

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

BOARD ORDER R7-2014-0008

WASTE DISCHARGE REQUIREMENTS
FOR
DESERT WATER AGENCY, OWNER/OPERATOR
WATER RECLAMATION FACILITY
Palm Springs – Riverside County

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

1. Desert Water Agency (DWA, or Discharger), 1200 Gene Autry Trail South, P.O. Box 1710, Palm Springs, CA 92263, owns and operates a Water Reclamation Facility (WRF or Facility) located at 1550 Gene Autry Trail, Palm Springs, CA. DWA submitted a Report of Waste Discharge (ROWD), dated July 25, 2013, to update Waste Discharge Requirements for the Facility. The Discharger owns the treatment and distribution system and provides tertiary treatment to secondary effluent received from the Palm Springs Wastewater Treatment Plant (Palms Springs WWTP), which is regulated separately. DWA currently distributes tertiary recycled water to twelve customers (users).
2. The WRF is located in the South 1/2 of the Southwest 1/4 of Section 20, Township 4 South, Range 5 East, San Bernardino Base and Meridian, as indicated on the Location and Vicinity Map (Attachment "A"), incorporated herein and made part of this Board Order by reference.
3. The WRF has a design capacity of 10.0 million gallons per day (MGD), with an average daily flow of approximately 3.7 MGD (June 2008 - May 2013).
4. The discharge has been regulated under WDRs prescribed by Board Order 96-008, adopted January 26, 1996. The WDRs are being updated to incorporate design modifications that have taken place since 1996 at the Facility and implement the most current laws and regulations applicable to the discharge.

Wastewater Treatment Facility and Discharge

5. The tertiary treatment process at the WRF consists of coagulation/flocculation, clarification, filtration, and disinfection, in that order, and the following treatment units, illustrated on the Process Flow Schematic (Attachment "B"), incorporated herein and made part of this Board Order by reference:
 - a. One concrete influent reservoir, covered (0.5 MG)
 - b. One steel influent equalization reservoir, open (2.0 MG)
 - c. Two steel effluent reservoirs, covered (2.3 MG)
 - d. Four influent pumps (2,300 GPM-per-unit)
 - e. Four effluent pumps (2,300 GPM-per-unit)
 - f. Two backwash pumps (2,300 GPM-per-unit)
 - g. Two flocculation structures
 - h. Six adsorption clarifiers and mixed media filter modules
 - i. One filtered effluent siphon and chlorination chamber

- j. Two shallow groundwater recovery wells.
6. Sludge collected at the influent reservoirs and backwash from the filters is pumped back to Palm Springs WWTF for appropriate treatment and disposal.
 7. In its Report of Waste Discharge, DWA informed the Colorado River Basin Water Board that it installed two shallow groundwater recovery wells in 2013, which it intends to use to provide a standby supply of supplemental irrigation water to be used during times when demands for recycled water exceeds the supply available from the Facility.
 8. The WRF influent, which comes directly from the Palm Springs WWTP's effluent, is characterized by the City of Palm Springs WWTF Self-Monitoring Reports (SMRs) for the period of July 2008 through June 2013, submitted pursuant to Board Order 96-073, as follows:

	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
Biochemical Oxygen Demand	mg/L ¹	11.4	22.6	5.1
Total Suspended Solids	mg/L	12.5	26.7	5.0
Settleable Solids	ml/L ²	<0.1	<0.1	<0.1
pH	pH units	7.3	7.4	7.2
Total Dissolved Solids	mg/L	482	600	420
Sulfate	mg/L	89.5	120	75.9
Chloride	mg/L	79.1	90.8	66.6
Fluoride	mg/L	0.5	0.7	0.1
Nitrate as N	mg/L	9.0	16.0	1.3
Nitrite as N	mg/L	0.5	1.70	<0.15
Total Nitrogen	mg/L	14.4	39.6	6.2

9. The Discharger's SMRs for the five-year period spanning from June 2008 through May 2013, submitted pursuant to Board Order 96-008, characterize the WRF discharge as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u> ³	<u>Maximum</u>	<u>Minimum</u>
Total Effluent Flow	MGD	3.67	6.24	1.53
Turbidity	NTU ⁴	1.21	1.58	.67
Chlorine Residual	mg/L	6.25	12.77	2.39
Fecal Coliform	MPN/100ml ⁵	NA ⁶	49	<1.8

10. The recycled water use sites are shown in Recycled Water User Map (Attachment "C"), incorporated herein and made part of this Board Order by reference.

