

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

ORDER R7-2014-0013

**WASTE DISCHARGE REQUIREMENTS  
FOR  
IMPERIAL LANDFILL, INC., OWNER/OPERATOR  
ALLIED IMPERIAL LANDFILL  
CLOSURE AND POST CLOSURE MAINTENANCE OF  
ALLIED IMPERIAL CLASS III LANDFILL UNIT 1  
and  
ALLIED IMPERIAL ACTIVE CLASS III LANDFILL UNIT 2  
  
MUNICIPAL SOLID WASTE MANAGEMENT FACILITIES  
East of Imperial – Imperial County**

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

1. Imperial Landfill, Inc., 3354 Dogwood Road, Imperial, CA 92251 (Discharger), is the owner and operator of Allied Imperial Landfill, 104 East Robinson Road, Imperial, California 92251 (Facility), submitted to the Colorado River Basin Water Board a Report of Waste Discharge (ROWD) and an application for Waste Discharge Requirements (WDRs) including a Form 200, both dated March 17, 2011. The ROWD was submitted in the form of a Joint Technical Document, which was required pursuant to California Code of Regulations, Title 27, Sections 21585 and 21710, in response to regulation by both the Colorado River Basin Water Board and the County of Imperial, the local Enforcement Agency.
2. The Facility is located at 104 East Robinson Road in Imperial, California, as shown on the Location Map, Attachment A, attached hereto and made a part of this Board Order by this reference. Access to the site is via either State Route (SR) 111 or Dogwood Road as shown on the Location Map.
3. These WDRs will regulate the following two (2) waste management units (WMUs) at the Facility:
  - a. Unit 1: A closed, unlined, 31-acre Class III landfill, WDID No. 7A 13 0300 011.
  - b. Unit 2: An active, lined, 131-acre Class III landfill, WDID No. 7A 13 0300 013.
4. The WMUs are currently regulated by two separate WDRs and the Discharger has requested that the board orders be combined. Board Order R7-2011-0040, adopted in September 2011, regulated the active landfill, and Board Order R7-2005-0093, adopted in November 2005, regulates the closed landfill. This Board Order combines the 2005 and 2011 orders and updates the content to incorporate the laws and regulations as set forth in the California Water Code and the combined State Water Resources Control Board (SWRCB)/California Integrated Waste Management Board (CIWMB) Regulations, Division 2, Title 27 (hereinafter referred to as Title 27) and federal regulations under

Subtitle D of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6901 et seq.).

5. Definitions: The following terms used in this Board Order are as defined:
  - a. Discharger – Any person who discharges waste that could affect the quality of the waters of the state, and includes any person who owns a waste management unit or who is responsible for the operation of the waste management unit (Title 27, California Code of Regulations).
  - b. Waste Management Facility (WMF) – The entire parcel of property at which waste discharge operations are conducted. Such a facility may include one (1) or more waste management units.
  - c. Waste Management Unit (WMU) – An area of Land, or a portion of a Waste Management Facility at which waste is or was discharged. The term includes containment features, ancillary features for precipitation and drainage control and monitoring.
  - d. Landfill – A waste management unit at which waste is discharged in or on land for disposal. It does not include surface impoundments, waste piles, land and soil treatment.
  - e. Municipal Solid Waste (MSW) - as defined in 40 CFR Part 258.
6. The Facility site is located on two Imperial County Assessor's Parcels:
  - a. Assessor's Parcel Number (APN) 044-030-024, which comprises the entire existing Facility, including the operating 42-acre WMU, the closed 31-acre WMU, the construction, demolition and inert waste (CDI) operations, green waste operations, the scale house, and the office/shop buildings (177.34 acres). The legal description of this parcel is: Portion of Tracts 197 and 223 in Township 15 South, Range 14 East, San Bernardino Base & Meridian, in an unincorporated area of the County of Imperial, State of California.
  - b. APN 044-030-006, which is located immediately west of, and adjacent to, the above parcel, and comprising future expansion area and the remainder area out to Dogwood Road (160.04 acres). The legal description of this parcel is: Tract 222, Section 9, Township 15 South, Range 14 East, San Bernardino Base & Meridian, in an unincorporated area of the County of Imperial, State of California.
7. The Facility started operating in the 1960's as a burn site. On December 9, 1971, the Colorado River Basin Water Board adopted Board Order 71-065 providing regulatory coverage for the landfill operation. Board Order 71-065 was subsequently updated by Board Orders 75-006, 83-060 as amendment by 93-071, 97-073, 98-082, R7-2003-0100, R7-2005-0093, R7-2005-0102 and R7-2011-0040. The Facility has been known by multiple names, including the El Centro Sanitation Service Company, the Imperial County Sanitation Company, the Allied Imperial Landfill, and the Imperial Landfill Inc. The Facility was purchased in 1990 by Republic Imperial Acquisition Corporation, and in

2001 its ownership was transferred to Imperial Landfill Inc., a subsidiary of Allied Waste Industries. In 2008 Republic Services, Inc. purchased Allied Waste Industries.

8. On September 15, 1993, the Colorado River Basin Water Board adopted Order 93-071, which amended all existing municipal solid waste landfill Board Orders to comply with federal regulations. Current federal regulations are incorporated herein.
9. The current Facility is utilized as follows:
  - a. Unit 1 is an approximately 31-acre closed WMU that is unlined and does not have a Leachate Collection and Removal System (LCRS) in the eastern portion of the Facility.
  - b. Unit 2 is the active 131-acre lined WMU that includes a composite liner, which consists of two (2) feet of clay and a 60-mil High Density Polyethylene (HDPE) liner, and does include an operational LCRS.
  - c. The 131-acre WMU includes an older 42-acre WMU and an 89-acre expansion WMU. The liner constructed in the manner described for Unit 2 above and the LCRS system will be constructed in a phased approach beginning with its first, already completed, 5-acre cell.
  - d. An approximately 2-acre unlined area designed for short-term storage of green waste that is chipped and used for daily or intermediate cover.
  - e. Office and shop buildings are located at the entrance to the facility in the southwest corner of the property, and a scale house is located approximately 1,000 feet northeast of the entrance near the middle of the property.
10. The closed 31-acre Class III WMU is unlined and does not have a leachate collection system and stopped accepting waste in 2000.
11. From approximately 1987 until 1992, spent geothermal brine filters were disposed of in the 31-acre Class III WMU. The filters were found to have met the criteria for California hazardous waste under the California Code of Regulations (CCR) Title 22 due to heavy metal content (specifically, antimony, arsenic, mercury, and selenium). On October 14, 1992, the Discharger applied to the Department of Toxic Substances Control (DTSC) to classify the spent filters as a special waste. The spent filters met all of the technical and analytical requirements for classification as a special waste in accordance with CCR Title 22. On December 31, 1996, DTSC granted the Discharger a variance to allow the spent filters already present at the landfill to remain at the landfill as a special waste.
12. In the final Closure/Post-Closure Maintenance Plan submitted to the Colorado River Basin Water Board on May 13, 1998, the Discharger proposed a monolithic final cover design. This design differed from the original proposed prescriptive cover design upon which the DTSC had granted the variance. On August 25, 1998, DTSC approved the revised monolithic final cover design proposed by the Discharger. The final Closure/Post-Closure Maintenance Plan, including the monolithic cover design for the

31-acre WMU, was approved by the Colorado River Basin Water Board's Executive Officer on September 2, 1998.

