

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

BOARD ORDER R7-2015-0013

**WASTE DISCHARGE REQUIREMENTS  
FOR  
CITY OF PALM SPRINGS, OWNER  
VEOLIA WATER WEST OPERATING SERVICES, INC., OPERATOR  
PALM SPRINGS WASTEWATER TREATMENT PLANT  
Palm Springs – Riverside County**

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

1. City of Palm Springs, 3200 E. Tahquitz Canyon Way, Palm Springs, CA 92262, owner, and Veolia Water West Operating Services Inc., 2300 Contra Costa Blvd., Pleasant Hill, CA 94523, operator (collectively, Discharger), submitted an application and Report of Waste Discharge (ROWD) to update Waste Discharge Requirements (WDRs) for Palm Springs Wastewater Treatment Plant (WWTP) located at 4375 East Mesquite Avenue, Palm Springs, CA 92264. The Discharger owns a wastewater collection, treatment and disposal system (hereinafter referred to as the Facility) and provides sewerage service to the City of Palm Springs.
2. Palm Springs WWTP is at the end of Vella Road, south of East Mesquite Ave, Palm Springs, as shown on the Location and Vicinity Map, Attachment A, incorporated herein and made part of this Board Order by reference. The Facility is located in the southeast  $\frac{1}{4}$  of Section 19, Township 4 South, Range 5 East, San Bernardino Baseline and Meridian. The Facility is assigned the California Integrated Water Quality System (CIWQS) WDID No. 7A330114012 and GeoTracker Global ID T10000006377.
3. The discharge from the Facility is currently regulated under Board Order 93-076, adopted on November 17, 1993. The Colorado River Basin Water Board has determined that WDRs for the discharge are in need of revision. The WDRs are being updated to incorporate design modifications at the Facility and implement laws and regulations applicable to the discharge.

**Wastewater Treatment Facility and Discharge**

4. The Facility is currently designed to treat and discharge up to 10.9 MGD of treated domestic wastewater. The facility's Schematic Flow Diagram is shown in Attachment B, incorporated herein and made part of this Board Order by reference, and the treatment consists of the following processes:
  - a. Preliminary Treatment: Preliminary treatment includes one automatic bar screen followed by two aerated grit chambers operating in parallel. Large materials are removed by the bar screen. Sand and heavy inorganic particles are removed in the aerated grit chambers. Removed material is collected and disposed of at an approved solid waste management facility.

- b. Primary Treatment: Effluent from the aerated grit chambers enters one of three primary clarifiers operating in parallel, where solids settle to the bottom of the tank and are segregated from the effluent. Grease and oils, which float to the surface, are skimmed off and segregated from the effluent. Sludge solids and grease are then pumped to the gravity thickeners for further concentration.
- c. Secondary Treatment: Secondary treatment includes four trickling filters and six secondary clarifiers both operating in parallel. Effluent from the primary clarifiers is combined with recycled trickling filter or secondary effluent for dilution. The combined flow is then pumped over the trickling filters where the majority of the soluble organic matter is removed through absorption and utilization by the biological organisms growing on the trickling filter media. Trickling filter effluent, along with biological organisms that periodically slough off the media, flows to the secondary clarifiers where suspended solids are removed before discharge. Solids collected at the secondary clarifiers are pumped to a gravity thickener. The solids are then transferred to anaerobic digesters for further treatment.
- d. Effluent Disposal: Between 30 and 40 percent of the final WWTP effluent is disposed of to one of six percolation ponds (totaling 23.3 acres). The remainder 60 to 70 percent is sent to an offsite tertiary treatment plant operated by the Desert Water Agency (DWA) and permitted pursuant to Board Order R7-2014-0008. DWA distributes the tertiary-treated recycled water for use as landscape and golf course irrigation. The effluent discharged to the percolation ponds is rotated from pond to pond on a frequency that does not exceed 7 days. Pond maintenance for sludge control and soil scarification to facilitate percolation also occurs rotationally.
- e. Solids Handling: All solids collected in the primary treatment after the grit chambers and secondary treatment processes are pumped to two gravity thickeners, which are operated in parallel, where the solids are settled to increase the total solids concentration prior to pumping to two anaerobic digesters, which are currently operated in series but may also be operated in parallel if necessary. In the anaerobic digesters, organic solids in the sludge are reduced through the biochemical reactions of biological organisms. Methane and carbon dioxide are produced as a result of the process. The methane is disposed of in a gas flare. The digestion process is comprised of primary and secondary stages. In the primary stage the majority of the organic solids destruction takes place. In the secondary stage destruction continues and the solids are stored and concentrated. The solids are then drawn off into one of twenty-six (26) sludge drying beds, where the solids are dried for several weeks. The dry solids concentration of the sludge in the drying bed can be increased from about 2.5% total solids to over 90% total solids. A belt filter press was installed in 2002 to allow for increased solids dewatering capabilities during the cooler winter months, when drying times are longer and the drying beds can reach capacity. Water that is removed from the sludge in the solids handling processes is collected and returned to the plant headworks for treatment. Dewatered solids are stored in an asphalt-lined impoundment area for eventual removal by a biosolids hauling contractor for legally permitted composting or land application.
- f. SCADA System: A Supervisory Control and Data Acquisition (SCADA) system provides monitoring of plant equipment and processes. The system utilizes a central computer station, as well as remote Programmable Logic Controllers (PLCs) and panel view units that allow key equipment and processes to be viewed from various

