

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

BOARD ORDER R7-2014-0049  
WASTE DISCHARGE REQUIREMENTS  
FOR

MISSION SPRINGS WATER DISTRICT, OWNER/OPERATOR  
ALAN L. HORTON WASTEWATER TREATMENT PLANT  
Desert Hot Springs – Riverside County

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

1. Mission Springs Water District (MSWD or Discharger), 66575 East Second Street, Desert Hot Springs, California 92240, submitted an application to update its Waste Discharge Requirements (WDRs) for the Alan L. Horton Wastewater Treatment Plant (WWTP or Facility) and wastewater disposal system. The WWTP is located at 14601 Verbena Drive, Desert Hot Springs, California 92240, as shown in Attachment A (Vicinity Map), made part of this Board Order by this reference.
2. The Discharger owns and operates a wastewater collection, treatment and disposal system and provides sewerage service to portions of the city of Desert Hot Springs. The WWTP has a design treatment capacity of 2.3 million gallons-per-day (MGD) and presently discharges approximately 1.56 MGD into five evaporation/percolation ponds, located in the southeast  $\frac{1}{4}$  of the northeast  $\frac{1}{4}$  of Section 6, Township 3 South, Range 5 East, San Bernardino Baseline and Meridian.
3. The discharge has been subject to WDRs prescribed under Board Order 01-020, adopted on May 9, 2001. There have been some changes in the operation and treatment capacity of the WWTP as described in Order 01-020. The Colorado River Basin Water Board has determined that WDRs for the discharge are in need of revision. The WDRs are being updated to update changes in operation and to implement the most current laws and regulations applicable to the discharge.

**Wastewater Treatment Facility and Discharge**

4. The WWTP consists of preliminary, primary, and secondary treatment, and solids and effluent disposal systems. The preliminary treatment system consists of one channel grinder, one channel auger, one grit vortex inducer, two grit pumps and two grit classifiers. Primary and secondary treatment units consist of five extended aeration units, five secondary clarifiers and five evaporation/percolation ponds. The process flow is shown in Attachment B (Process Flow Diagram), made part of this Board Order by this reference.
5. Untreated wastewater flows from the influent pump station to the preliminary treatment system. Wastewater from the preliminary treatment system gravity flows to one or more of five extended aeration units for primary and secondary treatment. Two of the extended aeration units have treatment capacities of 0.2 MGD each, the third has a treatment capacity of 0.4 MGD, and the remaining two have treatment capacities of 0.75 MGD each. Effluent from the extended aeration units then gravity flows to the secondary clarifiers and then to the evaporation/percolation ponds for disposal.
6. Scum and sludge from the secondary clarifiers is pumped to a 2.2 meter skid mounted

sludge dewatering belt filter press. The scum, sludge, grit and screenings are loaded into trailers daily. A private contractor hauls away the trailers to a land fill or private composting facility. As emergency back-up, twelve asphalt lined sludge drying beds are also available.

7. The Discharger's Self-Monitoring Reports (SMRs) from January 2009 through December 2013 characterize the WWTP effluent as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
Flow	MGD	1.44	1.55	1.29
20° C BOD <sub>5</sub> <sup>1</sup>	mg/L <sup>2</sup>	9.4	26.5	4.0
TSS <sup>3</sup>	mg/L	7	22	2
pH	s.u. <sup>4</sup>	7.44	8.08	7.19
TDS <sup>5</sup>	mg/L	555	677	377
Nitrate as N	mg/L	2.6	18	0.2
Total Nitrogen	mg/L	10.2	19	2.3

#### **Hydrogeologic Conditions**

8. Annual precipitation in the region averages about 5 inches. Annual evapotranspiration rate in the vicinity is approximately 60 inches.
9. There are no surface waters in the vicinity of the evaporation/percolation ponds. An ephemeral wash borders the northeast corner of the WWTP. The site is protected from flooding by an earthen berm and a 3.5-foot tall block wall on the north. An earthen berm covered with rock rip-rap starts at the northeast corner and extends southward for channeling floodwater outward and away from the plant. The Discharger states that the site is adequately protected from a 100-year storm event.
10. There are no domestic wells within 1,000 feet of the on-site evaporation/percolation ponds.
11. Water supply to the community is from groundwater production wells located in the Mission Creek Subbasin. TDS in the water supply averages about 480 mg/L based on values reported in MSWD's SMRs from January 2009 through December 2013.
12. Regional groundwater flow in the area is generally from the west to the east.
13. The Discharger installed a network of three groundwater monitoring wells, one upgradient and two downgradient, to monitor the impact of wastewater discharge to groundwater in the area of the evaporation/percolation ponds. The locations of the groundwater

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<sup>1</sup> 5-day biochemical oxygen demand at 20 degrees Celsius.