13. The monolithic cover for the 31-acre WMU was constructed during 2002. The final cover design consisted of the following:
  - a. Foundation Layer – one foot of existing interim landfill cover and one foot of soil with permeability of at least  $1 \times 10^{-4}$  cm/sec.
  - b. Low Permeability and Protection Layer – Two feet of soil with permeability of at least  $1 \times 10^{-4}$  cm/sec.
  - c. Gravel Armor – The monolithic cover was armored with four to six inches of pit-run rock to further protect against erosion.
14. The active, existing 131-acre WMU has a projected total volume of approximately 19,514,700 cubic yards (cy) and was formed by integrating the older 42-acre lined WMU with the new 89-acre lined WMU. The phased cells of the 89-acre lined WMU are constructed on the 160-acre parcel immediately west of and contiguous to the 42-acre lined WMU. This will increase the Facility's remaining life to approximately 30 years. This active landfill will be closed as a single unit after reaching maximum capacity.
15. The 131-acre lined WMU includes a new scale house, a new facility entrance and a new public drop off area, as shown on Attachment B appended hereto and made a part of this Board Order by this reference.
16. The 89-acre expansion will be constructed contiguously with the existing 42-acre WMU and will be a lined, phased, multi-cell unit, which will be compliant with Subtitle D requirements and designed by a registered professional engineer. Design and liner system details are shown in Attachment C, appended hereto and made a part of this Board Order by this reference. In general, the liner can be summarized as follows, beginning at the bottom of the liner system: 1) prepared subgrade, 2) geogrid, 3) two feet of low-permeability, compacted clay, 4) 60-mil high density polyethylene (HDPE) liner, 5) a geocomposite drainage layer, and 6) a two-foot soil protective layer. Additionally, the expansion WMU will be equipped with a leachate collection and recovery system, and a landfill gas collection and recovery system as it fills to capacity.
17. Land use within 1,000 feet of the Facility is as follows:
  - a. Fallow and cultivated agricultural fields.
  - b. Five (5) residences located within 900 feet of the Facility property boundary.
18. Including the expansion, the total property encompasses approximately 337 acres. The Facility is bounded on the north by McCall Drain 1B and Neckel Road; to the west by Dogwood Road; to the south by Robinson Road; and to the east by Rose Canal.
19. The Facility is not located in a 100-year flood plain.
20. The Facility is centrally located within the Imperial Valley Physiographic Province. The valley slopes gently to the northeast on a very flat plain. General land elevation is between 75 and 85 feet below mean sea level (MSL) in the vicinity of the Facility. The

Imperial Fault scarp, part of an active fault system, crosses the Facility site and adds about 10 to 15 feet of local relief at the northeast corner of the property. Along the eastern boundary of the Facility, vertical components of movement of the Imperial Fault have produced a scarp that adds about 10 to 15 feet to the local elevation on the western side of the fault trace. This scarp is dissected at generally right angles to the fault trace by erosional gullies and arroyos except where obliterated by man-made construction. At the Facility, unconsolidated Quaternary clay, silt, and fine sand have been deposited by ancient Lake Cahuilla and local sediments from recent erosional reworking from the surficial deposits.

21. The dominant geological feature in the region is the Salton Trough, which forms part of the Colorado Desert Geomorphic Province. The Imperial Valley is essentially a flat featureless alluvial basin along its western and eastern boundaries. Below the alluvial cover of Imperial Valley lay an unexposed succession of Tertiary and Quaternary sedimentary rocks thought to be at least 20,000 feet thick. Surface sediments consist of Holocene clay and silt alluvium grading to sandy gravel near the mountains.
22. During Quaternary time, from at least 13,000 years ago to as recently as several hundred years ago, the central parts of Imperial Valley, including the site, lay beneath ancient Lake Cahuilla. Lake Cahuilla originated by periodic over flow and diversions of the Colorado River into the Salton Basin. Sediments from Lake Cahuilla consist primarily of silt and clay in the central portion of the basin.
23. Active fault zones occur in the Valley. The principal fault zones consist of (1) the San Andreas system which parallels the northeast margin of the Salton Trough and obliquely transects its southwest flank; (2) the Clark and Coyote Creek branches of the San Jacinto fault zone which transects the southwest flank of the Salton Trough; and (3) the Elsinore fault zone along the southwest edge of the trough, (4) the Brawley fault zone, including the seismic zone that marks its northward extension, and the Imperial, Superstition Hills, and the Superstition Mountain faults are situated on or nearest the axis of the trough. With the exception of the Brawley fault zone, the above-named faults display the surficial features characteristic of the San Andreas system throughout California; linearity, northwest-southeast trend, physiographic evidence of recent activity and right-lateral displacement.
24. The dominant tectonic feature in the area is the Imperial Fault. The fault trends southeast through the Imperial Valley, cuts across the northeast corner of the WMF property west of State Route 111 and passes east of the City of El Centro. Movement on the Imperial Fault is well documented from extensive field investigations conducted after the Imperial Valley earthquakes of 1940 and 1979. Although displacement along the fault is generally right lateral, some vertical components of displacement exist.
25. The Discharger reports that studies conducted since 1992 have revealed the presence of other faults, roughly parallel to but smaller than the Imperial Fault, trending through areas of the central portion of the WMF. In 1979, two surface ruptures were mapped by the U.S. Geological Survey, following the earthquake along the Imperial Fault in October 1979. Initial shallow trench evaluation of the two surface ruptures in 1992 was conducted by Cascade Pacific Engineering, Inc., resulting in verification of subsurface deformation coincident with the northern mapped rupture. Subsequently, two additional

shallow trenching investigations were conducted by EMCON. The objective of the investigations was to document any fault or fault-related features regardless of size. The results of the investigations include evidence of a number of discontinuities, ancillary faults existing along a north/south zone in the central portion of the Facility. The faults in areas of the central zone appear to be ancillary to the Imperial Fault. In contrast to the strike-slip displacement of the Imperial Fault, relative movement of the ancillary faults appears to be normal, with the downthrown side being to the east.

