Industrial Storm Water Fact Sheet, and 40 CFR 122.26(b)(14).) On November 25, 2008, the Colorado River Basin Water Board terminated coverage in the Industrial General Storm Water Permit for the Coachella WMF because the land use had been altered such that there is no exposure of significant materials to storm water at the site. Therefore, the Discharger is not required to obtain coverage under Order 2014-0057-DWQ for the WMF.

### **Basin Plan and Other Regulatory Considerations**

56. The Water Quality Control Plan for the Colorado River Basin (Basin Plan), which was adopted on November 17, 1993, and amended on March 7, 2017, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (including amendments adopted by the Colorado River Basin Water Board to date). Pursuant to section 13263(a) of the California Water Code (CWC), waste discharge requirements must implement the Basin Plan and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.
57. For beneficial use designations, the WMF is located in the Coachella Hydrologic Subunit. The beneficial uses of groundwater in the Coachella Hydrologic Subunit are:
  - a. Municipal supply (MUN)
  - b. Industrial supply (IND)
  - c. Agricultural supply (AGR).
58. 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. Colorado River Water Rights service this area for its domestic water supply.
59. State Water Board Resolution No. 68-16 ("Statement of Policy with Respect to Maintenance of High Quality Waters in California") requires that whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality must be maintained. Any change in the existing high quality is allowed by that policy only if it has been demonstrated to the Regional Water Board that any change will be consistent with maximum benefit to the people of the state, and will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies. The policy further requires that dischargers meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur

and that the highest water quality consistent with maximum benefit to the people of the state will be maintained.

60. Resolution 68-16 does not apply to discharges to groundwater authorized in this Order because the Coachella Sanitary Landfill has been closed since 1997, it no longer receives waste and the final cover was constructed as detailed in Findings 40-44, above.

### **California Environmental Quality Act**

61. In accordance with Section 15301, Chapter 3, Division 6, 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 California Environmental Quality Act (Public Resources Code, Section 21000 et seq.).

### **Public Participation**

62. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to issue waste discharge requirements for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
63. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.
64. Any person aggrieved by this action of the Colorado River Basin Water Board may petition the State Water Board to review the action in accordance with Water Code, section 13320 and Title 23, sections 2050 et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of adoption of this Board Order. If the thirtieth day after the adoption of this Board Order falls on a Saturday, Sunday, or a State holiday, the petition may be submitted on the following business day. Copies of the law and regulations applicable to filing petitions may be found online at [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

**IT IS HEREBY ORDERED**, pursuant to Sections 13263 and 13267 of the California Water Code, that Board Order 01-098 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. Prohibitions**

1. The discharge or deposit of any solid waste at this site is prohibited.

#### **B. Discharge Specifications**

1. Waste materials shall be confined to the existing footprint of the Waste Management Facility as described on the attached site maps.
2. The Discharger 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.8 of the attached Monitoring and Reporting Program R7-2017-0012.

3. 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. R7-2017-0012.
4. The Discharger shall follow the Water Quality Protection Standard (WQPS) for Detection Monitoring established by the Colorado River Basin Water Board in this Order pursuant to Title 27, Section 20390. The following are five parts of WQPS as established by the Colorado River Basin Water Board (the terms used in this Order regarding monitoring are defined in Part I of the attached Monitoring and Reporting Program R7-2017-0012 and revisions thereto, which is hereby incorporated by reference):
  - a. The Discharger shall test, for the Monitoring Parameters and the Constituents of Concern (COC) listed in Monitoring and Reporting Program R7-2017-0012, and revisions thereto.
  - 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 its background value.
  - c. Monitoring Points and background Monitoring Points for Detection Monitoring shall be those listed in Part II.A.8 of the attached Monitoring and Reporting Program R7-2017-0012, and any revised Monitoring and Reporting Program approved by the Colorado River Basin Water Board's Executive Officer.
  - d. The Points of Compliance are shown on Attachment D and extend through the zone of saturation.
  - e. Compliance Period – The estimated duration of the Compliance Period for this WMF is six years. Each time the Standard is not met (i.e., releases discovered), the WMF begins a Compliance Period on the date the Colorado River Basin Water Board directs the Dischargers to begin an Evaluation Monitoring Program. If the Dischargers' 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 WMF has been in continuous compliance for at least three consecutive years.