<sup>2</sup> milligrams per Liter

<sup>3</sup> Total Suspended Solids

<sup>4</sup> Standard pH units

<sup>5</sup> Total Dissolved Solids

monitoring wells identified as MW1, MW2 and MW3 are shown in Attachment C (Monitoring Well Site Plan), made part of this Board Order by this reference. MSWD reports the following water quality data from the groundwater monitoring wells:

	<u>Units</u>	<u>MW1 (upgradient)</u>	<u>MW2 (downgradient)</u>	<u>MW3 (downgradient)</u>
Depth to Groundwater	feet below ground surface	202	188	177
Total Dissolved Solids	mg/L	620	646	650
Total Nitrogen	mg/L	3.3	5.9	4.6
Nitrate as N	mg/L	3.1	5.9	4.6
Sulfate	mg/L	203	203	206
Chloride	mg/L	61	59	60
Aluminum	mg/L	3.7	9.1	ND
Fluoride	mg/L	0.4	0.9	0.5

14. The Discharger reports that the soil in the vicinity of the WWTP, from ground surface to twenty-five feet beneath ground surface, is coarse, clean, whitish gray, dry sand. From a depth of twenty-five to twenty-eight feet below ground surface, the soil is sandy silt, light brown in color and slightly porous. Thereafter, the soil is similar to that in the first twenty-five feet, except it is much finer and has traces of silt in it. Infiltration rate is 0.67 feet per day. Groundwater is located 200 feet below ground surface.
15. The site is located in a seismically active desert region.

**Basin Plan, Beneficial Uses, and Regulatory Considerations**

16. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), adopted November 17, 1993 and amended November 16, 2012, designates the beneficial uses of ground and surface waters in this Region, and contains implementation programs and policies to achieve objectives.
17. The discharge is within the Coachella Hydrologic Unit. The beneficial uses of groundwater in the Coachella Hydrologic Unit include:
  - a. Municipal supply (MUN),
  - b. Industrial supply (IND), and
  - c. Agricultural supply (AGR).
18. WDRs implement numeric and narrative water quality objectives for ground and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply are the maximum contaminant levels (MCLs) and bacteriological limits specified in section 64421 et seq. of Title 22, of the California Code of Regulations (CCR). The narrative objectives are:

- a. Ground water for use as domestic or municipal water supply (MUN) shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity (Basin Plan, page 3-8).
  - b. Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal facilities which ultimately discharge in areas where such wastes can percolate to ground water usable for domestic and municipal purposes are prohibited (Basin Plan, page 3-8).
19. 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.
  20. Section 13267 of the California Water Code (CWC) authorizes the Colorado River Basin Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and state requirements.
  21. This Order establishes WDRs pursuant to Division 7, Chapter 4, Article 4, of the CWC for discharges that are not subject to regulation under Clean Water Act (CWA) section 402 (33 U.S.C. section 1342).
  22. Pursuant to CWC section 13263(g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.
  23. The discharge authorized by this Board Order, and treatment and storage facilities associated with discharges of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of the Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1. This exemption is based on section 20090(a) of Title 27, which states in relevant part that discharges of domestic sewage or treated effluent are exempt provided that such discharges are regulated by WDRs, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal WWTP's, provided that residual sludges or solid waste from WWTP's shall be discharged only in accordance with the applicable Title 27 provisions.
  24. Groundwater Degradation
  25. State Water Board Resolution 68-16, "Policy with Respect to Maintaining High Quality Waters of the State"(Resolution 68-16) states:  
  
"Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies."

26. Resolution 68-16 further states:

“Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control [BPTC] of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.”

27. Some degradation of groundwater from the discharge to the evaporation/percolation ponds is consistent with Resolution 68-16, provided that the degradation:

- a. Is confined to a reasonable area;
- b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures;
- c. Is limited to waste constituents typically encountered in domestic wastewater; and
- d. Does not result in the loss of any beneficial use as prescribed in the applicable basin plan, or violation of any water quality objective.

