

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

BOARD ORDER R7-2016-0016

WASTE DISCHARGE REQUIREMENTS
FOR
MAGMA POWER COMPANY, OWNER DESERT VALLEY COMPANY,
OWNER/OPERATOR
DESERT VALLEY MONOFILL
CLASS II SOLID WASTE MANAGEMENT FACILITY
Northwest of Westmorland – Imperial County

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

Discharger

1. The Desert Valley Monofill is a Class II Solid Waste Management Facility (Facility) used for the disposal of wastes from geothermal facilities in Imperial County. The Monofill is owned and operated by Desert Valley Company, a wholly owned subsidiary of Magma Power Company, 7030 Gentry Road, Calipatria, CA 92233. The Facility is located at 3301 W. Highway 86, Brawley, CA 92227, as shown on Attachment A, attached hereto and made a part of this Order by reference. Both companies, Desert Valley Company and Magma Power Company, are herein jointly referred to as the Discharger. The Facility is assigned the California Integrated Water Quality System (CIWQS) waste discharge identification (WDID) number 7A132197001 and Geotracker Global ID number L10003472657.
2. The California Code of Regulations (CCR), Title 27, Article 4, 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 shall make all Report of Waste Discharge (ROWD) submittals (including updates to previously submitted ROWD) in the form of a Joint Technical Document (JTD).
3. On November 19, 2015, the Discharger submitted a Report of Waste Discharge to the Colorado River Basin Water Board for the purpose of updating the current Waste Discharge Requirements (WDRs).

Definitions

4. Terms used in this Order:
 - a. Discharger – Any person who discharges waste that could affect the quality of the waters of the State, and includes any person who owns the land or waste management unit, or who is responsible for the operation of a waste

management unit. Specifically, the terms “Discharger” or “Dischargers” in this Order refer to Magma Power Company and Desert Valley Company.

- 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. Monofill - The Desert Valley Company Facility is a monofill that accepts only specific types of process materials.
- f. Facility –The Desert Valley Monofill is a Class II Solid Waste Management Facility used for the disposal of wastes from geothermal facilities in Imperial County.

Facility

- 5. The WMF is located in the northeast ¼ of Section 33, Township 12 South, Range 11 East, San Bernardino Base Meridian (SBB&M) on Assessor’s Parcel No. 019-100-004. The latitude and longitude of the site are 32.105991° North and 115.822212° West, respectively.
- 6. Desert Valley Company was formed to handle product storage/solid waste disposal requirements of Magma’s (CalEnergy) geothermal facilities in Imperial County. The Imperial County Conditional Use Permit allows for the Monofill to accept geothermal drilling mud, sump material, filter cake, plastic liners, and soil contaminated with geothermal materials.
- 7. The Facility currently consists of Cell 1, Cell 2, Cell 3, as shown in Attachment B and Attachment C; three leachate storage ponds; and office/shop buildings. The total permitted area for the Class II WMF is 181.5 acres, with 28.9 acres permitted for disposal operations. The permitted hours and days of operation are 6:00 AM to 6:00 PM, Monday through Sunday during daylight hours. The peak daily loading is 750 tons per day of non-hazardous wastes with a peak incoming truck volume of 38 vehicles per day.
- 8. Cell 1 of the Monofill was built in 1990, and Cell 2 was built in 1999. Cell 1, Cell 2 and the tie-in area were closed and capped in May, 2008. Construction of Cell 3 began in the summer of 2004 and was completed in June, 2005. Cell 3 is the only active cell receiving waste. The current estimated remaining capacity on 2010 for Cell 3 was approximately 1,058,252 cubic yards with an estimated closure date of January 2025. The site is not open for public and/or commercial use at any time.