locations throughout the Facility. Operational trends are monitored and all flows and levels are saved to a permanent archive. The system monitors equipment and sends alarms to operators if problems are detected.

5. Back-up power is available for all treatment processes.
6. The Discharger's ROWD does not discuss industrial discharges into its collection system. The Discharger will be required to provide a routine assessment of its industrial dischargers in its annual report.
7. The Discharger's Self-Monitoring Reports (SMRs) from November 2009 through October 2014 characterize the WWTP influent as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
Flow	MGD	5.890	6.959	5.357
20°C BOD <sub>5</sub>	mg/L	202	314	71
Total suspended solids	mg/L	275	1455	61

8. The Discharger's SMRs from November 2009 through October 2014 characterize the WWTP effluent as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
20°C BOD <sub>5</sub>	mg/L	11.6	27.9	5.5
Total suspended solids	mg/L	11.8	26.7	4.5
Settleable matter	ml/L	<0.1	<0.1	<0.1
pH	pH units	7.3	7.4	7.2
Total dissolved solids	mg/L	501	600	420
Sulfate	mg/L	92.4	120	75.9
Chloride	mg/L	81.1	99.1	70.0
Fluoride	mg/L	0.5	0.7	0.1
Nitrate as N	mg/L	10.1	16.0	4.6
Nitrite as N	mg/L	0.57	1.80	<0.15
Total Nitrogen	mg/L	14.8	23.9	8.8
VOCs:	µg/L	-	-	-
Chloroform	µg/L		0.28 <sup>1</sup>	
Toluene	µg/L		0.07-0.5 <sup>2</sup>	
Methylene chloride	µg/L		5.4 <sup>3</sup>	

### Hydrogeologic Conditions

9. Annual precipitation averages about 5 inches. Annual evapotranspiration rate is about 60 inches.
10. There are no surface waters in the vicinity of the WWTP. A drainage course referenced as the Tahquitz Creek is adjacent to the Facility immediately to the south.

<sup>1</sup> Chloroform was detected in the fourth quarter of 2013 and second quarter of 2014.

<sup>2</sup> Toluene was detected in the first and second quarter of 2014.

<sup>3</sup> Methylene chloride was detected in a single sampling event during the second quarter of 2014.