¹ mg/L – milligrams per liter

² ml/L – milliliters per liter

³ Average, maximum and minimum values are based on monthly averages.

⁴ NTU – Nephelometric Turbidity Units

⁵ MPN/100ml – most probable number per 100 milliliters

⁶ Average monthly values for Fecal Coliform are not available.

Hydrogeologic Conditions

11. Annual precipitation averages approximately 5 inches. Annual evapotranspiration rate in the region is approximately 60 inches.
12. There are no surface waters in the vicinity of the WRF. A drainage course referred to as Tahquitz Wash is located approximately 600 feet south of the site.
13. Water supply to the community from groundwater production wells within the subbasin to the Coachella Valley Groundwater Basin has an average Total Dissolved Solids (TDS) concentration of about 350 mg/L.
14. The Discharger reports that there are no production wells located on the site or adjacent to the site.
15. The soil type in the vicinity of the facility is Myoma fine sand to very fine sand.
16. Regional groundwater flow in the area is generally from the northwest to the southeast.
17. The site is located in a seismically active desert region.

Basin Plan, Beneficial Uses, and Regulatory Considerations

18. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of ground and surface waters in this Region, and contains implementation programs and policies to achieve objectives. In addition, State Water Resources Control Board (State Water Board) Resolution 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.
19. The proposed discharge is within the Coachella Valley Hydrologic Unit. The beneficial uses of groundwater in the Coachella Valley Hydrologic Unit include:
 - a. Municipal supply (MUN),
 - b. Industrial supply (IND), and
 - c. Agricultural supply (AGR).
20. 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, 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).

21. 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.
22. Section 13267 of the California Water Code (CWC) authorizes the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and state requirements.
23. 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).
24. 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.
25. 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 Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1, commencing with section 20005. 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 wastewater treatment plants, provided that residual sludge or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable Title 27 provisions. These requirements have been met. The discharge is domestic sewage, this Board Order regulates that discharge in a manner consistent with applicable surface and ground water quality objectives, and residual sludge or solid waste from the Facility will be managed pursuant to Title 27.
26. The discharge to the storage ponds for reuse 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 Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20090(h).

Recycled Water

27. State policy promotes the use of recycled water to the maximum extent in order to supplement existing surface and ground water supplies to help meet water needs (CWC sections 13510-13512). One of the primary conditions on the use of recycled water is protection of public health (CWC sections 13521, 13522, 13550(a)(3)). The discharge as authorized by this Board Order is consistent with the states recycled water policy and meets the requirements of CCR, Title 22, Division 4, Chapter 3, section 60301 to assure protection of public health.

28. The State Water Board adopted a Recycled Water Policy (Policy) on February 3, 2009, and amended the Policy on January 22, 2013. Section 7,b.(4) of the amended Policy states that permits or requirements for landscape irrigation projects shall include, in addition to any other appropriate recycled water monitoring requirements, monitoring for priority pollutants in the recycled water at the recycled water production facility once per year, except when the recycled water production facility has a design production flow for the entire water reuse system of one MGD or less. For these smaller facilities, recycled water shall be monitored for priority pollutants once every five years. Priority pollutants are those identified in 40 CFR Part 423, Appendix A.
29. The California Department of Public Health (CDPH), formerly California Department of Health Services (DHS), is statutorily required to establish uniform statewide recycling criteria for the various uses of recycled water to assure protection of public health where recycled water use is involved (CWC section 13521). CDPH has promulgated regulatory criteria in Title 22, Division 4, Chapter 3, section 60301 et seq. of the CCR. CDPH regulatory criteria include specified approved uses of recycled water, numerical limitations and requirements, treatment method requirements and performance standards. CDPH regulations allow use of alternate methods of treatment in some cases, so long as the alternate methods are determined by CDPH to provide equivalent treatment and reliability. The Title 22, Section 60301.230 disinfected tertiary recycled water standard is an appropriate level of treatment and performance for the intended reuse.
30. A 1996 Memorandum of Agreement (MOA) between the DHS, State Water Board, and the regional water boards on the use of recycled water allocates primary areas of responsibility and authority between these agencies. The MOA provides methods and mechanisms necessary to assure ongoing and continuous future coordination of activities relative to the use of recycled water in California.
31. The CDPH has established statewide reclamation criteria for the use of recycled water and has developed guidelines for specific uses:
 - a. Recycled water used for surface irrigation of the following is required to be at least disinfected Secondary-23 recycled water (Title 22 CCR Section 60301.225):
 - i. Cemeteries,
 - ii. Freeway landscaping,
 - iii. Restricted access golf courses,
 - iv. Ornamental nursery stock and sod farms where access by the general public is not restricted
 - v. Pasture for animals producing milk for human consumption, and
 - vi. Any nonedible vegetation where access is controlled so that the irrigated area cannot be used as if it were part of a park, playground or schoolyard.
 - b. Recycled water used for surface irrigation of the following is required to be at least disinfected tertiary recycled water (Title CCR Section 60301.230):
 - i. Food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop,
 - ii. Parks and playgrounds,
 - iii. School yards,