9. The Monofill is currently classified as a Class II Waste Management Facility. Each cell has two (2) clay liners, two (2) synthetic liners, a leachate collection and removal system (LCRS), and a leak detection system.
10. The LCRS for the Monofill cells consists of a drain net that is placed on the top of the first synthetic liner. The purpose of the LCRS is to minimize accumulation of liquids on top of the main liner. The LCRS is inspected weekly and any liquid present is removed and stored in either an above ground storage tank or lined surface impoundment for evaporation. Quarterly inspections of the LCRS are required. The liquid removed is tested for field electrical conductance (EC) and pH.
11. The Leak Detection System (LDS) for Cell 3 of the Monofill consists of a drain net located between the two synthetic liners. The LDS is used to assist in determining that a leak may exist in the primary synthetic liner. The LDS of Cell 3 is monitored weekly and any liquid found is removed and stored in either an above ground storage tank or lined evaporation surface impoundment used for the LCRS liquids. Quarterly inspections of the LDS of Cells 1 and 2 are required. The liquid removed is tested for field electrical specific conductance (EC) and pH.

Site Specific Regulatory Background

12. The site was previously regulated by Board Orders 90-053 adopted September 19, 1990, 94-021 adopted May 17, 1994 and 98-024 adopted May 14, 1998. The WMF is currently regulated by WDRs Order R7-2003-075, adopted on September 3, 2003. Order R7-2003-075 is being updated to comply with current laws and regulations as set forth in the California Water Code and combined State Water Resources Control Board (SWRCB)/CalRecycle Regulations, Division 2, Title 27 (Title 27) and federal regulations under the Resource Conservation and Recovery Act (RCRA), also known as Subtitle D. and to document any changes to the Facility or operating procedures that could impact groundwater.
13. The maximum daily tonnage accepted at the Monofill is 750 tons.
14. The Discharger discharges into the Monofill geothermal wastes associated with geothermal development. The Discharger also has permits from the Imperial County Public Health Department and CalRecycle for its operations. Geothermal wastes, for the purpose of this Order, are defined as filter cake, drilling muds and cuttings materials, plastic liners used for transport, or soil contaminated with filter cake, drilling mud materials, or geothermal brines resulting from any geothermal operation in Imperial County, which is operated and/or owned in part by Magma Power Company or one of its affiliates or assignees.
15. Geothermal wastes generated by the Magma Power Company's geothermal facilities contain Naturally Occurring Radioactive Material (NORM). The exposure and health risk to the public and workers were evaluated and

determined by the EIR to be an insignificant impact. NORM for the purpose of this Order, shall be defined as Material containing detectable amounts of Radium-226, Thorium-228, Thorium-232, Potassium- 40, Gross Alpha and Gross Beta particles.

Groundwater and Monitoring

16. Groundwater in the area of the Monofill occurs at a depth of 50 to 100 feet below ground surface. The direction of flow for the uppermost groundwater is estimated to be northeastward, towards the Salton Sea. Based on the data tabulated below, the groundwater monitoring data needs additional evaluation due to different chloride, sulfate and TDS concentrations in upgradient and downgradient wells, although the data in this table is consistent with data collected since 1989 at the Facility. Therefore, a groundwater constituent concentration trend analysis is required as specified in the Provisions section of this Board Order.

Constituent	Units	W-306 Background	W-12 Compliance	W-11 Compliance	W-09A Compliance
Elevation above msl	feet	-148.62	-181.95	-182.08	-180.29
Chloride	mg/l	781.5	3437.5	3202.5	3110
Lead	mg/l	<0.0001	<0.0001	<0.0001	<0.0001
Sodium	mg/l	661.75	1635	1530	1460
pH		7.70	6.79	6.87	6.88
Specific Conductance	µS/cm	3,445	12,402.5	11,732.5	11,687.5
Sulfate	mg/l	309	2,007.5	2,105	2,132.5
Total Dissolved Solids	mg/l	2,046.25	8,923.75	8,353.75	8,566.25
Cadmium	mg/l	<0.0005	<0.0005	<0.0005	<0.0005

17. Appendix 25 Geologic Investigations Report of the December 2002 JTD, in section 5.4 Groundwater Quality (page 47) for the Desert Valley Monofill Cell III prepared by RTP Environmental Associates, Inc. 7752 Fay Ave., Suite C, La Jolla, CA 92037, it states:

“Although there are substantial differences between wells, the water quality at each well has remained consistent over duration of the monitoring program, as demonstrated by the statistical analyses performed by Desert Valley Company (Appendix F) and the time- series plates in Graphs 7 through 18. These graphs show that the levels of TDS, chloride, sulfate, and sodium at each well have remained in the same range since monitoring began. Notably, there have been no progressive increases, such as would occur if waste constituents had been

released to the groundwater.