28. The discharge of wastewater from the WWTP, as permitted herein, reflects BPTC. The controls assure the discharge does not create a condition of pollution or nuisance, and that water quality will be maintained which is consistent with the anti-degradation provisions of Resolution 68-16. The WWTP incorporates:

- a. Technology for secondary or tertiary treated disinfected domestic wastewater;
- b. Solids handling facilities;
- c. An operation and maintenance manual;
- d. Staffing to assure proper operation and maintenance; and
- e. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.

29. Constituents in domestic wastewater effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and TDS. The WWTP provides substantial removal of soluble organic matter, solids, and some nitrogen treatment.

30. Title 22, CCR section 64431, Maximum Contaminant Level (MCL) for Nitrate plus Nitrite as Nitrogen is 10 mg/L. To account for the fate of transport for the various components of Total Nitrogen, as a conservative value it is assumed that all nitrogen present converts to nitrate/nitrite. MSWD's SMRs report an average of 8.3 mg/L for Total Nitrogen between January 2009 and December 2013. The concentration of Total Nitrogen in the effluent is higher than the groundwater level Total Nitrogen in the vicinity of the Facility reported by MSWD, which is 3.3 mg/L in the upgradient groundwater monitoring well and an average of 5.3 mg/L in the two downgradient wells. Some degradation of groundwater by nitrogen is likely. However, it is not anticipated that nitrates will reach groundwater in concentrations that exceed the MCL prescribed in Title 22, CCR, section 64431. Degradation by nitrogen will be limited to the area in the vicinity of the evaporation/percolation ponds and degradation by nitrates should not be significant.

31. While secondary treatment reduces fecal coliform densities by 90 to 99%, the remaining organisms in effluent are still  $10^5$  to  $10^6$  MPN/100 ml (United States Environmental Protection Agency, Design Manual, Municipal Wastewater Disinfection; October 1986). Given the depth to groundwater, it is not likely that pathogen-indicator bacteria will reach groundwater at densities exceeding those prescribed in Title 22, CCR.
32. The typical incremental addition of dissolved salts from domestic water usage is 150 to 380 mg/L. Domestic water supply to the community showed an average of about 480 mg/L during the period of January 2009 to December 2013. The average TDS increase over the domestic water supply for this facility during the same time period was about 74 mg/L. The CDPH recommends that the concentration of TDS in drinking water be limited to 500 mg/L as a secondary MCL (CCR, Title 22, section 64449).
33. Salinity of groundwater in the vicinity of the WWTP ranges from 620 to 650 mg/L with an average of approximately 640 mg/L. Treated wastewater discharged by MSWD has a TDS limit of a maximum of 400 mg/L above the domestic source water as regulated by Board Order 01-020. From January 2009 to December 2013 treated wastewater discharged by the MSWD had an average TDS concentration of approximately 555 mg/L. The regulatory limit of 400 mg/L above the domestic source water has been successfully maintained by the MSWD and reasonably protects present and anticipated beneficial uses of groundwater in the area; therefore, it is not likely that groundwater will exhibit significant degradation by TDS.
34. Groundwater limits equal to water quality objectives for indicator waste constituents are appropriate and protective of water quality objectives. MSWD provides a valuable service to the community that is protective of human health and the environment and contributes to economic development in the area. These factors, when taken in conjunction with the associated increase in waste constituents, are consistent with maximum benefit to the people of the State. Accordingly, the discharge as authorized is consistent with the anti-degradation provisions of Resolution 68-16, and the applicable water quality objectives.
35. The discharge will be subject to any requirements which may be imposed by a salt and nutrient management plan (SNMP), currently being developed by the Coachella Valley Integrated Regional Water Management Plan (IRWMP) group, as required by the Recycled Water Policy. The Discharger is participating in the IRWMP effort to develop the SNMP.

### **Stormwater**

36. Federal regulations for storm water discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990, (40 CFR Parts 122, 123, and 124) to implement the Clean Water Act's storm water program set forth in Clean Water Act section 402(p) (33 U.S.C. section 1342(p)). In relevant part, the regulations require specific categories of facilities that discharge storm water associated with industrial activity to "waters of the United States" to obtain NPDES permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards. Facilities used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are within the confines of the facility with a design flow of one million gallons a day or more, or required

to have an approved pretreatment program under 40 CFR Part 403, are considered to be engaging in "industrial activity" for purposes of the Clean Water Act's storm water program. Although the facility has a design treatment capacity of 2.3 MGD, the facility does not discharge stormwater to "waters of the U.S." Thus, the facility is not subject to the federal regulations for discharges of stormwater associated with industrial activity.