### **C. Facility and Operational Specifications**

1. The exterior surfaces of the WMF, including the intermediate and final Landfill covers, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.

### **D. Monitoring Specifications**

1. The Discharger shall implement the attached Monitoring and Reporting Program R7-2017-0012 in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the WMF, or any unreasonable impairment of beneficial uses associated with (or caused by) discharges of waste to the WMF.
2. The Discharger shall use the constituents listed in Monitoring and Reporting Program R7-2017-0012, Part III Summary of Self-Monitoring and Reporting Programs C.1., as "Monitoring Parameters". These Monitoring Parameters are subject to the most appropriate statistical or non-statistical test under Monitoring and Reporting Program R7-2017-0012, Part III.
3. 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 attached Monitoring and Reporting Program R7-2017-0012.
4. The discharge shall not cause the release of pollutants, or waste constituents in a manner that 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 attached Monitoring and Reporting Program R7-2017-0012.
5. The Discharger shall comply with the Water Quality Protection Standards (WQPS) for Detection Monitoring established by the Colorado River Basin Water Board in this Board Order and the Monitoring and Reporting Program pursuant to Title 27, Section 20390. The water quality protection standard shall apply during the active life of the waste management unit, closure period, post-closure maintenance period, and any compliance period under Title 27, section 20410. The following are five (5) parts of the WQPS as established by the Colorado River Basin Water Board (the terms of art used in this Board Order regarding monitoring are defined in Part I.B. of attached Monitoring and Reporting Program R7-2017-0012:
  - a. Constituents of Concern (CCR, tit. 27, § 20395)). The Constituents of Concern shall be those constituents listed in Part III Summary of Self-Monitoring and Reporting Programs C.2. of Monitoring and Reporting Program No. R7-2017-0012.
  - b. Concentration Limit (CCR, tit. 27, § 20400). For each Monitoring Point assigned to a Detection Monitoring Program (as described in Monitoring and Reporting Program Part II.A.7.), the concentration limit for each Constituent of Concern (or Monitoring Parameter) shall be its background value as determined and updated as follows:
    - i. In cases where the constituent's practical quantitation limit (PQL) is exceeded in less than ten percent of the historical samples, the PQL is the Concentration Limit.
    - ii. In cases where the inorganic constituent's PQL is exceeded in ten percent or more of the historical samples, a statistically based concentration limit must be defined and regularly updated as follows:

- (a) Statistically analyze existing monitoring data, and propose, to the Executive Officer, statistically derived Concentration Limits for each Monitoring Parameter at each Monitoring Point for which sufficient data exists.
  - (b) In cases where sufficient data for statistically determining Concentration Limits does not exist the Discharger shall collect samples and analyze for Monitoring Parameter(s) which require additional data. Once sufficient data is obtained, the Discharger shall submit proposed Concentration Limit(s) to the Executive Officer for approval. This procedure shall take no longer than two calendar years.
  - (c) Sample and analyze new Detection Monitoring Points, including any added by this monitoring and reporting program, until sufficient data is available to establish a proposed Concentration Limit for all Monitoring Parameters. Once sufficient data is obtained the Discharger shall submit the proposed Concentration Limit(s) to the Executive Officer for approval. This procedure shall take no longer than two calendar years.
- iii. In cases where the organic or synthetic constituent's PQL is exceeded in ten percent or more of the historical samples, a concentration limit must be defined and regularly updated. The concentration limit shall be assigned to frequently detected constituents in the following order of precedence: California drinking water maximum contaminant level (MCL), California drinking water notification level (NL), EPA Region 9 tap water screening level (SL) and laboratory practical quantitation limit (PQL).
- c.
- d. Monitoring Points and Background Monitoring Points for Detection Monitoring (CCR, tit. 27, § 20415) shall be those listed in Part II.A.7. of attached Monitoring and Reporting Program R7-2017-0012, and any revised Monitoring and Reporting Program approved by the Colorado River Basin Water Board Executive Officer. Monitoring Points and Background Monitoring Points are shown on Attachment C.
  - e. Points of Compliance (CCR, tit. 27, § 20405) shall be those Monitoring Points listed in Part II.A.7.a.ii., as shown on Attachment D, and extending down through the zone of saturation.
  - f. Compliance Period (CCR, tit. 27, § 20410). The estimated duration of the compliance period for the WMF is 30 years. Each time the Standard is not met (i.e. a release is discovered), the WMF begins a Compliance Period on the date the Colorado River Basin Water Board directs the Discharger to begin an Evaluation and 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 is automatically extended until the WMF has been in continuous compliance for at least three (3) consecutive years.