- iv. Residential landscaping,
 - v. Unrestricted access golf courses, and
 - vi. Any other irrigation use not specified in Section 60304 and not prohibited by other sections of the CCR.
32. The Discharger signed a wastewater reclamation agreement with the City of Palm Springs, dated February 19, 1985, and a wastewater reclamation Memorandum of Understanding (MOU), dated June 12, 1985, whereby the City delivers secondary treated wastewater to the Discharger for further treatment and distribution for beneficial reuse by the Discharger.
33. DWA produced an Engineering Report, dated May 1988, for approval by DHS and the Colorado River Basin Water Board for the treatment and distribution of tertiary treated and disinfected recycled water.

Groundwater Degradation

34. 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."

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."

35. Some degradation of groundwater from the discharge to the storage ponds is consistent with Resolution No. 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.
36. The discharge of wastewater from the WRF, 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 WRF incorporates:

- a. Technology for tertiary treated disinfected domestic wastewater;
 - b. Solids handling facilities;
 - c. An operation and maintenance manual;
 - d. Staffing to assure proper operation and maintenance; and
37. Constituents in domestic wastewater effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and dissolved salts (TDS). Treatment for removal of solids, soluble organic matter, and nitrogen are performed at the Palm Springs WWTP. DWA's WRF provides additional removal of suspended organic and inorganic matter through coagulation/flocculation, clarification and filtration. Disinfection is provided for pathogen removal.
38. Title 22, CCR, Section 64431, Maximum Contaminant Level (MCL) for Nitrate plus Nitrite as Nitrogen is 10 mg/L. Elevated concentrations of nitrate in domestic water supplies can be toxic to human life and may cause infants to develop methemoglobinemia (blue baby syndrome). 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. Nitrogen in domestic wastewater is treated by Palm Springs WWTP prior to entering the WRF. Palm Springs WWTP is prescribed effluent limitations and monitoring requirements for Nitrogen. The average Total Nitrogen in Palm Springs WWTP effluent is 14.4 mg/L. Since the majority of WRF effluent is used for irrigation purposes, a considerable amount of remaining Nitrogen can reasonably be expected to be taken up by plants; hence, it is not likely that nitrates will reach groundwater at a rate or in concentrations causing groundwater to exceed those prescribed in Title 22, CCR, Section 64431.
39. The WRF provides disinfection by chlorination to Title 22 tertiary recycled water standards. Considering the level of treatment and the depth to groundwater in the area, is not likely that pathogen-indicator bacteria will reach groundwater at densities exceeding those prescribed in Title 22, CCR.
40. 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 TDS concentration of approximately 350 mg/L from 2008 through 2012, according to the latest available DWA Water Quality Report. Average TDS in the Palm Springs WWTP effluent for the period of June 2008 through June 2013 is 482 mg/L. The CDPH recommends that the concentration of TDS in drinking water be limited to 500 mg/L as a secondary MCL (Title 22, CCR, Section 64449).
41. Board Order 96-008 does not require TDS monitoring for recycled water from the WRF. Since all influent into the WRF comes from Palm Springs WWTP, and the tertiary treatment process provided by the WRF is not expected to substantially increase TDS concentrations, the effluent limitation of 400 mg/L above domestic source water for TDS prescribed under Board Order 96-008, and upheld by this Board Order, is sufficient to protect present and anticipated beneficial uses of groundwater, it is not likely that groundwater will exhibit significant degradation by TDS. This Board Order will include TDS monitoring to more accurately quantify any incremental increase resulting from the tertiary treatment processes.
42. Groundwater limits equal to water quality objectives for indicator waste constituents are

appropriate and protective of water quality objectives. The Discharger provides a valuable service to the community that is protective of human health and the environment and contributes to the economic development of the area. This factor, when considered with the associated minor increase in nitrogen and TDS, 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.