### CEQA and Public Participation

37. In accordance with section 15301, Chapter 3, Title 14, CCR, 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 (Pub. Resources Code, § 21000 et seq.).
38. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to draft 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,

that Board Order 01-020 is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code, and regulations adopted thereunder, the Discharger shall comply with the following:

#### A. Effluent Limitations

1. Effluent discharged to the evaporation/percolation ponds for disposal shall not exceed the following effluent limits:

<u>Constituent</u>	<u>Units</u>	<u>30-Day Arithmetic Mean</u>	<u>7-Day Arithmetic Mean</u>
20° C BOD <sub>5</sub>	mg/L	30	45
Total Suspended Solids	mg/L	30	45

2. The 30-day average daily dry weather discharge from the WWTP shall not exceed 2.3 MGD.
3. Effluent from the WWTP shall not have a pH below 6.0 or above 9.0.
4. The increase in concentration of TDS in the wastewater discharged to the evaporation/percolation ponds over that contained in the water supply to the community shall not exceed 400 mg/L.
5. The evaporation/percolation ponds shall be maintained so they will be kept in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of the evaporation/percolation ponds shall not be less than 1.0 mg/L.

#### B. Discharge Prohibitions

1. Discharge of waste classified as "hazardous", as defined in Title 23, CCR, section 2521(a), or "designated", as defined in California Water Code section 13173, is prohibited.
2. Discharge of treated wastewater at a location other than the designated disposal areas is prohibited.
3. The WWTP shall be maintained to prohibit sewage or treated effluent from surfacing or overflowing.
4. The discharge of any wastewater from the facility to any surface waters or surface drainage courses is prohibited.
5. Discharge of waste to land not owned or authorized for such use by the Discharger is prohibited.
6. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
7. Bypass, overflow, discharge, or spill of untreated or partially treated waste is prohibited.

C. Discharge Specifications

1. The treatment or disposal of wastes from the WWTP shall not cause pollution or nuisance as defined in sections 13050(l) and 13050(m) of Division 7 of the California Water Code, respectively.
2. A minimum depth of freeboard of two feet shall be maintained at all times in each evaporation/percolation pond.
3. All treatment, storage, and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
4. Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration during the non-irrigation season. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
5. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
6. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.
7. The evaporation/percolation ponds shall be maintained and operated so as to maximize infiltration and minimize the increase of salinity in the groundwater.
8. There shall be no surface flow of wastewater away from the designated disposal areas.
9. The Discharger shall not accept wastewater in excess of the treatment capacity of the Facility.



#### D. Groundwater Limitations

1. Discharge from the WWTP shall not cause groundwater to:
  - a. Contain waste constituents in concentrations statistically greater than background water quality;
  - b. Contain constituents in excess of California Maximum Contaminant Levels (MCLs), as set forth in the California Code of Regulations, Title 22, section 64426.1 for bacteriological constituents; section 64431 for inorganic chemicals; section 64432.1 for nitrates; and section 64444 for organic chemicals;
  - c. Acquire taste, odor, toxicity, or color that creates nuisance or impairs beneficial use.

#### E. Pretreatment

1. In the event that the facility has an average dry weather flow or treatment capacity of 5 MGD or more and Industrial Users [40 CFR 403.3(h)] are discharging pollutants which Pass Through [40 CFR 403.3(n)] or Interfere [40 CFR 403.3(i)] with the operation of the wastewater treatment facility or are otherwise subject to National Pretreatment Standards [40 CFR 403.3(j)], (ii) California Code of Regulations, Title 23, section 2233 requires the facility to have and enforce an adequate pretreatment program, or (iii) the Colorado River Basin Water Board or its Executive Officer determines that other circumstances warrant, then:
  - a. The Discharger shall notify the Colorado River Basin Water Board within 30 days after there are discharges that trigger the pretreatment requirements.
  - b. The Discharger shall submit a revised Report of Waste Discharge and the pretreatment program for the Board review and approval as soon as possible but not later than one year of the notice of pretreatment requirements.
  - c. The Discharger shall enforce the federal categorical pretreatment standards on all Categorical Industrial Users (CIUs).
  - d. The Discharger shall notify the CIU of its discharge effluent limits. The limits must be as stringent as the pretreatment standards contained in the applicable federal category (40 CFR Part 400-699). The Discharger may develop more stringent, technically based local limit if it can show cause.
  - e. The Discharger shall notify the RWQCB if the CIU violates its discharge effluent limits.
2. The Colorado River Basin Water Board retains the right to take legal action against an industrial user and/or the Discharger where a user fails to meet the approved applicable pretreatment standards.