#### **E. Financial Assurance Specifications**

1. The Discharger shall obtain and maintain adequate assurances of financial responsibility for closure, post closure maintenance, and corrective action for all known and reasonably foreseeable releases from a WMU at the facility in accordance with California Code of Regulations, Title 27, Sections 20380(b), 20950, 22210, 22211, 22212, 22220, 22221, and 22222.
2. The Discharger shall demonstrate to CalRecycle and report to the Colorado River Basin Water Board that it has established an acceptable financial assurance mechanism described in California Code of Regulations, Title 27, section 22228 in at least the amount of the cost estimate approved by the Executive Officer.
3. The Discharger shall obtain and maintain the following assurances of financial responsibility with Cal Recycle:
  - a. Landfill closure and post-closure maintenance in at least the amount of an approved cost estimate adjusted annually for inflation;
  - b. Operating liability in at least the amount of one million dollars per occurrence and one million dollars annual aggregate; and
  - c. To initiate and complete corrective action for all known or reasonably foreseeable releases from the landfill and as adjusted for inflation.
4. Documents supporting the amount and active status of the required financial assurance mechanisms shall be included in the WMF's JTD and revisions. Annual cost estimates and inflation factors shall be submitted to the Colorado River Basin Water Board as an addendum to the JTD.
5. Cost Estimates for corrective action funding requirements shall also be submitted to the Colorado River Basin Water Board for approval by the Executive Officer.
6. The Discharger is required to update approved cost estimates annually to account for inflation.

#### **F. Provisions**

1. The Discharger shall follow all Closure/Post Closure Maintenance Requirements as outlined in the JTD titled "Coachella Sanitary WMF Joint Technical Document (JTD), Addendum No. 1 Final Post-Closure Maintenance Plan, June 2014."
2. The Discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Board Order.
3. **Within 90 days** of adoption of this Board Order, the Discharger shall complete and submit groundwater monitoring data available from the groundwater supply wells within half-mile radius of the WMF mentioned in Finding 33, above. Data should include a to-scale map showing the location, owner and status of all groundwater



supply wells, and the results of groundwater monitoring for all COCs listed in Monitoring and Reporting Program R7-2017-0012 in a tabular form.

4. 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 WMF 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.
5. 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.
6. The Discharger shall implement the attached Monitoring and Reporting Program No. R7-2017-0012, and revisions thereto, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the WMF.
7. This Board Order is subject to Colorado River Basin 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.
8. The Colorado River Basin 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.
9. 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.
10. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
11. 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.
12. 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.
13. 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.
14. The Preliminary and Final Closure and Post-Closure Maintenance Plan shall satisfy all requirements of Title 27 as specified by the Colorado River Basin Water Board's Executive Officer. The post-closure maintenance 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.
15. The Discharger shall maintain assurances of financial responsibility for post-closure maintenance activities in accordance with Section 22212 of Title 27. The financial responsibility assurance documents shall be submitted to Cal Recycle and the Colorado River Regional Water Quality Control Board.

16. The Discharger shall comply with all discharge specifications, prohibitions, provisions and monitoring and reporting requirements of this Order and Monitoring and Reporting Program R7-2017-0012 and future revisions thereto, as specified by the Colorado River Basin Water Board's Executive Officer.
17. The Discharger shall immediately notify the Colorado River Basin 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.
18. The Discharger shall within 48 hours of a significant earthquake event, submit to the Colorado River Basin Water Board a detailed post-earthquake report describing any physical damages to the containment features, groundwater monitoring and/or WMF gas control facilities and a corrective action plan, in if necessary, to be implemented at the WMF.
19. The Discharger shall maintain visible monuments identifying the boundary limits of the entire Waste Management Facility.
20. 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.
21. 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.
22. 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.
23. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer, proposing modifications to the Monitoring and Reporting Program. The Discharger shall implement any monitoring changes in the revised Monitoring and Reporting Program approved by the Executive Officer upon receipt of a signed copy of the revised Monitoring and Reporting Program.
24. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with Chapter 30, Division

3, Title 23 of the California Code of Regulations (CCRs), as groundwater raw data uploads electronically over the internet into the State Water Board's GeoTracker <https://geotracker.waterboards.ca.gov/> database. Documents that are normally mailed by the Discharger, such as regulatory documents, narrative technical monitoring program reports, and such reports submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall also be uploaded into GeoTracker in the appropriate Microsoft software application, such as word, excel, or an Adobe Portable Document Format (PDF) file. Large documents are to be split into manageable file sizes appropriately labelled and uploaded into GeoTracker. The Facility is identified in the GeoTracker by the global identification number L10003659217 and in the California Integrated Water Quality Systems (CWIQS) by waste discharge identification (WDID) No. 7A 33 0305 061.