26. The Discharger reports that there are no known Holocene faults within 200 feet of the footprint of the Unit 1 and Unit 2 WMUs.
27. The climate of the region is arid. Climatological data obtained from measurements from 1951 to 1980 indicate an average seasonal precipitation of 3 inches and an average annual pan evaporation rate greater than 75 inches.
28. The wind direction follows two general patterns:
  - a. Seasonally from fall through spring, prevailing winds are from the west and northwest. Most of these winds originate in the Los Angeles basin area. Humidity is lowest under these conditions.
  - b. Summer weather patterns are often dominated by an intense, heat-induced low pressure area that forms over the interior deserts, drawing air from the area to the south of the Facility. Humidity is highest under these conditions.
29. There are no perennial natural surface water features at the site. Manmade surface water structures consist of a canal system that conducts water from the All-American Canal and agricultural drains which lead to the Alamo and New Rivers, and ultimately discharge to the Salton Sea. These are:
  - a. Canals: On the south side, lying between the Facility and McCall Drain 1, the Dogwood Canal feeds irrigation water to the areas east of the Facility. The Date Canal lies just north of McCall Drain 1B along the north boundary of the site. During closure activities of the 31-acre unlined landfill, portions of the McCall Drain 1B to the north and the Dogwood Canal to the south were piped underground.
  - b. Drains: The two local agricultural drains in the adjoining area, the McCall Drains 1B and 1 are located on the north side and south side of the Facility, respectively.
30. Surface drainage from the WMU is controlled and directed into the drainage system via berms, ditches, and culverts. The WMU was re-contoured in early 1992 to minimize ponding of water in interior areas and to prevent uncontrolled runoff from eroding exterior slopes of the 31-acre landfill. Surface drainage from exterior slopes along the south, east, and north sides of the 31-acre landfill is now prevented from leaving the site by exterior berms which direct runoff into surface channels and into the McCall Drain 1B via a 12-inch outlet pipe located near the northeast corner of the site. The drains carry very low quality water relative to the irrigation canals, typically showing high levels of conductivity due to dissolved salts derived from natural and agricultural sources.

31. The Discharger reports that, in general, ground water in Imperial Valley is of poor quality. The total dissolved solids range from approximately 15,000 ppm in shallow ground water to 2,000 ppm in some deeper aquifers found 1,000 feet below ground surface.
32. The Discharger has performed several hydrological and geological studies, including drilling geotechnical wells to log subsurface conditions and establish water levels beneath the WMF. The Discharger reports that:
  - a. Average depth to shallow ground water ranges from 8 to 14 feet below ground surface.
  - b. The general ground water flow at the Facility is from the southwest to the northeast.
  - c. The hydraulic conductivity at this facility has not been determined. .
  - d. The shallow aquifer appears confined. However, the deeper aquifer is under pressure and has an upward vertical gradient.
33. 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 NPDES permits and to implement Best Conventional Pollutant Technology (BCT) to reduce or eliminate industrial storm water pollution.
34. The State Water Resources Control Board adopted Order No. 97-03-DWQ (Industrial Storm Water General Permit No. CAS000001) specifies WDRs for discharges of storm water associated with industrial activities, including landfill facilities. The Discharger is required to submit of a Notice of Intent (NOI) to be covered under the Industrial Storm Water Permit or subsequent replacement.
35. The storm water federal regulations also require discharges of storm water to surface waters associated with construction activity, including clearing, grading, and excavation activities (except operations that result in disturbance of less than five (5) acres of total land area and which are not part of a larger common plan of development or sale) to obtain a National Pollutant Discharge Elimination System (NPDES) permit and to implement Best Conventional Pollutant Control Technology and Best Available Technology Economically Achievable to reduce or eliminate storm water pollution. (40 CFR 122.26(b)(14)(x).) On December 8, 1999, federal regulations promulgated by USEPA (40 CFR Parts 9, 122, 123, and 124) expanded the NPDES storm water program to include, in pertinent part, storm water discharges from construction sites that disturb a land area equal to or greater than one acre and less than five acres, or is part of a larger common plan of development or sale (small construction activity). (40 CFR 122.26(b)(15).)
36. To comply with these construction storm water federal requirements, the State Water Resources Control Board (State Water Board) adopted Water Quality Order No. 2009-0009-DWQ (NPDES No. CAS000002), "WDRs for Discharges of Storm Water Runoff Associated with Construction Activity" (Construction General Permit, or CGP). The CGP

specifies WDRs for discharges of storm water associated with construction activity that results in a land disturbance of one acre or more or is part of a larger common plan of development or sale. The CGP specifies certain construction activities that are exempted from coverage. Because these exemptions do not apply to the Discharger's proposed phased construction activity and because this activity will result in a land disturbance of more than 1 acre, the Discharger is subject to the CGP requirements.

37. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), which was adopted on November 17, 1993, and amended on November 16, 2012, designates the beneficial uses of ground and surface waters in this Region.
38. The Allied Imperial Landfill is located in the Imperial Hydrologic Unit. The beneficial uses of groundwater in the Imperial Hydrologic Unit are:
  - a. Municipal (MUN)<sup>1</sup>
  - b. Industrial (IND)
39. The Discharger currently accepts municipal solid waste (MSW) from the cities of Imperial, Calipatria, and El Centro, and other entities in the surrounding unincorporated areas of Imperial County. The Discharger does not plan to accept waste from outside of Imperial County, except for a limited amount from the Borrego Springs area, and limited wastes originating in Mexico that have been seized by U.S. Customs or legally imported by US.-based transnational companies for in-country disposal under requirements of the 1994 North American Free Trade Agreement.
40. Based on the projected waste generation rate and the capacity of the 89-acre expansion WMU, the Facility is expected to accept waste through the year 2040.
41. The Discharger reports that currently accepted waste types include residential refuse, commercial solid wastes, industrial wastes, construction and demolition debris, inert solid fill, and tires, and that unacceptable waste types are any hazardous or designated wastes.
42. The County of Imperial, acting as the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.), prepared an Environmental Impact Report (EIR) for the landfill expansion project. On September 21, 2010, prior to approving the project, the County of Imperial certified that the final EIR prepared for the proposed project was completed in compliance with CEQA; the final EIR was presented to the Imperial County Board of Supervisors, and that decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and the final EIR reflects the County's independent judgment and analysis. On September 24, 2010, the County filed a notice of determination of its decision to approve the project. As a Responsible Agency under CEQA, the Colorado River Basin Water Board has considered the EIR and the potential impacts to water quality identified and addressed by the County of Imperial.