#### F. Provisions

##### Special Provisions

1. The Discharger shall perform a study to evaluate the effects of nitrogen discharges to groundwater in the effluent. The study shall address the practicability of a 10 mg/L total nitrogen effluent limitation and the impact the discharge has on the beneficial uses of the receiving groundwater. The report shall be submitted to the Colorado River Basin Water Board's Executive Officer three (3) years after the date of adoption of this Board Order.

The report shall at a minimum include the following:

- a. Evaluation by the Discharger must include information on the following factors relating to the discharge:
  - i. Description of the municipal entity and facilities.
  - ii. Description of the quantity and nitrogen concentration of domestic water sources contributing to discharge.
  - iii. Description of significant nitrogen sources of the municipal wastewater collection system, and identification of entities responsible for each source, if available.
  - iv. Description of the wastewater discharge, receiving waters, quantity, and nitrogen load.
  - v. Alternative plans for minimizing nitrogen contribution from the municipal sources. Alternative plans should include:
    - 1) Description of nitrogen sources and alternative means of control; and
    - 2) Cost of alternative plans in dollars per ton, of nitrogen removed from discharge.
  - vi. Such other information pertinent to the study as the permitting authority may deem necessary.
- b. In determining what permit conditions shall be required, the permit issuing authority shall consider the following criteria including, but not limited to:
  - i. The practicability of achieving a 10 mg/L total nitrogen effluent limit.
  - ii. Where a 10 mg/L effluent limit is not determined to be practicable, the Discharger shall provide the following:
    - 1) The impact of the proposed nitrogen input of each alternative on the beneficial uses of the groundwater in terms of tons per year and concentration;
    - 2) Costs per ton of nitrogen removed from discharge of each alternative plan;
    - 3) Capability of minimizing nitrogen discharge;
    - 4) A proposed value for the practical incremental increase; and
    - 5) A justification for the proposed practical incremental increased value.
2. If a sewer system is available or becomes available within 200 feet of an existing or proposed dwelling unit, the Discharger shall require the owner to connect to the sewer system in accordance with the Basin Plan, Chapter 4. Implementation, II. Point Source Controls, H. Septic Systems, Mission Springs or Desert Hot Springs Aquifers.

Standard Provisions

3. The Discharger shall comply with all of the conditions of this Board Order. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (CWC, section 13000 et seq.), and is grounds for enforcement action.
4. The Discharger shall comply with Monitoring and Reporting Program (MRP) R7-2014-0049, and future revisions thereto, incorporated herein and made part of this Order by reference, as specified by the Colorado River Basin Water Board's Executive Officer.
5. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with the specifications prepared by the Colorado River Basin Water Board Executive Officer and in Monitoring and Reporting Program R7-2014-0049. Such specifications are subject to periodic revisions as may be warranted. Documents that are normally sent via mail by the Discharger, such as regulatory reports, documents, submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall be converted to Portable Document Format (PDF) or other appropriate Microsoft application, such as Excel, and emailed to RB7-wdrs\_paperless@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and sent mailed to the Colorado River Basin Water board office in Palm Desert.
6. The Discharger shall not cause degradation of any water supply in accordance with State Water Board Resolution 68-16.
7. Standby power generating facilities shall be available to operate the plant during a commercial power failure.
8. 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.
9. The WWTP shall be supervised and operated by persons possessing certification of appropriate grade pursuant to section 3680, Chapter 26, Division 3, Title 23 of the California Code of Regulations.
10. The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment and control, installed or used by the Discharger to achieve compliance with this Board Order. Proper operation and maintenance includes effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Board Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained, and made available to the Colorado River Basin Water Board's Executive Officer on request.
11. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
12. The Discharger shall 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 the premises regulated by this Board Order, or the place where records are kept under the conditions of this Board Order;