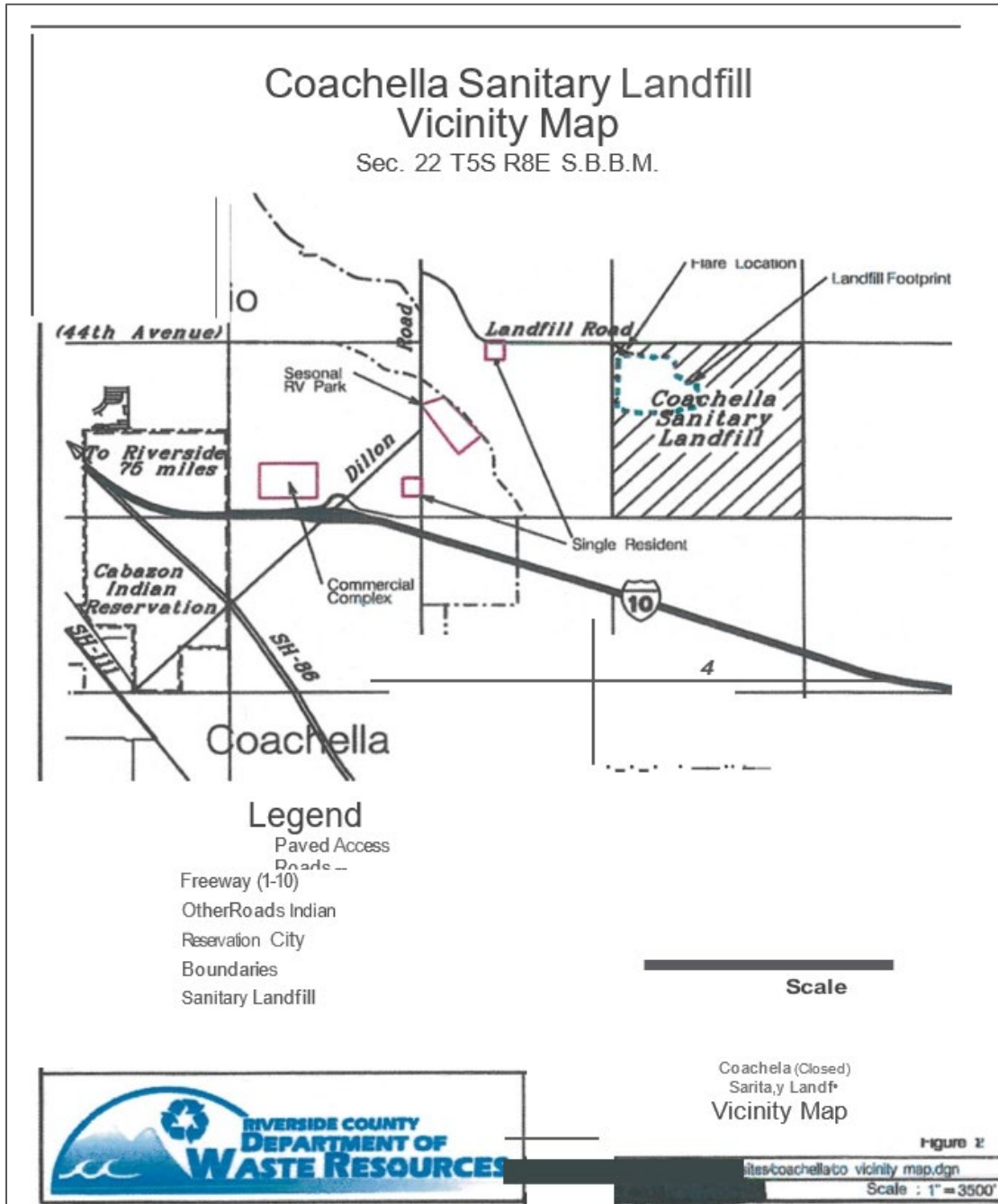
I, Jose L. Angel, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 30, 2017.