Wells W301, W302, W305, and W306, in the proposed Cell 3 area, have been sampled by Desert Valley Company since March 2000. (Piezometers W303 and W304 are used for water-level measurements are not sampled.) These wells show substantial differences in water quality that appear related to the differences in subsurface units, much as seen in the wells at Cells 1 and 2. In the northern part of the proposed Cell 3 area, wells W301, W302, and W305 show TDS of about 3,500 to 4,400 mg/L. These TDS levels are in about the same range as at nearby well W04 and former well W02. Wells W02, W04, W301, and W305 are completed in subsurface units that appear to be connected hydraulically: Units Qb4, Qb5 (sand facies) and Qb6. At the extreme south, well W306 showed a much lower TDS of about 2,000 mg/L. Well W306 is the only well completed in Unit Qb8.”

Therefore this Board Order contains a special Provision to evaluate Well W306 as the background well for the WMF. Final designation of the background well(s) will be made after the analysis/report required in Provision C.3 is submitted to the Colorado River Basin Water Board.

18. Monitoring and Reporting Program R7-2016-0016 attached to and made a part of this Order by reference, and the requirement to maintain groundwater monitoring wells is necessary to determine compliance with WDRs and Facility’s impacts, if any, to
19. Groundwater monitoring points of compliance are W01, W04, W09 (W09A), W10 (W10A), W11, W12, W301, W302, W303, W304, W305, W306, W307, W308, and W309. W04, W301, W303, and W304 were abandoned in 2004 when Cell 3 was constructed.

Geologic Conditions

20. The Desert Valley Monofill is located in the Imperial Valley. The valley slopes gently to the northeast on a very flat plain. General land elevation in the vicinity is between 20 and 45 feet below mean sea level.
21. During Quaternary times, from at least 13,000 years ago to as recently as several hundred years ago, the central parts of Imperial Valley, including the site, periodically lay beneath ephemeral lakes, such as ancient Lake Cahuilla. Lake Cahuilla resulted from periodic overflow and diversion of the Colorado River into the Salton Basin. Sediments from these ephemeral lakes consist primarily of silt and clay in the central portion of the basin. Below the alluvial cover of Imperial Valley lies an unexposed succession of Tertiary and Quaternary sedimentary rocks thought to be at least 20,000 feet thick.
22. The dominant geomorphic feature in the region is the Salton Trough, which occupies a broad lowland in the southern part of the Salton Trough geomorphic province. The Salton Trough is a structural, as well as a topographic, depression resulting from tectonic stresses associated with the San Andreas Fault. The

Salton Trough is bounded by the San Andreas Fault zone on the north and east sides; the discontinuous San Jacinto Fault zone on the west; and the Elsinore Fault zone further west and southwest.

23. Active fault zones occur in the Imperial Valley. The principal fault zone is the San Andreas system, which runs parallel to the northeast margin of the Salton Trough. The Clark and Coyote Creek branches of the San Jacinto fault zone transect the southwest flank of the Salton Trough. 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, all the above named faults display the surficial features characteristic of the San Andreas system through California: linearity, northwest- southwest trend, physiographic evidence of recent activity and right-lateral displacement.

Climate

24. The Facility is located in a desert environment in the. The climate is. Precipitation averages 2.5 to 3.0 inches per year, and surface evaporation averages 100 inches per year.
25. The climate of the region is warm and arid. The average annual rainfall for the northern part of the Imperial Valley is 3 inches. There is no typical wet or dry season – rain events occur throughout the year. The projected 24-hour, 100-year storm event is expected to yield approximately 3 inches as determined from historic data gathered by the National Oceanographic and Atmospheric Administration (NOAA).
26. The average temperature in the area is 73 degrees Fahrenheit (°F) with hot summers and mild winters the mean daily high temperature in July being approximately 108°F. The mean pan evaporation rate is 72 to 84 inches per year.
27. The prevailing winds in the area follow two general patterns:
 - a. During late fall until early spring, the winds prevail from the west and northwest. 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 desert, drawing air from the area to the south. Humidity is highest under the summer conditions.