43. This discharge is also consistent with the State Water Board's Recycled Water Policy. The discharge will be subject to any requirements that 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.

CEQA and Public Participation

44. In accordance with Section 15301, Chapter 3, 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 (Public Resources Code, Section 21000 et seq.).
45. 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.
46. 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 96-008 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. 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. Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal facilities are prohibited.
3. Discharge of treated wastewater at a location other than the designated disposal areas or as recycled water used for irrigation at approved use areas, is prohibited.
4. The WRF shall be maintained to prohibit sewage or treated effluent from surfacing or overflowing.
5. The discharge of any wastewater from the facility to any surface waters or surface

drainage courses is prohibited.

6. The discharge of waste to land not owned or authorized for such use by the Discharger is prohibited.
7. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
8. Bypass or overflow of untreated or partially treated waste is prohibited.

B. Effluent Limitations

1. The 30-day monthly average daily discharge from the WRF shall not exceed 10.0 MGD.
2. Effluent from the WRF shall not have a pH below 6.0 or above 9.0.
3. Total Dissolved Solids (TDS) shall not be greater than 400 mg/L above domestic water supply.
4. Disinfected Tertiary recycled water directly reused shall conform to the following:
 - a. The filtered wastewater has been disinfected by either:
 - i. A chlorine disinfection process following filtration that provides a Contact Time (CT) (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or
 - ii. A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration; The median concentration of total coliform bacteria measured in the disinfected effluent shall not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria shall not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.
 - b. Wastewater that has been coagulated and passed through natural undisturbed soils or a bed of filter media pursuant to the following:
 - i. At a rate that does not exceed 5 gallons per minute per square foot of surface area in mono, dual or mixed media gravity, upflow or pressure filtration systems, or does not exceed 2 gallons per minute per square foot of surface area in traveling bridge automatic backwash filters; and
 - ii. Turbidity of the filtered wastewater does not exceed any of the following:
 - (1) An average of 2 NTU within a 24-hour period;
 - (2) 5 NTU more than 5 percent of the time within a 24-hour period; and
 - (3) 10 NTU at any time.

- c. Wastewater that has been passed through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane so that the turbidity of the filtered wastewater does not exceed any of the following:
 - i. 0.2 NTU more than 5 percent of the time within a 24-hour period; and
 - ii. 0.5 NTU at any time.
- d. Wastewater that has not been coagulated:
 - i. filter effluent turbidity does not exceed 2 NTU;
 - ii. the turbidity of the influent to the filters is continuously measured;
 - iii. the influent turbidity does not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU; and
 - iv. that there is the capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 NTU for more than 15 minutes

C. Discharge Specifications

1. The treatment or disposal of wastes from the WRP 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. The Discharger shall not accept secondary effluent in excess of the design treatment capacity of the WRF.
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. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
5. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the WRF.
6. On-site wastes, including windblown spray from recycled water application, shall be strictly confined to the lands specifically designated for the disposal operation, and on-site irrigation practices shall be managed so there is no runoff of effluent from irrigated areas.
7. There shall be at least a 4-foot horizontal and 1-foot vertical separation (with domestic water above the recycled water pipeline) between all newly installed constant pressure pipelines transporting domestic water and those transporting recycled water. All newly installed recycled water distribution lines shall be colored purple or labeled with purple tape. Existing pipelines are excluded from this requirement.
8. There shall be no-cross connection between potable water supply and piping containing recycled water. Supplementing recycled water with water used for domestic supply shall not be allowed except with an air-gap separation. An air-gap or reduced pressure principle device shall be provided at all domestic water service connections to recycled water use areas.