11. Water supply to the community from groundwater production wells located in the subbasin has an average Total Dissolved Solids (TDS) concentration of about 350 mg/L.
12. The Discharger's SMR provides groundwater monitoring data for three wells in the vicinity of the discharge. Groundwater monitoring samples are collected from three wells as shown on Attachment C, incorporated herein and made part of this Board Order by reference. Wells 1 and 2 are located downgradient and Well 3 is located upgradient of the disposal ponds. Groundwater monitoring data shows the following characteristics for groundwater in the vicinity of the discharge:

<u>Constituent</u>	<u>Units</u>	<u>Well 1</u>	<u>Well 2</u>	<u>Well 3</u>
Depth to groundwater	Feet	195	200	197
TDS	mg/L	644	751	580
Nitrate as N	mg/L	7.0	14.6	4.6
Sulfate	mg/L	124	149	90
Chloride	mg/L	105	121	86
Fluoride	mg/L	0.29	0.32	0.27
Total Nitrogen	mg/L	8.07	19.54	5.69
VOCs:	µg/L	-	-	-
Naphthalene	µg/L	0.29 <sup>4</sup>		
Methylene chloride	µg/L	2.05 <sup>5</sup>		2.2 <sup>6</sup>
Trichlorobenzene	µg/L	0.28		
Chloroform	µg/L	-	0.5-6.1 <sup>7</sup>	0.67-2.1 <sup>8</sup>
Bromodichloromethane	µg/L	-	-	0.39 <sup>9</sup>

13. Regional groundwater flow in the area is to the southeast.
14. The site is located in a seismically active desert region.

**Chloride, Fluoride and Sulfate**

15. Board Order 93-076 contains effluent limitations of 70 mg/L for chloride, 1.2 mg/L for fluoride and 90 mg/L for sulfate which Colorado River Basin Water Board staff has determined to be neither technology based nor water quality based. Technology based effluent limits are derived from industry standards considering economic consequences and water quality based effluent limits apply in the receiving water are derived to protect designated beneficial uses.
16. The Discharger's June 26, 2013 ROWD and case file report documents show that an increase in chloride and sulfate concentrations in the effluent has occurred over the past 20 years. Recent effluent monitoring for chloride and sulfate show a maximum

<sup>4</sup> In 20 sampling events, naphthalene was detected once at 0.29 µg/L. ?

<sup>5</sup> In 20 sampling events, methylene chloride was detected once at 2.05 µg/L.

<sup>6</sup> In 20 sampling events, methylene chloride was detected once at 2.2 µg/L.

<sup>7</sup> In 20 sampling events, chloroform was detected seven times at concentrations between 0.5 and 6.1 µg/L.

<sup>8</sup> In 20 sampling events, chloroform was detected four times at concentrations between 0.67 and 2.1 µg/L.

<sup>9</sup> In 20 sampling events, bromodichloromethane was detected once at 0.39 µg/L.

concentration of 99.1 and 120 mg/L, respectively. The ROWD further states that the primary cause for the increased concentrations has been water conservation measures in the community that have significantly reduced influent flow to the WWTP. The quantity of wastewater treated has declined from about 8.8 million gallons per day (MGD) in 1993 to about 6.0 MGD in 2012. Chloride, fluoride and sulfate are present in the water supply and the concentration of these inorganic constituents increases with use with contributions from municipal and water softening wastewater.

17. The state of California does not currently have a primary maximum contaminant level (MCL) for chloride or sulfate and thus chloride and sulfate are not considered by the state of California to be a potential human health threat. A California Primary MCL has been established for fluoride at 2 mg/L, which is also the same values as the U.S. Environmental Protection Agency's Secondary MCL. Title 22 of the California Code of Regulations (CCR) lists a Secondary MCL for both chloride and sulfate of 250 mg/L and chloride has an agricultural use water quality goal of 106 mg/L. The U.S. Environmental Protection Agency has adopted a Primary MCL for sulfate of 500 mg/L. Primary MCLs are derived from health based criteria and Secondary MCLs are derived from human welfare considerations such as taste and odor.
18. The Palm Springs WWTP does not currently have/operate appropriate treatment technology for the removal of chloride, fluoride or sulfate. Further, the existing effluent limits are set lower than water quality goals. Therefore, Colorado River Basin Water Board staff believes the effluent limitations for chloride, fluoride and sulfate have not been justified. Current treatment technologies that effectively remove chloride are ion exchange, membrane processes, microfiltration and reverse osmosis. Requiring the removal of chloride, fluoride and sulfate from the wastewater in concentrations below the Secondary MCL would be energy intensive and costly. In support of the California Global Warming Solutions Act of 2006, the creation of an air borne waste by-product (CO<sub>2</sub>) in exchange for the removal of chloride and sulfate in the wastewater is not necessary.
19. This Board Order eliminates the effluent limits for chloride, fluoride and sulfate that are contained in Board Order 93-076, but it retains some monitoring and reporting requirements. In addition, this Board Order requires that the Discharger develop, implement and report efforts to promote a source control program for chloride, fluoride, sulfate and other dissolved salts, including but not limited to public outreach and measures to restrict or eliminate ion exchange water softeners. The Discharger will be required to monitor and analyze the effectiveness of the source control program by means of trend monitoring and report the analytical results periodically to the Colorado River Basin Water Board.