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<sup>1</sup> The actual municipal usage is limited to only a small portion of the ground water unit.

43. The proposed project that was the subject of the 2010 EIR was the 89-acre expansion which extended the 42-acre active landfill to the now existing 131-acre active Unit 2 WMU. This Order combines the requirements of two existing WDRs. This Order does not allow for additional expansion beyond the 31-acre closed Unit 1 WMU and 131-acre active Unit 2 WMU. The mitigation measures set forth in this Order are necessary to reduce any significant environmental impacts of the project to less than significant levels.
44. The monitoring and reporting requirements in Monitoring and Reporting Program R7-2014-0013, and revisions thereto, attached hereto and made a part of this Order by this reference, are necessary to determine compliance with these WDRs and to determine the facility's impacts, if any, on receiving waters.
45. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to issue these WDRs and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
46. The Colorado River Basin Water Board in a public meeting heard and considered all comments pertaining to this discharge.
47. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
48. The monitoring and reporting requirements in Monitoring and Reporting Program R7-2014-0013, and the requirement to monitor the installed groundwater monitoring wells, is necessary to determine compliance with these WDRs, and to determine the facility's impacts, if any, on receiving water. The State's electronic database, GeoTracker Information Systems, facilitates the submittal and review of monitoring and reporting.

IT IS HEREBY ORDERED that Orders R7-2011-0040 and R7-2005-0093 be rescinded, except for enforcement purposes, and in order to meet the provisions contained in Division 7 of the California Water Code, RCRA Subtitle D and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations adopted thereunder, the Discharger shall comply with the following requirements regarding the discharge of waste to the existing 131-acre WMU as well as post-closure maintenance of the closed 31-acre WMU.

#### **A. Prohibitions**

1. Additional discharge of waste to land at the closed 31-acre Unit 1 WMU is prohibited.
2. The discharge of waste to land not owned and controlled by the Discharger is prohibited.
3. The discharge of waste to areas outside the current 131-acre Unit 2 WMU is prohibited.
4. The discharge of the following wastes, as defined in Title 27, Chapter 3 of the California Code of Regulations (Title 27) is prohibited at the Allied Imperial Landfill:

- a. Hazardous waste, as defined in California Code of Regulations, Title 22, Section 66261, except for waste that is hazardous only due to the friable asbestos content;
  - b. Designated waste as defined in Title 27;
  - c. Liquid waste (moisture content more than 50%); as defined in Title 27;
  - d. Recyclable White goods (i.e. large intact household appliances);
  - e. Infectious wastes;
  - f. Geothermal wastes, with limited exceptions approved by the Colorado River Basin Water Board and LEA, and as specifically defined in Section 1.7.2.3 of the Facility's Joint Technical Document, which is incorporated into this Board Order by this reference;
  - g. Incinerator ash, unless approved by the Colorado River Basin Water Board's Executive Officer and allowed under California regulations;
  - h. Radioactive waste; and
  - i. Wastewater treatment plant sewage sludge that has a moisture content greater than 40 percent.
5. The Discharger shall neither cause nor contribute to the following conditions:
- a. Contamination or pollution of ground water via the release of waste constituents in either the liquid or gaseous phase.
  - b. Increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil or other geologic material outside of the WMU, if such waste constituents could migrate to waters of the state, in either liquid or gaseous phase, and cause contamination, pollution, or nuisance.
6. The discharge of waste to surface water, surface water drainage courses, or to ground water is prohibited.
7. The discharge or deposit of wastes that could cause erosion or decay, or otherwise reduce or impair the integrity of containment structures is prohibited.
8. The discharge or deposit of waste is prohibited if such waste, when mixed or commingled with other wastes in the 131-acre Unit 2 WMU, could (1) produce chemical reactions that create heat or pressure, fire or explosion, toxic by-products, or reaction and require a higher level of containment than provided by this WMU or (2) impair the integrity of the containment structure.
9. Odors, vectors and other nuisances of waste origin beyond the Facility boundary are prohibited.

## B. Specifications

1. The treatment or disposal of wastes at this Facility 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 final cover for the closed 31-acre Unit 1 WMU is constructed as follows:
  - a. Foundation Layer – One foot of existing landfill cover and one foot of soil with a permeability of at least  $1 \times 10^{-4}$  cm/sec.
  - b. Slope – Constructed to have a slope of three (3) percent and the completed side slopes have a 3:1 horizontal to vertical slope.
  - c. Low Permeability and Protection Layer – Two feet of soil with a permeability of at least  $1 \times 10^{-4}$  cm/sec.
  - d. Gravel Armor – The monolithic cover was armored with four to six inches of pit-run rock to further protect against erosion.
3. The Discharger has placed erosion control blankets to mitigate side slope erosion of the final cover at the closed 31-acre Unit 1 WMU.
4. The Discharger shall inspect the closed 31-acre Unit 1 WMU monthly for evidence of erosion, ponding, cracking, and slope failure. The monthly inspection shall also include recording any evidence of passive gas system failure, such as any unusual ground surface seeps, odors, or disturbance of the cover that appears along the pipe alignment.
5. The Discharger shall take appropriate measures to repair and correct any damage observed at the Facility in a timely manner.
6. "Treated wood" wastes may be discharged, but only to an area equipped with a composite liner and leachate collection and removal system and shall be handled in accordance with the requirements set forth in either California Health and Safety Code Section 25143.1.5 or Section 25150.7, whichever is applicable. "Treated wood" means wood that has been treated with a chemical preservative for purposes of protecting the wood against attacks from insects, microorganisms, fungi, and other environmental conditions that can lead to decay of the wood, and the chemical preservative is registered pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. section 136 et seq.). This "treated wood" may include, but is not limited to, waste wood that has been treated with chromated copper arsenate (CCA), pentachlorophenol, creosote, acid copper chromate (ACC), ammoniacal copper arsenate (ACA), ammoniacal copper zinc arsenate (ACZA), or chromated zinc chloride (CZC).
7. Treated wood must be managed to ensure consistency with either Section 25143.1.5 or 25150.7 of the Health and Safety Code, whichever is applicable. If a verified release is detected from the unit where treated wood is disposed, the disposal of treated wood will be terminated at the unit with the verified release until corrective action ceases the release.
8. The Facility and Unit 1 and Unit 2 WMUs shall be protected from any washout or erosion of wastes or covering material and from inundation due to rainfall.