9. Irrigation with, or impoundment of disinfected tertiary recycled water shall not take place within 100 feet of any domestic water supply well.
10. Irrigation with, or impoundment of, undisinfected secondary recycled water shall not take place within 150 feet of any domestic water supply well.
11. The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibs.
12. Sludge and filter backwash pumped from the WRF to Palm Springs Wastewater Treatment Plant (WWTP) shall be pumped in such a way that they shall not cause the pass through of pollutants from the WWTP to the environment, nor cause upset in the treatment processes or operation of the WWTP.

D. Groundwater Limitations

1. Discharge from the WRF 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. Provisions

Recycled Water

1. The Discharger shall provide the following information regarding off-site use of disinfected tertiary recycled water:
 - a. Name and location of the golf courses/landscape areas being irrigated.
 - b. Quantity and quality of the recycled water provided to individual customers.
 - c. The discharger shall immediately notify the Colorado River Basin Water Board's Executive Officer of any changes regarding the location and quantity of recycled water provided to individual customers.
2. Personnel must be informed that recycled water is meant for irrigation and landscaping purposes only, and is not approved for drinking, hand washing, etc. Personnel must also be informed of the locations of domestic and recycled water lines to ensure that the potable and recycled systems are not interconnected.
3. The Discharger shall conduct a cross-connection control test, at least once every four (4) years. The cross-control tests shall be conducted by an American Water Works Association (AWWA) certified cross-connection control program specialist or equivalent. Prior to conducting the test the Discharger shall notify the CDPH and the Riverside County Department of Environmental Health. Results of the cross-connection test shall be submitted to the Colorado River Basin Water Board, CDPH and County Department of Health Services within 30 days of completion or the next monthly monitoring and reporting

program report.

4. Adequate measures shall be taken to minimize public contact with recycled water. Clearly visible, adequately sized warning signs shall be posted in sufficient numbers around the application and storage areas. The size and number of warning signs shall be mutually determined by the Discharger and CDPH.
5. The storage, delivery, or use of recycled water shall not individually or collectively, directly or indirectly, result in pollution, or adversely affect water quality, as defined in the California Water Code.
6. The delivery and use of recycled water shall be in conformance with the reclamation criteria contained in CCR, Title 22, or amendments thereto, for the irrigation of food crops, irrigation of fodder, fiber, and seed crops, landscape irrigation, supply of recreational impoundments and ground water recharge.
7. The Discharger shall not deliver recycled water for reuse to those users whom, by reason of their operational practices, may cause a nuisance associated with wastewater or otherwise contribute to the violation of the requirements of this Board Order.
8. Prior to delivering recycled water to any new user, the Discharger shall submit to the Colorado River Basin Water Board a report discussing any new distribution system being constructed by the Discharger to provide service to the new user.
9. Recycled water shall not be delivered to any new user who has not first submitted a Report of Waste Discharge and has received a Waste Discharge Requirements permit from the Colorado River Basin Water Board and approval from CDPH.
10. Recycled water shall not be applied in a manner or at a location where it could come in contact with drinking water fountains, food handling, food storage or dining areas.
11. Irrigated areas shall be properly managed to minimize ponding.
12. Recycled water shall not be used as domestic supply water or intentionally used as animal water supply.
13. The Discharger shall designate an on-site supervisor responsible for operation of the recycled water system. The supervisor shall be responsible for the installation, operation and maintenance of the irrigation system, prevention of potential hazards, maintenance of the distribution system plans in "as-built" form, and for the distribution of the recycled water. The name of the on-site supervisor shall be listed on the monthly monitoring report.

Standard Provisions

14. 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, § 13000 et seq.), and is grounds for enforcement action.
15. The Discharger shall comply with Monitoring and Reporting Program (MRP) R7-2014-0008, incorporated herein and made part of this order by reference, and future revisions thereto, as specified by the Colorado River Basin Water Board Executive Officer.

16. The Discharger shall not cause degradation of any water supply in accordance with State Water Resources Control Board Resolution 68-16.
17. Standby, power generating facilities shall be available to operate the plant during a commercial power failure.
18. 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.
19. The WRF 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.
20. 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 Executive Officer on request.
21. 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.
22. 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.
23. Uncovered reservoirs shall be managed to prevent breeding of mosquitoes, prevent odors and to minimize the accumulation of debris and organic material.
24. 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.
25. 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.

26. 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 Regional 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.
27. 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.
28. 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.
29. Prior to a change in ownership or management of WRF, 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.
30. 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.
31. 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 Executive Officer, and the Office of Emergency Services 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 office voice recorder at (760) 346-7491. 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 facility or collection system to the Colorado River Basin Water Board office in accordance with the above time limits.

32. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the Discharger's next scheduled SMR or earlier if requested by the Colorado River Basin Water Board Executive Officer, or if required by an applicable standard for sludge use and disposal.
33. 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

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.
 - b. 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.
34. 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 (5) 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.

Limitations

35. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
36. 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.
37. 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 September 14, 2013.

Ordered By:



ROBERT PERDUE
Executive Officer

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

MONITORING AND REPORTING PROGRAM R7-2014-0008
FOR
DESERT WATER AGENCY, OWNER/OPERATOR
WATER RECLAMATION FACILITY
Palm Springs – Riverside County

Location of Wastewater Reclamation Facility:
S ½ of the SW ¼ of Section 20, T4S, 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 (Water Code) 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 regional 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 regional 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 regional 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 § 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 regional board in accordance with Article 2.5 (commencing with § 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 R7-2014-0008. 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 United States Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Colorado River Basin Water Board Executive Officer, all analyses shall be conducted by a laboratory certified by California Department of Public Health (CDPH). 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. 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.
9. 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.
10. Samples shall be collected at the location specified in the Waste Discharge Requirements. If no location is specified, sampling shall be conducted at the most representative sampling point available.
11. Given the monitoring frequency prescribed by MRP R7-2014-0008, 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. The Discharger shall comply with the following:

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. The Discharger shall retain records of all monitoring information, 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 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Colorado River Basin Board's Executive Officer at any time.
- c. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements.
 - ii. The individual(s) who performed the sampling or measurements.
 - iii. The date(s) analyses were performed.
 - iv. The individual(s) who performed the analyses.
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.

13. 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.

Tertiary Effluent Monitoring

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

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Total Effluent Flow	MGD ⁷	Flow Measurement	Daily ⁸	Monthly
pH	pH units	Grab	Monthly	Monthly
Volume of Wastewater Used for Irrigation at Each Location	MGD	Flow Measurement	Daily	Monthly
Fecal Coliform	MPN/100 mL ⁹	Grab	Daily	Monthly
Total Coliforms	MPN/100 mL	Grab	Daily	Monthly
Chlorine Residual	mg/L ¹⁰	Grab	Daily	Monthly
Chlorine Contact Time (CT)	mg*min/L ¹¹	Calculation	Daily	Monthly

⁷ MGD – million gallons per day

⁸ Reported for each day with average monthly flow calculated

⁹ MPN/100 mL – Most Probable Number per 100 milliliters

¹⁰ mg/L – milligrams per liter

¹¹ milligram minutes per liter is chlorine concentration x modal contact time.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Nitrate (NO ₃ ⁻ N) as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Nitrite (NO ₂ ⁻ N) as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Kjeldahl Nitrogen as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Turbidity	NTU ¹²	Continuous	Daily	Monthly
20° C BOD ₅	mg/L	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Total Suspended Solids	mg/L	Grab at peak flow	Monthly	Monthly
Dissolved Oxygen	mg/L	Grab	Monthly	Monthly
Priority Pollutants ¹³	µg/L ¹⁴	Grab	Annually	Annually

15. The Discharger shall provide the following information regarding off-site use of tertiary effluent annually:

- a. Name, location, and acreage of the golf courses/landscape areas being irrigated.
- b. Name and person, company or agency responsible for the operation and maintenance of the irrigation system.
- c. Quantity and quality of the tertiary effluent being provided to individual customers.
- d. The Discharger shall immediately notify the Colorado River Basin Board's Executive Officer of any changes regarding Items a, b, c, above.

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 the results of the cross-connection test in the monthly Self-Monitoring Report (SMR) following completion of the test.
3. The Discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with WDR. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).

¹² Nephelometric Turbidity Units

¹³ 40CFR Part 423 Appendix A

¹⁴ µg/L – micrograms per liter

4. The results of any analysis taken, more frequently than required at the locations specified in this MRP shall be reported to the Colorado River Basin Water Board.
5. The SMR 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.
6. Each SMR 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".
7. The SMR, and other information requested by the Colorado River Basin Water Board, shall be signed by a principal executive officer or ranking elected official.
8. 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.
9. The Discharger shall report any failure in the facility (wastewater treatment plant, and collection and disposal systems). The incident shall be reported immediately to the Colorado River Basin Water Board Executive Officer 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.Results of analyses performed shall be provided within 15 days of sample collection.
10. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDR, 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.
11. 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 15th day of the following month. Quarterly monitoring reports shall be submitted by January 15th, April 15th, July 15th and October 15th. Annual monitoring reports shall be submitted to the Colorado River Basin Water Board by January 15th of the following year.