- b. Have access to and copy, at reasonable times, records kept under the conditions of this Board Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
  - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
13. Ponds shall be managed to prevent breeding of mosquitoes. In particular,
  - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
  - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
  - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
14. Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes shall be pursuant to Title 27, and the review and approval of the Colorado River Basin Water Board Executive Officer.
15. Any proposed change in use or disposal of biosolids requires the approval of the Colorado River Basin Water Board Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least 90 days in advance of the change.
16. Sludge use and disposal shall comply with Federal and State laws and regulations, including permitting requirements, and technical standards in 40 CFR Part 503. If the State and Colorado River Basin Water Boards are delegated the authority to implement 40 CFR Part 503 regulations, this Order may be revised to incorporate appropriate time schedules and technical standards. The Discharger shall comply with the standards and time schedules in 40 CFR part 503, whether or not part of this Order.
17. The Discharger shall provide a plan as to the method, treatment, handling and disposal of sludge that is consistent with all State and Federal laws and regulations and obtain prior written approval from the Colorado River Basin Water Board specifying location and method of disposal, before disposing of treated or untreated sludge, or similar solid waste.
18. The Discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the MRP of this Board Order. Sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the MRP of this Board Order and as required by Title 40, Code of Federal Regulations, Part 503. The results of the analyses shall be submitted to the Colorado River Basin Water Board as part of the MRP.
19. The Discharger shall provide a report to the Colorado River Basin Water Board when it determines that the plant's average dry-weather flow rate for any month exceeds 80 percent of the design capacity. The report should indicate what steps, if any, the Discharger intends to take to provide for the expected wastewater treatment capacity

necessary when the plant reaches design capacity.

20. Prior to implementing a modification that results in a material change in the quality or quantity of wastewater treated or discharged, or a material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Colorado River Basin Water Board, and obtain revised requirements.
21. Prior to a change in ownership or management of WWTP, 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.
22. The Discharger shall provide adequate notice to the Colorado River Basin Water Board Executive Officer of the following:
  - a. The introduction of pollutants into any treatment facility described in the Findings of this Board Order from an indirect Discharger which would be subject to section 301 or 306 of the Clean Water Act, if the pollutants were discharged directly;
  - b. Any substantial change in the volume or character of pollutants introduced into any treatment facility described in the Findings of this Board Order, by an existing or new source; and
  - c. Any planned physical alteration or addition to the facilities described in this Board Order, or change planned in the Discharger's sludge use or disposal practice, where such alterations, additions, or changes may justify the application of Board Order conditions that are different from or absent in the existing Board Order, including notification of additional disposal sites not reported during the Board Order application process, or not reported pursuant to an approved land application plan.
23. The Discharger shall report orally, any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Colorado River Basin Water Board's Executive Officer at (760) 346-7491, and the California Office of Emergency Services at (800) 852-7550 as soon as:
  - a. The Discharger has knowledge of the discharge,
  - b. Notification is possible, and
  - c. Notification will not substantially impede cleanup or other emergency measures.

During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board's office voice recorder at the above listed number. Incident information shall be provided orally as soon as possible and within 24 hours from the time the Discharger becomes aware of the incident. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the WWTP or collection system to the Colorado River Basin Water Board office in accordance with the above time limits.

24. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the Discharger's next scheduled SMRs or earlier if requested by the Colorado River Basin Water Board's Executive Officer, or if required by an applicable standard for sludge use and disposal.
25. By-pass (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is prohibited. The Colorado River Basin Water Board may take enforcement action against the Discharger for by-pass unless:
  - a. By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur in the absence of a by-pass. Severe property damage does not mean economic loss caused by delays in production; and
  - b. There were no feasible alternatives to by-pass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent by-pass occurring during equipment downtime, or preventive maintenance.
  - c. By-pass is:
    - i. Required for essential maintenance to assure efficient operation; and
    - ii. Neither effluent nor receiving water limitations are exceeded; and
    - iii. The Discharger notifies the Colorado River Basin Water Board ten (10) days in advance.
26. In the event of an unanticipated by-pass, the Discharger shall immediately report the incident to the Colorado River Basin Water Board. During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board office voice recorder. A written report shall be provided within five business days the Discharger is aware of the incident. The written report shall include a description of the by-pass, any noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance.
27. Federal regulations for storm water discharges require specific categories of facilities which discharge storm water associated with industrial activity (storm water) to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCPT) and Best Available Technology Economically Achievable (BAT) to reduce or eliminate industrial storm water pollution.
28. All storm water discharges from this facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm water drain systems or other courses under their jurisdiction.
29. Storm water discharges from the facility shall not cause or threaten to cause pollution or contamination.

30. Storm water discharges from the facility shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.
31. The Discharger is the responsible party for the waste discharge requirements and the monitoring and reporting program for the facility. The Discharger shall comply with all conditions of these waste discharge requirements. 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 waste discharge requirements by the Colorado River Basin Water Board.
32. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
33. This Board Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights, or infringement of federal, state, or local laws or regulations.
34. This Board Order may be modified, rescinded, or reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission or reissuance, or notification of planned changes or anticipated noncompliance, does not stay any Board Order condition. Causes for modification include a change in land application plans, or sludge use or disposal practices, and adoption of new regulations by the State or Colorado River Basin Water Board (including revisions to the Basin Plan), or Federal government.