## **Nitrogen**

20. Constituents in domestic WWTP effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and dissolved salts. The WWTP provides substantial removal of soluble organic matter, solids and pathogen control.
21. Title 22, CCR section 64431 lists the Primary MCL for Nitrate plus Nitrite as Nitrogen at 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. The Discharger's SMRs from November 2009 to October 2014 show a range of 8.8 to

23.9 mg/L with an average 14.8 mg/L for Total Nitrogen in the effluent. Some degradation of groundwater by nitrogen constituents is occurring. Degradation should be limited to the area near the facility. Groundwater monitoring samples are collected from three wells as shown on Attachment C. Upgradient Well 3 contains nitrate (as nitrogen) concentrations averaging 4.6 mg/L. Downgradient wells show nitrate (as nitrogen) concentrations averaging 7.0 mg/L (total nitrogen 8.07 mg/L) in Well 1 and 14.6 mg/L (total nitrogen 19.54) in Well 2. Well 2 data indicate that nitrates reach groundwater at a rate or in concentrations causing groundwater to exceed the Primary MCL prescribed in Title 22, CCR section 64431. This is evidence that to protect drinking water beneficial use, the Board Order should incorporate a water quality based effluent limit for nitrogen in groundwater.

22. The wastewater reuse practices have worked to mitigate the rate of increase and areal extent of the elevated nitrogen concentrations in groundwater. Approximately two-thirds of the treated effluent is used for landscape irrigation. The balance is discharged to the evaporation/percolation ponds. Groundwater degradation by nitrates seems confined to the area in the vicinity of the evaporation/percolation ponds. However, long term continuation of the existing treatment practice is not sustainable and conducive to the drinking water beneficial use of groundwater. This Board Order will require the Discharger to undergo a nitrogen study and investigation. The study needs to evaluate the sources of nitrogen, alternatives for immediate mitigation, and by January 2023, the feasibility of adding treatment process elements for nitrification and de-nitrification implementing best practicable treatment and control (BPTC). The Board Order also contains a time schedule to improve treatment and comply with a groundwater limit for total nitrogen.

### **Pathogens**

23. 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 in excess of that prescribed in Title 22, CCR.

### **Salinity**

24. During the period of November 2009 to October 2014, the Dischargers SMRs show that effluent from the WWTP had a TDS range of 420 to 600 mg/L with an average of about 501 mg/L. TDS is a measure of dissolved salts or salinity and the typical incremental addition of TDS above that of the community water supply is between 150 to 300 mg/L. Domestic water supply to the community showed an average TDS concentration of about 354 mg/L from 2009 to 2013. The average TDS increase in the effluent for this facility over the domestic water supply for the same time period was about 135 mg/L.
25. Salinity, measured as TDS of the groundwater beneath the WWTP ponds ranges from 580 mg/L at well 3 (upgradient) to 751 mg/L at well 2 (downgradient). This Board Order retains the Board Order 93-076 TDS limit as an increase over the domestic supply and reduces that allowable increase from 400mg/L to 300 mg/L. The regulatory limit is achievable by the Discharger and reasonably protects present and anticipated beneficial uses of groundwater. In addition, as previously specified, this Board Order requires that the Discharger develop, implement and report efforts to promote a source control

program for dissolved salts.