9. Drainage features within the Facility shall be designed to control the runoff from a 100-year, 24-hour storm event.
10. The Discharger shall implement a self-monitoring and reporting program in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Facility, or any unreasonable impairment of beneficial uses associated with or caused by the management and disposal of waste.
11. Wastes shall not be discharged on any ground surface that is less than five (5) feet above the highest anticipated ground water level.
12. Pursuant to Title 27 of the California Code of Regulations, each future WMU of this Facility shall have:
  - a. A liner
  - b. A leachate collection and removal system (LCRS);
  - c. A gas collection/removal system; and
  - d. A vadose zone leachate and gas monitoring system, if technically feasible.
13. The nature and extent of the vadose zone leachate and gas (if applicable) monitoring system shall be reviewed, when appropriate, to determine whether expanded or reduced monitoring requirements shall be implemented based on actual operating experience. The burden of demonstrating the appropriateness of any reduced monitoring requirements shall be placed upon the Discharger.
14. Leachate collection sumps shall be designed and operated to keep leachate levels at a minimum and provide easy access for inspection and monitoring, and shall have double containment. Detailed designs for leachate collection sumps for the WMU shall be approved by the Colorado River Basin Water Board's Executive Officer prior to construction.
15. The Discharger shall provide interim cover to the MSW as follows:
  - a. Daily cover – a minimum of six (6) inches of compacted soil, or alternative material, shall be placed over the exposed waste at least once in every 24 hours.
  - b. Intermediate cover – a minimum of 12 inches of compacted soil, or equivalent, shall be placed over the waste area that has been inactive for a period greater than 180 days. Existing daily cover may be used as part of the intermediate cover.
16. The intermediate and daily covers for the active WMU shall:
  - a. Control disease vectors pursuant to 40 CFR Section 258.22;
  - b. Minimize infiltration into the WMU;
  - c. Control erosion and convey run-off to the storm water management system at manageable, non-scouring flow rates;
  - d. Control and contain landfill gas; and
  - e. Minimize the potential for windblown litter and particulates.

17. Any alternative materials used for daily or intermediate cover that may have a different characteristic and thickness, compared to the requirements of this Board Order, shall be approved by the Colorado River Basin Water Board's Executive Officer prior to use. The Discharger shall demonstrate that the alternative material and thickness will control disease vectors without presenting a threat to human health and the environment.
18. All LCRS's shall be designed to:
  - a. Function without clogging throughout the active life of the WMF and during the post-closure maintenance period.
  - b. Maintain less than 1-foot depth of leachate over any of the landfill liners, except for conditions where the first lift of the MSW has not been placed in a segment.
  - c. Remove twice the maximum anticipated daily volume of leachate from the landfill.
  - d. Be of sufficient strength and thickness to prevent collapse under the pressures exerted by the overlying waste, waste cover material, and by any equipment used at the landfill.
19. The Discharger shall test the LCRS on an annual basis. A detailed plan for testing the LCRS performance shall be submitted to the Colorado River Basin Water Board's Executive Officer for approval. The Discharger shall submit the test results to the Colorado River Basin Water Board.
20. Any monitoring and reporting of the leachate shall be done as specified in the self-monitoring program and revisions thereto.
21. The Discharger shall place any leachate removed from the LCRS sumps into a leachate management system as described herein.

Prior to operation, the Discharger shall submit a detailed Leachate Management Plan for the Facility acceptable to the Colorado River Basin Water Board's Executive Officer. This plan shall estimate the quantity of leachate produced and stored, and describe the ultimate disposal point of the leachate. The report shall evaluate the quantity of the leachate produced from each WMU and determine the maximum safe operating level for the leachate containment facilities. If leachate collects, a plan shall be provided with a detailed assessment of alternative disposal methods together with a plan for implementation of preferred alternatives. If re-circulation of leachate is to be considered, the Discharger must demonstrate that the quantity of leachate being re-circulated will not result in a solid-to-liquid ratio less than 5:1 by weight in that WMU at the Facility.
22. The Discharger shall ensure that the foundation of the WMU and the structures which control leachate, surface drainage, erosion and gas mitigation for the WMU are constructed and maintained to withstand conditions generated during a Maximum Probable Earthquake (MPE) event without damage that is not readily repairable. Leachate sumps, and interim and final berms shall be designed and constructed to withstand the MPE at the Facility.

23. For any material used for all or any portion of the leachate detection/monitoring system, base liner, LCRS, horizontal and vertical gas collection/removal systems, and daily, intermediate, and final cover, the Discharger must demonstrate to the satisfaction of the Colorado River Basin Water Boards' Executive Officer that the material is compatible chemically and biologically with the MSW leachate. The Discharger must also demonstrate, to the satisfaction of the Colorado River Basin Water Board's Executive Officer, that material used for any portion of the WMU has proper shear strength to withstand all the applicable normal and shear forces exerted onto these materials during and after the closure of the Facility.
24. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the Facility inoperable.
25. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources, shall not contact or percolate through the waste discharged at this WMU. Storm water drainage ditches shall be constructed to ensure that all non-contact surface water runoff is diverted away from the disposal area, such that it does not contact the MSW or leachate (except for contact surface water, which shall be contained).
26. The exterior surfaces of the WMU area, including daily cover, and intermediate and final covers shall be graded and maintained to promote lateral run-off or precipitation and to prevent ponding.
27. The Discharger shall follow the Water Quality Protection Standards (WQPS) for detection monitoring established by the Colorado River Basin Water Board in this Board Order pursuant to Title 27, Section 20390. The following are five (5) parts of WQPS as established by the Colorado River Basin Water Board (the terms used in this Board Order regarding monitoring are defined in Part 1 of the attached Monitoring and Reporting Program No. R7-2014-0013 (MRP) and revisions thereto, which are hereby incorporated by this reference.):
  - a. The Discharger shall test for the monitoring parameters and Constituents of Concern (COCs) listed in The MRP, and revisions thereto, from any samples taken from the following:
    1. Water bearing media (i.e., groundwater, surface water, and liquids in the vadose zone)
    2. Perimeter gas monitoring system
  - b. Concentration Limits – The concentration limits for each monitoring point assigned to a detection monitoring program (Monitoring and Reporting Program Part II), and the concentration limit for each COC (or monitoring parameters) shall be the background values as obtained during that reporting period (defined in Monitoring and Reporting Program Part I).
  - c. Monitoring points and background monitoring points for detection monitoring shall be those listed in Part II of the attached MRP, and any revised Monitoring and Reporting Program approved by the Colorado River Basin Water Board's Executive Officer.