Basin Plan and Other Regulatory Considerations

28. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), which was adopted on November 17, 1993, and amended on November 13, 2012, designates beneficial uses and establishes water quality objectives for ground and surface waters in the Region, and contains implementation programs and policies to achieve objectives. In addition, State Water Board Resolution 88-63 requires that, with certain exceptions, the Colorado River

Basin Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.

29. The Facility is located in the Imperial Hydrologic Unit. The designated beneficial uses of the groundwaters in the Imperial Hydrologic Unit are:
 - a. Municipal Supply (MUN)
 - b. Industrial Supply (IND)
30. The Monofill is designed to withstand the probable maximum precipitation of a 100-year storm for this area. The discharger has taken measure to ensure that no rainfall creates runoff from the active Monofill cell (Cell 3). Cells 1 and 2 are capped and the surface of the cap is treated with an approved soil binder to protect against erosion from wind and precipitation.
31. The nearest surface water, the Westside Canal, is located one and one-half (1½) miles northeast of the Monofill. The Facility is within the Salton Sea surface water drainage.
32. 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 area is serviced for its drinking water supply by Colorado River Water Rights and the Imperial Irrigation District which is designated the responsibility and authority to protect human health and ensure that drinking water is safe for domestic use.

Storm Water

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 National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCPT) to reduce or eliminate industrial storm water pollution. The Desert Valley Monofill WMF is subject to the federal requirements for regulation of storm water discharges associated with industrial activities as listed in 40 CFR 122.26(b)(14).
34. The Discharger is enrolled in the State Water Board's 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. The Facility is assigned the SMART's (Storm Water Multiple Application and Reporting Tracking System) database ID number 713I005191. The Industrial General Storm Water Permit requires the implementation of Best Available Technology Economically Achievable (BAT) and BCT to achieve performance standards. The Industrial General Storm Water Permit also requires the development of a Storm Water Pollution Prevention Plan (SWPPP) and monitoring plan, and requires the Discharger to submit a Notice of Intent (NOI) to obtain regulatory coverage.

Financial Assurance

35. Title 27, Sections 21820 and 22206 require that the Discharger provide financial assurance in the amounts of, a lump sum cost estimate for landfill closure and Sections 21840 and 22211 requires the Discharger provides a lump sum estimate of the landfill post-closure maintenance and monitoring. The Discharger is required to demonstrate financial assurances for landfill closure and post close maintenance to CalRecycle pursuant to Sections 22205(a) and 22210(a). This Board Order requires that the Discharger provide and maintain financial assurances to the CalRecycle in at least the amount of the corrective action cost estimate, as annually adjusted for inflation.
36. 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 (Section 22205) – in at least the amount of the current closure cost estimate;
 - b. Post-closure Maintenance (Section 22210) – in at least the amount of the current post-closure cost estimate;
 - c. Operating Liability (Section 22215) – to compensate third parties for bodily injury and property damage caused by any accidental occurrences; and
 - d. Corrective Action (Section 22220) – for initiating and completing corrective action for all known or reasonably foreseeable releases from the landfill.

California Environmental Quality Act (CEQA)

37. In accordance with Section 15301, Article 19, Chapter 3, Division 6, Title 14 of the California Code of Regulations, the issuance of these WDRs, which govern the operation of an existing Facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et. seq.)

Public Participation

38. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for this discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
39. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to Sections 13263 and 13267 of the California Water Code, that Order R7-2003-0075 is rescinded, except for enforcement purposes, and that in order to meet provisions contained in Division 7 of the California Water Code and regulations Order R7-2016-0016 is adopted, the Discharger shall comply with the following:

A. Specifications

1. The treatment or disposal of wastes at this Facility shall not cause pollution or nuisance as defined in Section 13050 of Division 7, of the California Water Code.
2. Waste materials shall be confined to the existing footprint of the WMF, as defined in Finding No. 8, and as shown on Attachment B.
3. Thirty days prior to introduction of a new waste stream into the monofill, the Discharger shall request approval from the Colorado River Basin Water Board's Executive Officer.
4. Waste materials shall not be discharged on any ground surface that is less than five (5) feet above the highest anticipated groundwater level.
5. The Discharger shall not cause degradation of any water supply.
6. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources, shall not contact or percolate through the wastes discharged at the WMF.
7. The exterior surfaces of the disposal area, including the intermediate and final Landfill covers, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.
8. The WMF shall be operated and maintained to prevent inundation, washout, or erosion of wastes or covering material, which could occur as a result of floods having a predicted frequency of once in 100 years.
9. The Discharger shall implement the attached Monitoring and Reporting Program R7- 2016-0016 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 (caused by) discharges of waste to the WMF.
10. The Discharger shall use the constituents, listed in Monitoring and Reporting Program No. R7-2016-0016, Part III Summary of Self-Monitoring and Reporting Programs B.1., as "Monitoring Parameters" and revisions thereto. These Monitoring Parameters are subject to the most appropriate statistical or non-statistical test under Monitoring and Reporting Program No. R7-2016-0016, Part III, and any revised Monitoring and Reporting Program approved by the Colorado River Basin Water Board's Executive Officer.
11. The discharge shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any Monitoring Point assigned to Detection Monitoring pursuant to Part II.B.4. of attached Monitoring and Reporting Program No. R7-2016-0016.

12. 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 No. R7-2016- 0016.
13. The Discharger shall remove and relocate any wastes that are discharged at this site in violation of these requirements.
14. 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 pursuant to Section 20390, Title 27. 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 No.R7-2016-0016, and revisions thereto, which is hereby incorporated by reference):
 - a. The Discharger shall test for monitoring parameters and Constituents of Concern (COC) listed in the Monitoring and Reporting Program. R7-2016-0016 and revisions thereto.
 - b. Concentration Limits - for each monitoring point, the concentration limit for each monitoring parameter and constituent of concern (as stated in Detection Monitoring Program RB-2016-16), shall be its background value as obtained during that reporting period.
 - c. Monitoring Points and Background Monitoring Points for Detection Monitoring shall be those listed in attached Monitoring and Reporting Program R7-2016- 0016, and any revised Monitoring and Reporting Program approved by the Colorado River Basin Water Board's Executive Officer. Monitoring Points and Background Monitoring Points are shown on Attachment B which is made a part of this Order by reference.
 - d. Points of Compliance shall be those Monitoring Points listed in attached Monitoring and Reporting Program R7-2016-0016.
 - e. Compliance Period - The estimated duration of the compliance period for this 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.

B. Prohibitions

1. The direct or indirect discharge of any waste to any surface waters or surface drainage courses is prohibited.

2. The discharge of waste to land not owned or controlled by Discharger is prohibited.
3. The discharge of hazardous waste as defined in Title 27 at this WMF is prohibited.
4. The discharge or deposit of designated waste as defined in Title 27 at this WMF is prohibited unless approved by the Colorado River Basin Water Board's Executive Officer.
5. The discharge of liquid or semi-solid waste (i.e., containing less than 50 percent solids) to the WMF is prohibited unless approved by the Colorado River Basin Water Board's Executive Officer.
6. The co-disposal of incompatible wastes is prohibited.
7. The discharge shall neither cause nor contribute to the contamination or pollution of groundwater via the release of waste constituents in either liquid or gaseous phase.
8. 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 for Detection Monitoring pursuant to Monitoring and Reporting Program R7-2016-0016.

C. Provisions

1. The Discharger shall comply with Monitoring and Reporting Program R7-2016-0016, and future revisions thereto, as specified by the Colorado River Basin Water Board's Executive Officer.
2. The Discharger shall not cause any increases in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil or other geologic materials outside the Landfill if such waste constituents could migrate to waters of the State in either the liquid or the gaseous phase, and cause conditions of contamination or pollution.
3. Within 6 months of adoption of this Board Order, the Discharger shall complete and submit a trend analysis for the groundwater data for all onsite groundwater monitoring wells; intra-well and inter-well. The trend analysis shall determine the significance of any increases in the concentration of waste constituents (such as chloride, sulfate and TDS) in groundwater beneath the site, over the footprint of the landfill and within each monitoring well over time. The analysis shall also demonstrate the suitability or lack thereof of designating W306 as the background well for the landfill. The Discharger shall submit professional recommendations based on the results of the analysis. Maps showing the direction of flow and gradient isopleths for COC's and an appropriate evaluation of the groundwater monitoring data shall be included with the analysis. The analysis/report shall be completed by a California Registered Professional

Engineer or Professional Geologist.