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

26. The Water Quality Control Plan for the Colorado River Basin (Basin Plan), as amended to date, designates beneficial uses and establishes water quality objectives for ground and surface waters in the Region, and contains implementation programs and policies to achieve objectives. In addition, State Water Resources Control Board (State Water Board) Resolution 88-63 requires that, with certain exceptions, the Colorado River Basin Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.
27. The discharge is within the Coachella Hydrologic Subunit and the Basin Plan designated beneficial uses for groundwater include:
  - a. Municipal supply (MUN),
  - b. Industrial supply (IND), and
  - c. Agricultural supply (AGR)
28. 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 MCL, 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.
  - 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.
29. Section 13267 of the California Water Code (CWC) authorizes a Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement state requirements and demonstrate compliance with the Order. The State Water Board's electronic database, GeoTracker Information Systems facilitates the submittal and review of monitoring and reporting.
30. 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).
31. 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.
32. 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 (Title 27), 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 sludges or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable Title 27 provisions: The Discharger's compliance with this Order results in meeting the applicable Title 27 provisions. 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 sludges or solid waste from the Facility will be managed pursuant to Title 27.

33. This Board Order allows the Discharger to distribute secondary treated waste water to DWA for additional treatment and eventual reuse. The storage and conveyance facilities associated with the distribution of secondary treated wastewater to DWA are exempt from the requirements of Title 27, based on section 20090(h). The Discharger's compliance with this Order results in meeting the applicable Title 27 provisions.
34. 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)).
35. The discharge authorized by this Board Order is consistent with the State Water Board's Recycled Water Policy.
36. State Water Board Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State"), hereinafter 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 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."

37. Some degradation of groundwater from the discharge to the disposal 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.
38. With the exception of the lack of processes dedicated to nitrification and de-nitrification, 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 treated 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.

#### **CEQA and Public Participation**

39. In accordance with section 15301, Chapter 3, Title 14 of the 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 (CEQA), Public Resources Code, section 21000 et seq.
40. The 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.
41. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order 93-076 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 CWC 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 CWC 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 in a manner or a location, other than as described in the findings, is prohibited.

4. The WWTP shall be operated and maintained to comply with BPTC.
5. The WWTP shall be operated and maintained to prevent untreated sewage or partially or fully treated effluent from surfacing or overflowing.
6. The discharge of any wastewater from the facility to any surface waters or surface drainage courses is prohibited.
7. The discharge of waste to land not owned or authorized for such use by the Discharger is prohibited.
8. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
9. Bypass or overflow of untreated or partially treated waste is prohibited.

#### B. Effluent Limitations

1. Effluent discharged to the percolation ponds for disposal or conveyed offsite for further treatment shall not exceed the following effluent limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>
20° C BOD <sub>5</sub> <sup>10</sup>	mg/L <sup>11</sup>	30	45
Total Suspended Solids (TSS)	mg/L	30	45
Settleable Matter	ml/L <sup>12</sup>	0.3	0.5

2. The pH of the effluent from the WWTP shall not be below 6.0 or above 9.0.

#### C. Groundwater Limitations

1. Effective immediately, groundwater shall not contain nitrates in excess of 20 mg/L.
2. By **January 15, 2025**, groundwater shall not contain nitrates in excess of the MCLs, as set forth in the CCR, Title 22, section 64432.1 of 10 mg/L.
3. 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 MCLs, as set forth in the CCR, Title 22, section 64426.1 for bacteriological constituents; Section 64431 for inorganic chemicals; and Section 64444 for organic chemicals.
  - c. Acquire taste, odor, toxicity, or color that creates nuisance or impairs beneficial use.