12. The Discharger shall submit monitoring reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring, Suite 100
Palm Desert, CA 92260

Ordered By: _____

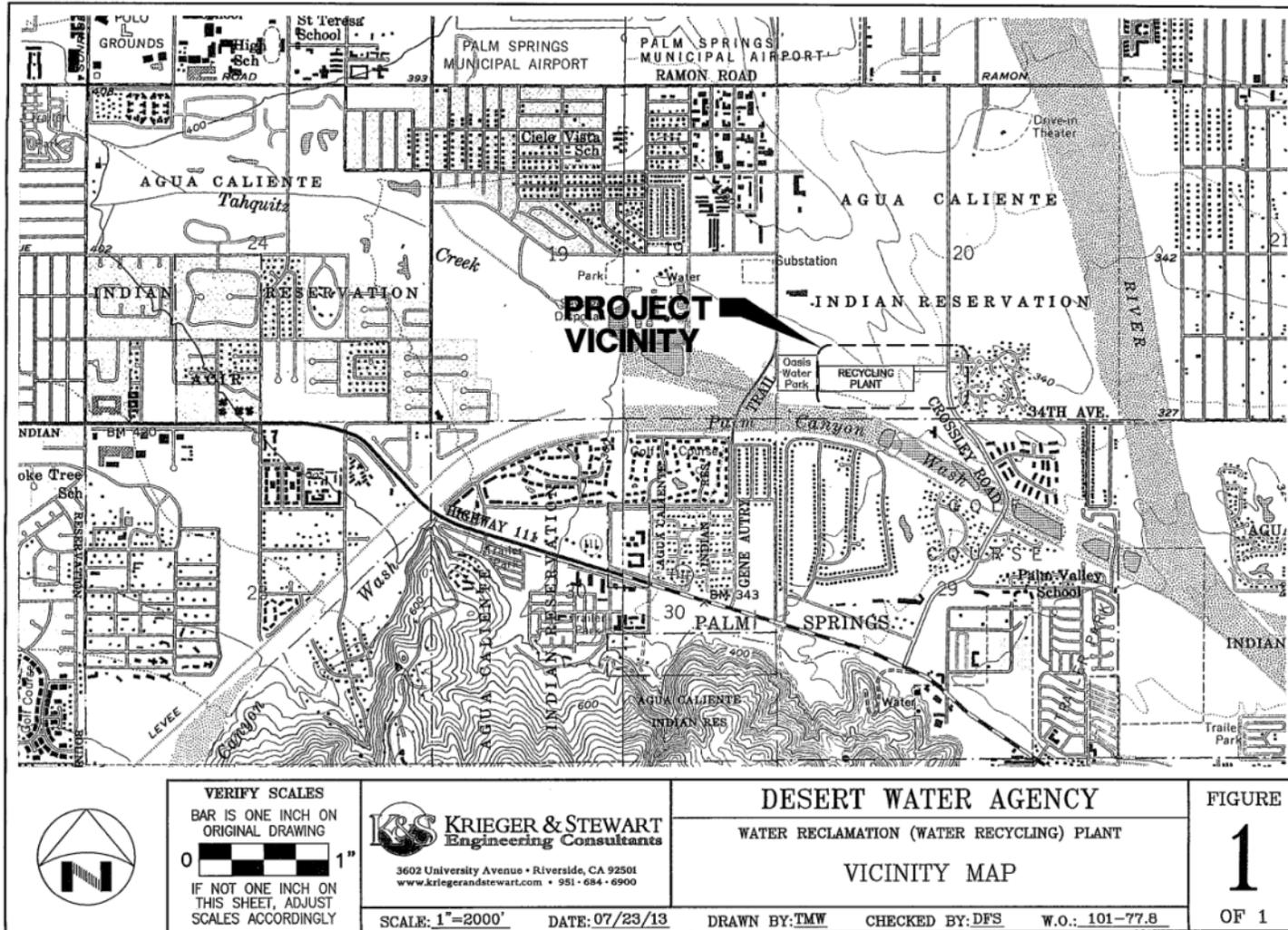


ROBERT PERDUE
Executive Officer

1/16/14
Date

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

ATTACHMENT "A"