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 June 26, 2014.

original signed by

ROBERT PERDUE  
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2014-0049  
FOR  
MISSION SPRINGS WATER DISTRICT, OWNER/OPERATOR  
ALAN L. HORTON WASTEWATER TREATMENT PLANT  
Desert Hot Springs - Riverside County  
Location of Discharge:  
SE¼ of the NE¼ of Section 6, T3S, R5E, SBB&M

A. Monitoring

1. This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater system and groundwater quality (when needed). This MRP is issued pursuant to California Water Code (CWC) section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.
2. Water Code section 13267 states, in part:

“In conducting an investigation specified in subdivision (a), the Colorado River Basin Water Board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the Colorado River Basin Water Board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the Colorado River Basin Water Board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”
3. Water Code section 13268 states, in part:

“(a) (1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in accordance with subdivision (b). (b) (1) Civil liability may be administratively imposed by a Colorado River Basin Water Board in accordance with Article 2.5 (commencing with section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”
4. The Discharger owns and operates the wastewater system that is subject to Board Order R7-2014-0049. The reports are necessary to ensure that the Discharger complies with the Order. Pursuant to Water Code section 13267, the Discharger shall implement the MRP and shall submit the monitoring reports described herein.



5. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Colorado River Basin Water Board staff.
6. Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:
  - a. The user is trained in proper use and maintenance of the instruments;
  - b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
  - c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
  - d. Field calibration reports are submitted as described in the "Reporting" section of this MRP.
7. The collection, preservation and holding times of all samples shall be in accordance with U. S. Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Colorado River Basin Water Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of the "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR Part 136), promulgated by the USEPA.
8. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for period greater than 24-hours, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.
9. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Colorado River Basin Water Board's Executive Officer at any time. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurement(s);
  - b. The individual(s) who performed the sampling or measurement(s);
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;

- e. The analytical techniques or method used; and
  - f. The results of such analyses.
10. Samples shall be collected at the location specified in the WDRs. If no location is specified, sampling shall be conducted at the most representative sampling point available.
  11. Given the monitoring frequency prescribed by MRP R7-2014-0049, if only one sample is available for a given reporting period, compliance with monthly average, or weekly average Discharge Specifications, will be determined from that sample.
  12. If the facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Colorado River Basin Water Board indicating that there has been no activity during the required reporting period.

**Influent Monitoring**

13. Influent to the WWTP shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Flow	MGD <sup>1</sup>	Measurement	Daily	Monthly
20°C BOD <sub>5</sub> <sup>2</sup>	mg/L <sup>3</sup>	24-Hr. Composite	Monthly	Monthly
Total Suspended Solids	mg/L	24-Hr. Composite	Monthly	Monthly

**WWTP Effluent Monitoring**

14. Effluent from the WWTP shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
20°C BOD <sub>5</sub>	mg/L	24 Hr. Composite	2x/Month	Monthly
Total Suspended Solids	mg/L	24 Hr. Composite	2x/Month	Monthly
pH	s.u. <sup>4</sup>	Grab	Weekly	Monthly
Dissolved Oxygen <sup>5</sup>	mg/L	Grab	Weekly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Nitrate as N	mg/L	Grab	Monthly	Monthly
Total Nitrogen	mg/L	Grab	Monthly	Monthly

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<sup>1</sup> Million Gallons per Day

<sup>2</sup> 5-day Biochemical Oxygen Demand at 20 degrees Celsius.

<sup>3</sup> milligrams per Liter

<sup>4</sup> standard pH units.

<sup>5</sup> Dissolved Oxygen shall be monitored at the upper one foot layer of the evaporation/percolation ponds.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
VOCs <sup>6</sup>	µg/L <sup>7</sup>	Grab	Annually	Annually

**Domestic Water Supply**

15. The domestic water supply shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly

**Groundwater Monitoring**

16. Ground water shall be sampled in the uppermost 20 feet of the shallow aquifer. Groundwater monitoring wells MW1, MW2, and MW3 shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Nitrate as N	mg/L	Grab	Quarterly	Quarterly
Sulfate	mg/L	Grab	Quarterly	Quarterly
Chloride	mg/L	Grab	Quarterly	Quarterly
Aluminum	mg/L	Grab	Quarterly	Quarterly
Fluoride	mg/L	Grab	Quarterly	Quarterly
VOCs	µg/L	Grab	Quarterly	Quarterly
Groundwater Elevation	ft (msl) <sup>8</sup>	measurement	Quarterly	Quarterly
Depth to Groundwater	ft (bgs) <sup>9</sup>	measurement	Quarterly	Quarterly

**Sludge Monitoring**

17. Prior to disposal, sludge that is generated at the WWTP shall be sampled and analyzed for the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
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<sup>6</sup> Analysis of Volatile Organic Compounds is to be accomplished using the USEPA test methods 601 and 602 or 624.