<sup>10</sup> 5-day biochemical oxygen demand at 20 °C

<sup>11</sup> milligrams per Liter

<sup>12</sup> milliliters per Liter

#### D. Discharge Specifications

1. The 30-day monthly average daily discharge from the WWTP to either the evaporation basin or for reuse, shall not exceed design treatment capacity of 10.9 MGD.
2. The Discharger shall not accept waste in excess of the design treatment capacity of the disposal system.
3. The 30-day average removal of the pollutant parameters BOD<sub>5</sub> and TSS shall not be less than 80 percent.
4. The total dissolved solids concentration should not exceed 300 mg/L above the average annual total dissolved solids concentration in the Palm Springs water supply.
5. For purposes of odor control, the percolation ponds shall be maintained so they will be kept in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of percolation ponds shall not be less than 1.0 mg/L. If there is little or no water in the percolation/evaporation ponds, the monitoring report shall state "No standing water in ponds" in place of reporting dissolved oxygen concentration.
6. A minimum depth of two (2) feet of freeboard shall be maintained at all times in the percolation ponds.
7. 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.
8. 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.
9. The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the CWC.
10. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
11. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.

#### E. Provisions

##### Special Provisions

1. The Discharger shall develop, implement and report efforts to promote a source control program for chloride, fluoride, sulfate and other dissolved salts and TDS, including but not limited to public outreach and measures to restrict or eliminate ion exchange water softeners and contributions from softener regeneration brines, other mineralized wastes. The Discharger shall perform a technical study to evaluate the incremental increase of salinity above the source water (community water supply). **By January 30, 2016**, the Discharger shall submit a technical report that includes a work plan and time schedule to

perform a study to evaluate the sources of chloride, fluoride, sulfate, TDS including softener regeneration brines, other mineralized wastes into the collection system. The study must consider the impact the discharge has on the beneficial uses of the receiving groundwater. The time schedule for the study shall not be longer than three (3) years. The work plan and time schedule shall be submitted to the Colorado River Basin Water Board's Executive Officer for review and approval. Upon approval, the work plan and time schedule shall become an enforceable part of this Board Order. The technical report shall include the following:

- a. Evaluation by the Discharger shall include but is not limited to information on the following factors relating to the discharge:
    - i. Description of the municipal entity and facilities, including local ordinances, and district rules and regulations that address the topic of controlling salinity in wastewater.
    - ii. Description of the quantity and concentrations of chloride, fluoride, sulfate and TDS including softener regeneration brines, other mineralized wastes of domestic water sources contributing to discharge and identification of entities responsible for each source, if available.
    - iii. Description of significant other salinity sources to the municipal wastewater collection system, and identification of entities responsible for each source, if available.
    - iv. Description of the wastewater discharge characterization, including chloride, fluoride, sulfate and TDS including softener regeneration brines, other mineralized wastes load, with its corresponding mass balance.
    - v. Description of wastewater treatment strategies employed at the facility to remove identified pollutants.
    - vi. Description of receiving groundwater characterization.
  - b. Recommended source control plan elements, the Discharger shall monitor and analyze the effectiveness of the source control program by means of trend monitoring and report the analytical results with the annual SMR to the Colorado River Basin Water Board. The public outreach and source control program shall be detailed and submitted as part of the workplan.
  - c. Monitoring and reporting proposal to accomplish recommended methods to monitor and analyze the effectiveness of the source control program.
2. The Discharger shall include nitrogen removal technology in future facility improvements and **by January 15, 2021** achieve nitrogen removal to comply with the **January 15, 2025** groundwater water quality limit for nitrates of 10 mg/L.
- a. **By January 30, 2016**, the Discharger shall submit a technical report that includes a work plan and time schedule to perform a study to evaluate the sources of nitrogen into the collection system and shall complete a feasibility study to address the practicability of a 10 mg/L total nitrogen groundwater limitation. The feasibility study must consider the impact the discharge has on the beneficial uses of the receiving

groundwater and the short and long-term costs for the alternative water supply treatment or replacement water and anticipated rate increases to upgrade the treatment system. The time schedule for the study shall not be longer than three (3) years. The work plan and time schedule shall be submitted to the Colorado River Basin Water Board's Executive Officer for review and approval. Upon approval, the work plan and time schedule shall become an enforceable part of this Board Order. The technical report shall include the following:

- a. Evaluation by the Discharger shall include information on the following factors relating to the discharge:
  - vii. Description of the municipal entity and facilities.
  - viii. Description of the quantity and nitrogen concentration of domestic water sources contributing to discharge.
  - ix. Description of significant nitrogen sources of the municipal wastewater collection system, and identification of entities responsible for each source, if available.
  - x. Description of the wastewater discharge, receiving waters, quantity, and nitrogen load, including a nitrogen mass balance.
  - xi. Alternative plans for minimizing nitrogen contribution from the municipal sources. Alternative plans shall include:
    - 1) Description of nitrogen sources and alternative means of control; and
    - 2) Costs of alternative plans, expressed in dollars per ton, of nitrogen removed from the discharge.
  - xii. Such other information pertinent to the technical report as the Executive Officer may deem necessary.
- b. In determining what permit conditions shall be required, the Colorado River Basin Water Board may 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, an alternative effluent limit may be considered. In this event, the Discharger shall provide the following information:
    - 1) A recommended alternative effluent limit.
    - 2) The impact of the proposed nitrogen input of the alternative on the beneficial uses of the groundwater in terms of tons per year and concentration;
    - 3) Costs per ton of nitrogen removed from the discharge of each alternative plan;
    - 4) The Discharger's ability to minimize nitrogen discharge;

- 5) The basis and rationale for the Discharger's recommendations and conclusions; and
  - 6) A proposed schedule with justifications for task duration for proposed system upgrades.
- c. **Within 30 days** of approval by the Executive Officer, the Discharger shall begin implementation of the work plan in accordance with the time schedule.
- d. **By January 30, 2019**, the Discharger shall submit a final technical report that includes the Discharger's recommendations and conclusions, including the work plan and time schedule for facility plant improvements to accomplish nitrogen removal and comply with the groundwater water quality limit.
3. The Discharger shall ensure that secondary treated wastewater delivered to Desert Water Agency for recycling does not contain sludge, algae, palm fronds, dead birds or any other organic or inorganic materials.

#### **Standard Provisions**

1. 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.
2. The Discharger shall comply with Monitoring and Reporting Program (MRP) R7-2015-0013, and future revisions thereto, incorporated herein and made part of this Order by this reference, as specified by the Colorado River Basin Water Board's Executive Officer.
3. The Discharger shall not cause degradation of any water supply in accordance with State Water Board Resolution 68-16.
4. Standby, power generating facilities shall be available to operate the plant during a commercial power failure.
5. 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.
6. 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 CCR.
7. 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.
8. 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.

9. 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 CWC, any substances or parameters at this location.
10. 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.
11. 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's Executive Officer.
12. Any proposed change in use or disposal of biosolids requires the approval of the Colorado River Basin Water Board's Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least 90 days in advance of the change.
13. 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.
14. 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.
15. 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.

16. 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.
17. 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.
18. 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.
19. 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.
20. The Discharger shall report 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, 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.

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.
21. 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's Executive Officer, or if required by an applicable standard for sludge use and disposal.

22. 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.

#### **Pretreatment**

23. The Discharger shall include in the annual report required pursuant to the MRP an evaluation of the performance of the WWTP, including a discussion of capacity and any potential pretreatment issues. The Discharger shall also notify Colorado River Basin Water Board staff as soon as the Discharger determines that a pretreatment program becomes necessary for compliance with this Board Order, including avoidance of nuisance conditions. In accordance with CCR, Title 23, Section 2233, the Executive Officer may also determine, based on data submitted, that it is necessary for the Discharger to develop, adopt, and enforce an adequate industrial pretreatment program,

#### **General Conditions**

24. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
25. 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.
26. 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.
27. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with Chapter 30, Division 3, Title 23 of the California Code of Regulations (CCR), as groundwater raw data uploads electronically over the internet into the State Water Board's GeoTracker <https://geotracker.waterboards.ca.gov/> database. Documents that are normally mailed by the Discharger, such as regulatory documents, narrative technical monitoring program reports, and such reports submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall also be uploaded into GeoTracker in the appropriate Microsoft software application, such as word, excel, or an Adobe Portable Document Format (PDF) file. Documents that are too large or that cannot be easily converted to an electronic format or cannot be uploaded into GeoTracker should be transferred to a disk and emailed to [RB7-wdrs\\_paperless@waterboards.ca.gov](mailto:RB7-wdrs_paperless@waterboards.ca.gov) or

otherwise hard copy mailed to the Colorado River Basin Water Board office in Palm Desert. The Facility is assigned the California Integrated Water Quality System (CIWQS) WDID No. 7A330114012 and GeoTracker Global ID T10000006377.