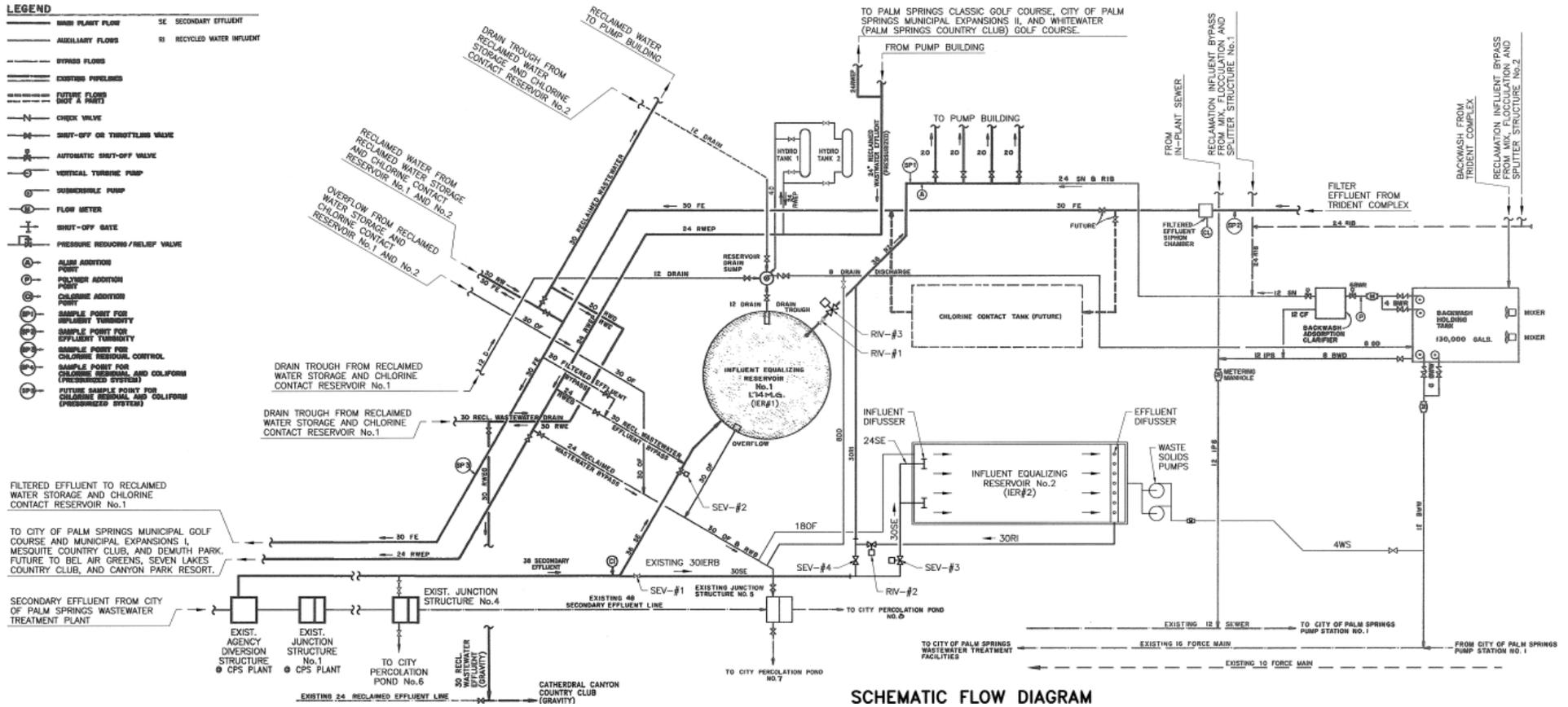


VICINITY MAP

DESERT WATER AGENCY OWNER/OPERATOR
WATER RECLAMATION FACILITY
Palm Springs – Riverside County

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

ATTACHEMENT "B"



**DESERT WATER AGENCY OWNER/OPERATOR
WATER RECLAMATION FACILITY
Palm Springs – Riverside County**