*Original Signed By:*

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JOSE L. ANGEL, P.E.  
Executive Officer

**ATTACHMENT A**



VICINITY MAP  
RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES,  
OWNER/OPERATOR  
COACHELLA CLASS III SANITARY LANDFILL  
NORTH OF COACHELLA – RIVERSIDE COUNTY

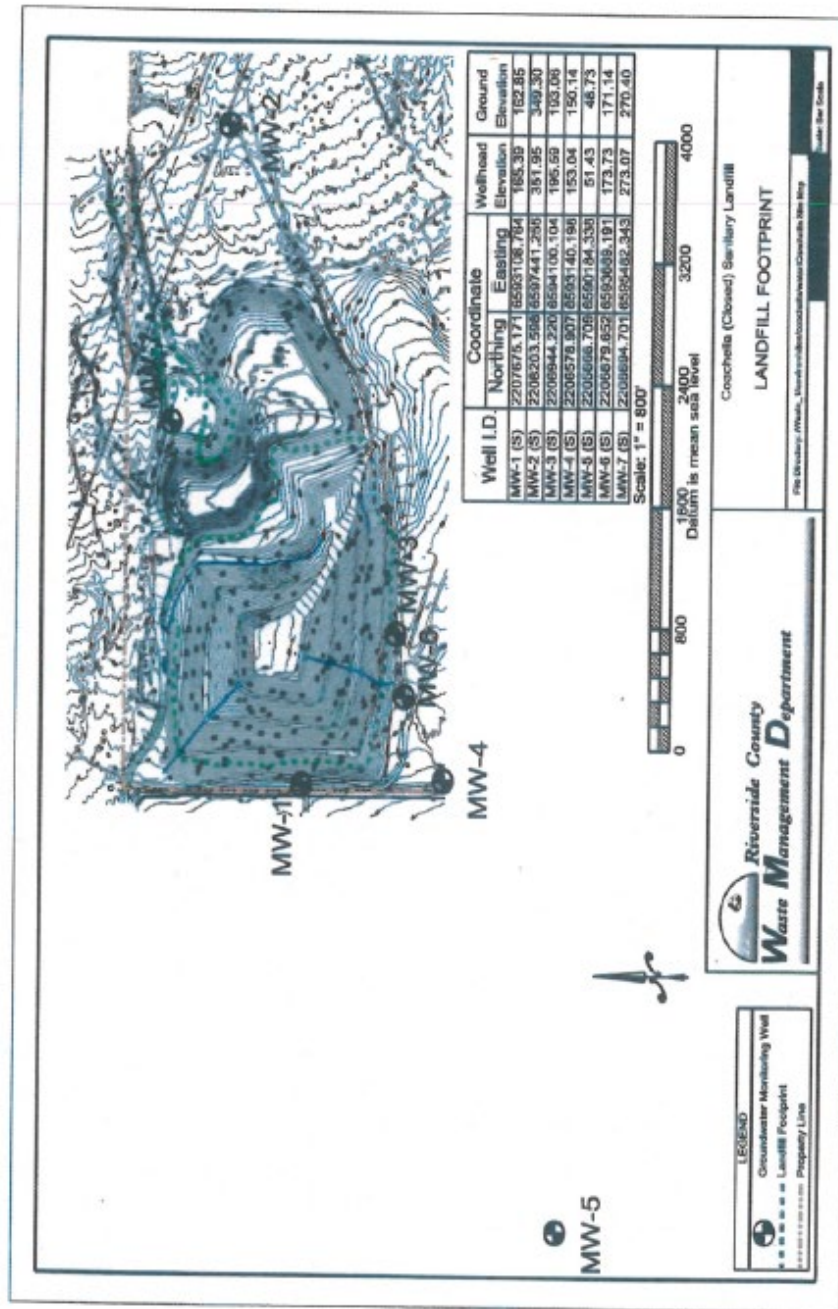
**ATTACHMENT B**



SITE MAP  
RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES,  
OWNER/OPERATOR  
COACHELLA CLASS III SANITARY LANDFILL  
NORTH OF COACHELLA – RIVERSIDE COUNTY