- d. The point of compliance is the property boundary or as otherwise approved by the Colorado River Basin Water Board's Executive Officer, and extends down (vertically) through the zone of saturation.
  - e. Compliance period – The estimated duration of the compliance period for the Allied Imperial Landfill is 6 (six) years. Each time a release is discovered, the WMU shall begin a compliance period on the date the Colorado River Basin Water Board directs the Discharger to begin an Evaluation Monitoring Program (EMP). If the Discharger's Corrective Action Program (CAP) has not achieved compliance with the Water Quality Protection Standard by the scheduled end of the compliance period, the compliance period shall be automatically extended until the WMU has been in continuous compliance for at least three (3) consecutive years.
28. The Discharger shall report monitoring parameters from the constituents listed in the MRP, and future revisions thereto. These monitoring parameters are subject to the most appropriate statistical or non-statistical tests under the MRP, Part III A, and any revised Monitoring and Reporting Program approved by the Colorado River Basin Water Board's Executive Officer.
  29. The Discharger shall, for any future expansion, adequate ground water, soil-pore liquid, or leachate monitoring devices to comply with the MRP and revisions thereto. The Discharger shall submit to the Colorado River Basin Water Board's Executive Officer, 120 days prior to construction, a plan for these installations.
  30. Methane, carbon dioxide, and other landfill gases shall be adequately vented, removed from each WMU of the Facility, or otherwise controlled to prevent the danger of explosion, underground fires, nuisance conditions, or the impairment of beneficial uses of water due to the migration of gas through the vadose zone.
  31. The Discharger shall submit to the Colorado River Basin Water Board's Executive Officer for review and approval the "Final Construction Design Drawings and Specifications" at least 120 days prior to initiation of construction of each future phase of the landfill. The plans and specifications shall take into consideration the following:
    - a. Engineering Designs and Analysis:
      1. Interim and final slopes shall have a minimum factor of safety of 1.50 for static conditions.
      2. Interim and final slopes shall have a minimum factor of safety of 1.50 for dynamic conditions.
      3. In lieu of Specification B.27.a.2 above, (i.e., under dynamic conditions) the Discharger shall demonstrate to the satisfaction of the Colorado River Basin Water Board's Executive Officer that the maximum permanent displacement that could be expected to occur for the MPE and 40 CFR 258.14 (b) event loading should not jeopardize the integrity of the final cover, base liner, monitoring and containment systems.

4. Details of the minimum requirements (i.e., shear strength) associated with each element of the WMU required to meet slope stability criteria shall be provided.
  5. Slope stability analyses shall explicitly model the actual WMU slopes, including benches. The actual residual shear strengths corresponding to the specific liner interfaces shall be employed in the analyses.
  6. Seismic and static slope stability calculations for all slopes under the appropriate range of loading conditions shall be provided.
  7. Calculations of minimum factor of safety for interim and final slopes, pursuant to Specification A.26.a.1 and 2 above shall be provided.
  8. Leachate head calculations shall be provided.
  9. Drainage system flow calculations shall be provided.
  10. Settlement analyses of the foundation, cover system, and waste shall be provided.
  11. Analyses indicating capability of the material used for the containment system such as VLDPE, HDPE, GG, Geotextile, or any other material to withstand the anticipated overburden pressure plus the weight of any operating equipment used that could cause axial loading on the containment system shall be provided.
  12. Details of liquefaction mitigation measures shall be provided.
  13. Any other applicable analyses shall be approved.
- b. Construction Drawings and Specifications – Detailed sets of construction drawings and specification with sufficient detail to build the remainder of the 89-acre expansion WMU containment system shall be provided. The construction plans shall include horizontal coordinates ( $\pm 0.1$  ft.), elevations ( $\pm 0.01$  ft), and grades ( $\pm 0.1$  percent). The plan should show locations of all interim and permanent berms, earthen and concrete channels, bench v-ditches, trapezoidal down drains, sumps, benches, pipe connection details, liner overlaps, lines seaming or welding, and layer minimum thickness.
- c. Detailed Fill Plan – The fill plan detailing the limits of acceptable interim geometrics for all locations of the WMU shall be provided. All phases of construction where waste and/or fills are being placed over the completed liner system shall be considered to be interim waste slopes. Such slopes shall be designed to meet a minimum slope stability factor of safety pursuant to Specification A.26.a. A range of maximum acceptable slopes for different fill heights and locations are acceptable.
- d. Construction Quality Control/Quality Assurance – A Construction Quality Control/Construction Quality Assurance (CQC/CQA) plan to be implemented during construction of the containment system by an independent engineering firm that is

not owned by the Discharger shall be provided. This plan should contain, at a minimum, the following:

1. Quality control/quality assurance procedures for each geosynthetic and fill material to be incorporated within the WMU liner and cover system.
2. Detailed testing, inspection, and acceptance criteria for each geosynthetic and fill material to be incorporated within the WMU liner and cover system.
3. Detailed foundation acceptance criteria and acceptable interim waste slopes.
4. A plan for:
  - a. Performing interface shear strengths, prior to liner installation, using the specific geosynthetic material specified for different elements of the liners. The test shall be performed for the range of normal stress, moisture conditions, and displacement rates which simulate actual field conditions;
  - b. The determination of shear strength values which must be equal to or greater than the shear strengths employed in the slope stability analyses performed during final design; and
  - c. A written determination by a Registered Geologist, or Certified Engineering Geologist, licensed in the State of California, of Holocene fault absence following grading, prior to development of any portion of the WMU.
  - d. Contractor Quality Control – A specification indicating that each contractor or manufacturer is responsible for implementing their own quality control plan as required by the detailed construction specifications, shall be provided. All material and workmanship shall be tested in accordance with the quality control/quality assurance plan. All tests may be observed by the CQC/CQA firm and all test results shall be submitted to the CQC/CQA firm for review and approval.
  - e. Field Changes:
    1. Construction drawings and specifications shall be developed to minimize, to the extent feasible, the need for “significant field changes”. “Significant field changes include, but are not limited to:
      - a. Changes in material specifications;
      - b. Changes in soil liner compaction criteria;
      - c. Changes in liner system component thickness;
      - d. Increase in side slope grades;
      - e. Decrease in bottom slope grades;
      - f. Decrease or increase in the height of the slopes;
      - g. Decrease or increase in the width of benches; and
      - h. Changes to the WMU grading plan.