4. 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.
5. The Discharger, within 48 hours of a significant earthquake event, shall inform the Colorado River Basin Water Board's Executive Officer by telephone of any physical damages to the containment features and groundwater monitoring facilities. Within 10 working days, the Discharger shall submit to the Colorado River Basin Water Board a detailed post-earthquake report describing any physical damages to the containment features and/or groundwater monitoring systems, and a corrective action plan to be implemented at the WMF.
6. The Discharger shall submit to the Colorado River Basin Water Board a final closure and post-closure maintenance plan, pursuant to Title 27, one (1) year prior to the anticipated closure of Cell 3, for review and approval by the Colorado River Basin Water Board's Executive Officer. Final closure and post-closure maintenance plan shall include seismicity studies.
7. Within 180 days of the adoption of this Board Order, the Discharger shall submit to the Colorado River Basin Water Board, pursuant to Title 27, assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the Facility, for staff review and approval by the Colorado River Basin Water Board's Executive Officer.
8. The Discharger shall submit to this Colorado River Basin Water Board for review and approval by the Colorado River Basin Water Board's Executive Officer, evidence of Financial Assurance for Closure and Post Closure, pursuant to Section 22212, Title 27. The post-closure period shall be at least 30 years. However, the post-closure maintenance period shall extend as long as the waste poses a threat to water quality.
9. The Discharger shall maintain legible records on the volume and type of each waste discharged at the WMF. These records shall be available for review by representatives of the Colorado River Basin Water Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Colorado River Basin Water Board.
10. The Discharger shall maintain visible monuments identifying the boundary limits of the entire WMF.
11. The Discharger shall comply with the existing load-checking program.
12. The Discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Order.

13. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the WMF inoperable.
14. Annually, prior to the first day of November, any necessary erosion control measures shall be implemented, including any necessary construction, maintenance, or repairs of precipitation and drainage control facilities to prevent erosion and flooding of the WMF. The report thereon shall be submitted to the Colorado River Basin Water Board by November 15 of each year.
15. All containment structures and erosion and drainage control systems shall be designed and constructed under direct supervision of a California licensed professional; Civil Engineer or Certified Engineering Geologist, and shall be certified by the individual as meeting prescriptive standards and performance goals of Title 27.
16. The Discharger shall allow the Colorado River Basin Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;
 - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order;
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
17. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
18. Prior to any modifications at this Facility that would result in change in the quality or quantity of waste discharged at the WMF; the Discharger shall report all pertinent information in writing to the Colorado River Basin Water Board and obtain revised WDRs prior to any modifications being implemented.
19. Prior to any change in ownership of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner, and forward a copy of the transmittal letter to the Colorado River Basin Water Board.
20. The Discharger is the responsible party for the WDRs and the Monitoring and Reporting Program for the WMF. The Discharger shall comply with all conditions of the WDRs. Violations may result in enforcement actions, including Colorado River Basin Water Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these WDRs

by the Colorado River Basin Water Board.

21. 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.
22. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
23. 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 right, nor any infringement of federal, state, or local laws or regulations.
24. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports. Such monitoring reports shall be submitted in accordance with the specifications prepared by the Colorado River Basin Water Board's Executive Officer. Such specifications are subject to periodic revisions as may be warranted.
25. The Discharger may be required to submit technical reports as directed by the Colorado River Basin Water Board's Executive Officer.
26. Unless otherwise approved by the Colorado River Basin Water Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Water Board's Laboratory Certification Program. All analyses shall be conducted pursuant to the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.
27. The Discharger shall maintain its storm water regulatory coverage and compliance with the Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, Order No. 2014-0057-DWQ NPDES No. CAS000001, or the most recent version of this order.
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. 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 (CCR), 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 L10003472657 and in the California Integrated Water Quality Systems (CWIQS) by waste discharge identification (WDID) No. 7A 13 2197 001

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, 2016.

Original signed by Joe L. Angel, P. E.

Executive Officer