<sup>7</sup> micrograms per liter

<sup>8</sup> feet above mean sea level

<sup>9</sup> feet below ground surface.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Arsenic	mg/kg <sup>10</sup>	Composite	Annually	Annually
Cadmium	mg/kg	Composite	Annually	Annually
Copper	mg/kg	Composite	Annually	Annually
Lead	mg/kg	Composite	Annually	Annually
Mercury	mg/kg	Composite	Annually	Annually
Molybdenum	mg/kg	Composite	Annually	Annually
Nickel	mg/kg	Composite	Annually	Annually
Selenium	mg/kg	Composite	Annually	Annually
Zinc	mg/kg	Composite	Annually	Annually
Fecal Coliform	MPN/gram <sup>11</sup>	Composite	Annually	Annually

B. Reporting

1. The Discharger shall inspect and document any operation/maintenance problems by inspecting each unit process. In addition, calibration of flow meters and equipment shall be performed in a timely manner and documented. Operation and Maintenance reports shall be submitted to the Colorado River Basin Water Board Office annually.
2. The Discharger shall report annually on the quantity, location and method of disposal of all sludge and similar solid materials being produced at the WWTP. If no sludge is disposed of during the year being reported, the Discharger shall state "No Sludge Removed" in the annual monitoring report.
3. The Discharger shall provide the Colorado River Basin Water Board with an annual report describing the pretreatment program activities over the previous twelve-month period. The report shall be transmitted to the Colorado River Basin Water Board office no later than January 31 of each year and include:
  - a. A summary of actions taken by the Discharger which ensures industrial-user compliance;
  - b. An updated list of industrial users (by SIC categories) which were issued permits, and/or enforcement orders, and a status of compliance for each user; and
  - c. The name and address of each user that received a revised discharge limit.
4. SMRs shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this MRP.

<sup>10</sup> milligrams per kilogram.

<sup>11</sup> Most Probable Number per gram.

5. Each Report shall contain the following statement:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations".

6. The SMRs, and other information requested by the Colorado River Basin Water Board, shall be signed by a principal executive officer or ranking elected official.

7. A duly authorized representative of the Discharger may sign the documents if:

- a. The authorization is made in writing by the person described above;
- b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
- c. The written authorization is submitted to the Colorado River Basin Water Board's Executive Officer.

8. The Discharger shall attach a cover letter to the SMRs. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.

9. Daily, weekly, and monthly monitoring shall be included in the monthly monitoring report. Monthly monitoring reports shall be submitted to the Colorado River Basin Water Board by the 15<sup>th</sup> day of the following month. Quarterly monitoring reports shall be submitted by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup> and October 15<sup>th</sup>. Annual monitoring reports shall be submitted by January 15<sup>th</sup> of the following year.

10. The Discharger shall submit, technical monitoring and all documents that are normally mailed by the Discharger, such as regulatory documents, submissions, materials, data, and correspondence electronically. All information required to be submitted in accordance to this Board Order must be emailed prior to the regulatory due date. To accomplish electronic submittal of documents the Discharger shall convert the signed original report to Portable Document Format (PDF), other appropriate Microsoft application, such as Excel documents may also be emailed. Email all the documents to [RB7-wdrs\\_paperless@waterboards.ca.gov](mailto:RB7-wdrs_paperless@waterboards.ca.gov). Documents that are 50 MB or larger should be transferred to a disk and sent mailed to:

California Regional Water Quality Control Board  
Colorado River Basin Region  
73720 Fred Waring, Suite 100  
Palm Desert, CA 92260

original signed by  
ROBERT PERDUE  
Executive Officer

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Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION



VICINITY MAP

MISSION SPRINGS WATER DISTRICT, OWNER/OPERATOR  
ALAN L. HORTON WASTEWATER TREATMENT PLANT  
Desert Hot Springs – Riverside County  
SE¼ of the NE¼ of Section 6, T3S, R5E, SBB&M