2. A plan outlining the following steps shall be taken if a “significant field change” is determined necessary:
  - a. The contractor shall notify the construction manager or the owner regarding the proposed change(s).
  - b. The construction manager or owner shall have the design engineer review the proposed change. The review shall include any engineering analysis that needs to be done to ensure that all design criteria are met with the proposed change.
  - c. The Discharger shall submit the proposed change to the Colorado River Basin Water Board’s Executive Officer for review and approval. The proposed change shall be accompanied by an explanation for the changes, a copy of the engineering analysis, and all changes to the design drawings and specifications.
  - d. The Colorado River Basin Water Board’s Executive Officer shall review the proposed change in a timely fashion and must approve the proposed change before it can be accepted. Such approval will not be given unless supported by slope stability analyses demonstrating that the field changes do not result in slope stability factors of safety less than the minimum acceptable values.
  
32. Adequate measures shall be taken to ensure that no part of the liner system (i.e., HDPE, VLDPE, GT) is punctured during construction, operation, or closure/post-closure activities.
  
33. The Discharger shall have on-site at all times during construction of expansion to the Facility, a qualified team to perform CQA/CQC over all aspects of foundation excavating/grading and liner system construction to ensure that the foundation and liner systems are being built in accordance with the approved design. All observations and test results shall be periodically submitted to the Colorado River Basin Water Board’s Executive Officer after construction. The Colorado River Basin Water Board’s Executive Officer shall retain the right to have Colorado River Basin Water Board representatives on-site during all aspects of the WMU liner system construction. If during the course of construction the Discharger desires to make a “significant field change” to the design, the Discharger shall submit all necessary engineering calculations, drawings and/or specifications to the Colorado River Basin Water Board’s Executive Officer for his review and approval. If the Colorado River Basin Water Board’s Executive Officer, or his agent, deems it necessary to have the proposed change reviewed by a third party, the Discharger shall be responsible for paying for any additional and reasonable costs and fees that may be incurred and that are not covered by other funding sources. Reasonable costs and fees may include field visits and observations, review of the Discharger’s changes, including drawing, specifications and/or analyses, QA/QC, and travel. Qualifications of the third party must be acceptable to the Discharger and approved by the Colorado River Basin Water Board’s Executive Officer.

34. Waste shall not be placed in any area of the WMU until the Colorado River Basin Water Board's Executive Officer has approved the detailed design plans and construction quality assurance plan for construction of the containment structures, and has received written certification by a California Registered Civil Engineer or Certified Engineering Geologist that the structures have been constructed in accordance with those plans.
35. A periodic load-checking program shall be implemented to ensure that hazardous waste is not discharged at the Facility. The program must be submitted to the Colorado River Basin Water Board's Executive Officer for approval. The program includes, but is not be limited to:
  - a. Random loads to be checked;
  - b. Description of training program for on-site personnel;
  - c. Record keeping and reporting program;
  - d. Program implementation schedule; and
  - e. Disposal options for waste found not to be in compliance with the Board Order.
36. Hazardous wastes shall be properly manifested and transported off-site within 90 days for disposal at an appropriate permitted facility.
37. Waste shall not be disposed in the Facility where it can be discharged into waters of the state.
38. Wastes shall not be placed in or allowed to remain in ponded water from any source.
39. In order to minimize the potential for windblown litter and particulates from the Facility that would pollute surface waters off the Facility, the MSW:
  - a. Shall be compacted into the working face of the WMU as soon as practicable and covered with a daily cover promptly, and in any event within 24 hours of placement,
  - b. Shall have a minimum of 6 inches of compacted soil or approved alternatives used as a daily cover,
  - c. Shall have a daily litter pickup and disposal program implemented and in adjacent off-site areas; and
  - d. Shall have litter control fencing installed around the Facility and the landfill footprint. A standard of "zero" escape of litter from the permitted Facility shall be established through the use of appropriate control systems and the collection of any escaped litter from the working face.
40. The Discharger shall remove and relocate any waste that is discharged at the Facility in violation of these requirements.
41. The Discharger shall maintain visible monuments identifying the boundary limits of each currently active area and the entire WMU.

42. Public contact with MSW and/or leachate shall be prevented through such means as fences, signs, and other acceptable physical barriers.
43. MSW shall be confined to the Facility as shown on the attached site map.
44. Waters used for dust control and for fire suppression shall be limited to amounts necessary for these purposes so as to minimize any potential for infiltration of these waters into the WMU.
45. Petroleum fuels, recovered solvents, and other liquids shall be stored in appropriate containers within the facility and managed and maintained in accordance with applicable federal, state and local regulations. The Discharger shall establish procedures, acceptable to the Colorado River Basin Water Board's Executive Officer, for rapid remediation of minor petroleum hydrocarbon spills from vehicles used for construction or MSW handling at the Facility.
46. If there is "statistically significant evidence of a release" from the WMU, where statistically significant is defined in section 20164 of Title 27 to be a condition that means a statistical test has a p value that is small enough for the null hypothesis to be rejected. The Discharger shall institute an evaluation monitoring program in accordance with Part I.E.2d of the attached Monitoring and Reporting Program R7-2014-0013 and future revisions thereto.
47. The corrective action plan shall be applicable as long as the release poses a threat to ground water quality.

### **C. Provisions**

1. The Discharger shall comply with all applicable regulations of Title 27 and RCRA Subtitle D that are not specifically referred to in this Board Order.
2. The Discharger shall comply with all Specifications, Prohibitions, and Provisions of this Board Order immediately upon its adoption.
3. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
4. The Discharger is the responsible party for the WDRs, and Monitoring and Reporting Program R7-2014-0013, and revisions thereto, for the WMU; and must 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 (California Water Code section 13000 et seq.) and is grounds for enforcement actions, including Colorado River Basin Water Board orders or court orders, requiring corrective action or imposing civil monetary liability or modification or revocation of these WDRs by the Colorado River Basin Water Board.
5. Prior to any change of 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 Colorado River Basin Water Board.

6. 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.
7. 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.
8. The Discharger shall submit to the Colorado River Basin Water Board's Executive Officer "Final Construction Design Plans and Specifications".
9. The Discharger shall comply with Monitoring and Reporting Program R7-2014-0013, and future revisions thereto, as specified by the Colorado River Basin Water Board's Executive Officer.
10. The Discharger shall ensure that all WMU operating personnel are familiar with the contents of this Board Order, and shall maintain a copy of the Board Order at the Facility.
11. The Discharger shall allow the Colorado River Basin Water Board, or any authorized representative, upon presentation of credentials and other documents as may be required by law:
  - a. To enter upon the premises regulated by this Board Order, or the place where records are kept under the conditions of the Board Order;
  - b. To have access to and be able to copy , at reasonable times, any records that must be kept under the conditions of this Board Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operation 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 Facility.
12. The Facility shall be readily accessible for sampling and inspection.
13. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control that are installed or used by the Discharger to achieve compliance with this Board Order. Proper operation and maintenance shall also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger only when necessary to achieve compliance with the conditions of this Board Order.