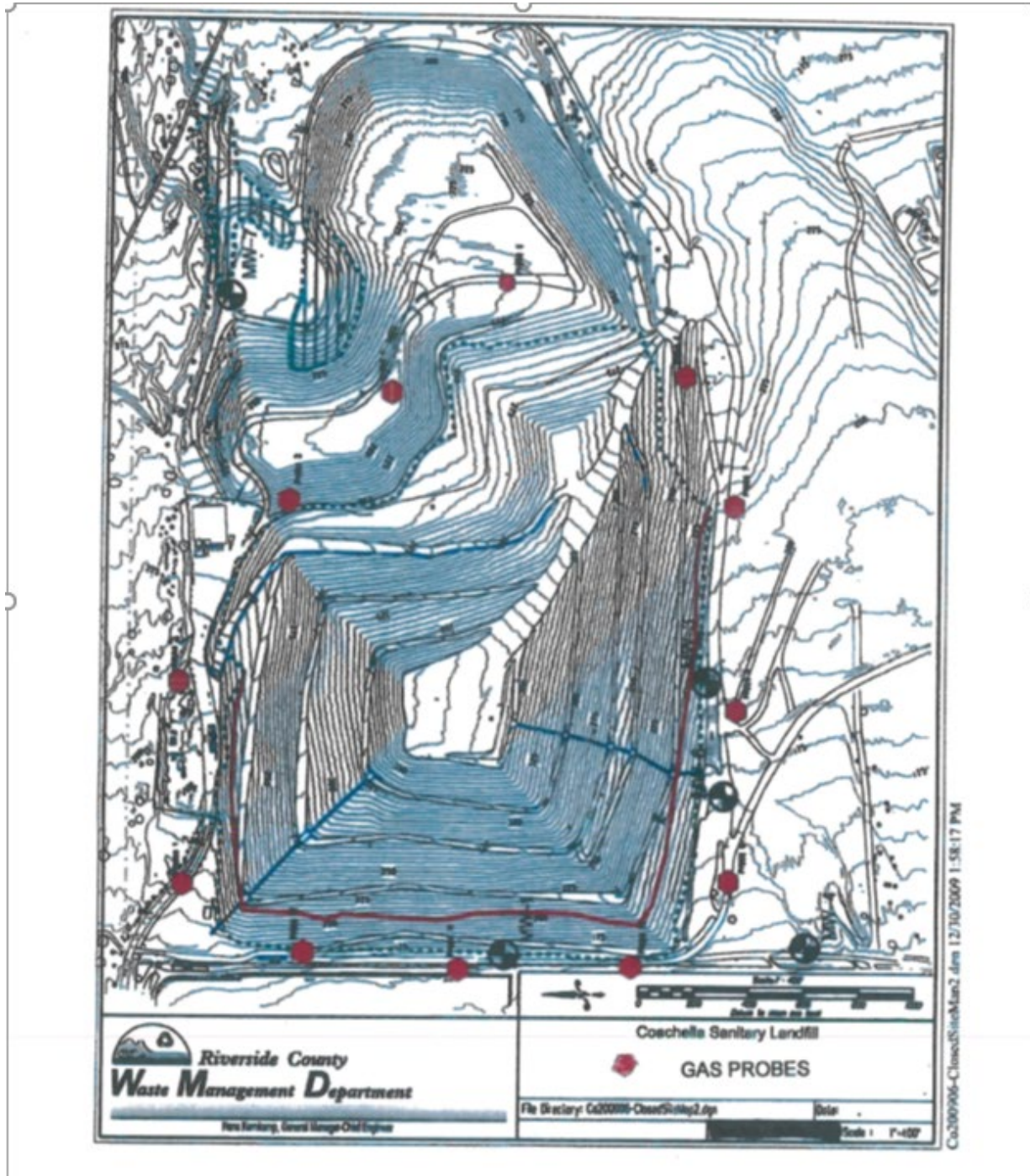


**ATTACHMENT C**



LANDFILL FOOTPRINT SHOWING MONITORING WELL LOCATIONS  
RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES,  
OWNER/OPERATOR  
COACHELLA CLASS III SANITARY LANDFILL  
NORTH OF COACHELLA – RIVERSIDE COUNTY

**ATTACHMENT D**



**GAS PROBES**  
RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES,  
OWNER/OPERATOR  
COACHELLA CLASS III SANITARY LANDFILL  
NORTH OF COACHELLA – RIVERSIDE COUNTY