14. Adequate measures shall be taken to assure that unauthorized persons are effectively excluded from contact with the waste disposal facilities.
15. 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.
16. The Discharger shall immediately notify the Colorado River Basin Water Board of any flooding, slope failure, or other change in site conditions that could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
17. The Discharger shall maintain a legible record using a reporting form approved by the Colorado River Basin Water Board's Executive Officer of the volume and weight (in tons) of MSW received at the Facility, and the manner and location of disposal of such MSW.
18. All containment structures, LCRS, monitoring systems, and erosion and drainage control systems shall be designed and constructed under supervision of a registered civil engineer or certified engineering geologist and shall be certified by the individual as meeting the requirements of this Board Order.
19. Two years prior to the anticipated closure of the Facility, or any portions thereof, the Discharger shall submit to the Colorado River Basin Water Board, for review and approval by the Colorado River Basin Water Board's Executive Officer, a closure and post-closure maintenance plan in accordance with Section 21769 of Title 27.
20. The closure plan shall include:
  - a. Facility location map;
  - b. Topographic maps;
  - c. Maximum extent of closures;
  - d. Current monitoring and control systems;
  - e. Land uses;
  - f. Estimated closure date and schedule;
  - g. General closure description;
  - h. Other special requirements;
  - i. Revised closure cost estimates (if appropriate); and
  - j. Any other applicable requirements as specified in Title 27.
21. The post-closure maintenance plan shall include:
  - a. Security and fencing;
  - b. Survey monuments;
  - c. Final Cover;
  - d. Storm water management system;
  - e. Leachate collection and removal system (LCRS);
  - f. Leachate management system;
  - g. Active gas extraction system, if necessary;
  - h. Vadose zone leachate monitoring system;
  - i. Vadose zone soil-pore gas monitoring system, if necessary; and
  - j. Groundwater quality monitoring system.

22. The Discharger shall continue to annually review and revise as necessary the existing, approved detailed post-earthquake inspection and corrective action plan to be implemented in the event of any earthquake generating significant ground shaking (i.e., Modified Mercalli Intensity V or greater) at or near the Facility. The Plan shall continue to describe the containment features, groundwater monitoring, leachate control facilities, storm water management system, and gas monitoring facilities, potentially impacted by the static and seismic deformations of the WMU. The plan shall continue to provide for reporting results of the post-earthquake inspection to the Colorado River Basin Water Board within 15 working days of the occurrence of the earthquake. Immediately after an earthquake event causing damage to the Facility, the corrective action plan shall be implemented, and this Board shall be notified of any damage.
23. Unless otherwise approved by the Colorado River Basin Water Board's Executive Officer, all water quality monitoring analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guidance Establishing Test Procedures for Analysis of Pollutants", promulgated by the EPA.
24. The Discharger shall furnish, under the penalty of perjury, technical monitoring program reports. These reports shall be submitted in accordance with specifications prepared by the Colorado River Basin Water Board's Executive Officer. Such specifications are subject to periodic revision as may be warranted.
25. The Discharger shall submit a Notice of Intent (NOI) to the State Water Resources Control Board to be covered under the Statewide General NPDES permit for Storm Water Discharges Associated with Industrial Activities, Water Quality Order No. 97-03 DWQ, NPDES No. CAS000001 (General Industrial Permit). The Discharger shall comply with all the discharge prohibitions, receiving water limitations, and provisions of the General Industrial Permit.
26. The Discharger shall submit a revised sampling and monitoring plan for storm water discharges to the Colorado River Basin Water Board's Executive Officer for review and approval not less than 90 days prior to commencement of construction of future expansions to the Facility. The plan shall meet the minimum requirements of Section B, Monitoring and Reporting Program Requirements of the General Industrial Permit.
27. The Discharger's proposed phased construction activity for the anticipated thirty-year life span of the 89-acre expansion is subject to the Construction General Permit (CGP), which became effective on July 1, 2010. To obtain coverage under the CGP, the Discharger is required to electronically file Permit Registration Documents, which includes a Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other compliance-related documents required by the CGP, and mail the appropriate permit fee to the State Water Resources Control Board.
28. 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.

29. At any time, the Discharger may file a written request (including appropriate supporting documents) with the Colorado River Basin Water Board's Executive Officer to propose appropriate modifications to the Monitoring and Reporting Program. The request may address changes:
- a. To any statistical method, non-statistical method, or retest method used with a given constituent or parameter;
  - b. To the manner of determining the background value for a constituent or parameter;
  - c. To the method for displaying annual data plots;
  - d. To the laboratory analytical method used to test for a given constituent or parameter;
  - e. To the media being monitored (e.g., the addition of soil-pore gas to the media being monitored);
  - f. To the number or placement of monitoring points or background monitoring points for a given monitored medium; or
  - g. To any aspect of monitoring or QA/QC.

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

30. The Discharger shall submit to the Colorado River Basin Water Board and the California Department of Resources Recycling and Recovery (CalRecycle) evidence of Financial Assurance for Closure and Post-Closure pursuant to Section 20950 of Title 27.
31. Financial assurances for post-closure shall be as determined by CalRecycle in accordance with applicable regulations. The post-closure maintenance period shall be at least 30 years, or as long as the waste poses a threat to water quality.
32. Within 180 days of the adoption of this Board Order, the Discharger shall submit to the Colorado River Basin Water Board, in accordance with Section 20430 of Title 27, assurances of financial responsibility acceptable to the Colorado River Basin Water Board's Executive Officer for initiating and completing corrective action for all known or reasonably foreseeable releases from the Facility.
33. The Discharger shall submit information requested by the Colorado River Basin Water Board's Executive Officer and the self-monitoring reports electronically over the Internet to the State Water Board's GeoTracker database. Electronic submission of reports

containing soil, vapor or groundwater data are required for subsurface investigation and remediation at sites in the leaking Underground Storage Tank (UST); Spills, Leaks, Investigation and Cleanup (SLIC); Department of Defense (DOD); and Land Disposal Programs, according to Chapter 30, Division 3, Title 23 of the California Code of Regulations.

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 March 20, 2014.

  
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ROBERT PERDUE  
Executive Officer