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 January 15, 2015.

Ordered By: \_\_\_\_\_  
ROBERT PERDUE  
Executive Officer

Draft, December 30, 2014

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2015-0013  
FOR  
CITY OF PALM SPRINGS, OWNER  
VEOLIA WATER WEST OPERATING SERVICES, INC., OPERATOR  
PALM SPRINGS WASTEWATER TREATMENT FACILITY  
Palm Springs – Riverside County

Location of Wastewater Treatment Facilities and Discharges:  
SE¼ of Section 19, 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 (CWC) section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Colorado River Basin Water Board or its 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 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 regional 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 R7-2015-0013. 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's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Department of Health Services. 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. 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.
10. Given the monitoring frequency prescribed by MRP R7-2015-0013, 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.

11. 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.
- 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.

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>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow	MGD <sup>1</sup>	Meter	Daily <sup>2</sup>	Monthly
Monthly Average Flow	MGD <sup>3</sup>	Calculated	Monthly <sup>4</sup>	Monthly
20°C BOD <sub>5</sub> <sup>5</sup>	mg/L <sup>6</sup>	24-Hr. Composite	Weekly	Monthly
TSS <sup>7</sup>	mg/L	24-Hr. Composite	Weekly	Monthly
TDS	mg/L	24-Hr. Composite	Weekly	Monthly

**Pond Monitoring**

<sup>1</sup> Million Gallons per Day  
<sup>2</sup> Reported for each day with average monthly flow calculated  
<sup>3</sup> Million Gallons per Day  
<sup>4</sup> Reported for each day with average monthly flow calculated  
<sup>5</sup> Biochemical Oxygen Demand  
<sup>6</sup> Milligrams per Liter  
<sup>7</sup> Total Suspended Solids

14. The Discharger shall monitor each of the wastewater treatment and evaporation/percolation ponds as specified:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
pH	pH units	Grab	Monthly	Monthly
Dissolved Oxygen <sup>8</sup>	mg/L	Grab	Monthly	Monthly
Freeboard	0.1 feet	Observation	Monthly	Monthly
Berm Condition		Observation	Monthly	Monthly
Seepage <sup>9</sup>	gallons/day/ft	Observation	Monthly	Monthly
Odors	mg/L	Observation	Monthly	Monthly

If there is little or no water in the percolation/evaporation ponds, the monitoring report shall state "No standing water in ponds" in place of reporting dissolved pH and dissolved oxygen concentration.

**WWTP Effluent Monitoring**

15. Effluent from the WWTP 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>
Flow to Desert Water Agency	MGD	Metered	Daily	Monthly
Flow to Ponds <sup>10</sup>	MGD	Calculation	Daily	Monthly
20°C BOD <sub>5</sub>	mg/L	24-Hr. Composite	Semi-Weekly <sup>11</sup>	Monthly
TSS	mg/L	24-Hr. Composite	Semi-Weekly	Monthly
Settleable Solids	ml/L <sup>12</sup>	Grab at Peak Flow	Daily	Monthly
pH	pH units	Grab	Daily	Monthly
TDS	mg/L	Grab	Monthly	Monthly
Dissolved Oxygen	mg/L	Grab	Monthly	Monthly
Nitrate as N	mg/L	Grab	Monthly	Monthly

<sup>8</sup> Samples shall be collected from opposite the inlet at a depth of one foot and from each pond in use.

<sup>9</sup> Pond containment berms and the dams shall be observed for signs of seepage, if surfacing water is found then a sample shall be collected and tested for total coliform organisms and TDS.

<sup>10</sup> Flow to evaporation ponds calculated as difference between influent and flow to DWA for tertiary treatment

<sup>11</sup> Twice weekly

<sup>12</sup> Milliliters per Liter

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Nitrite as N	mg/L	Grab	Monthly	Monthly
Total Nitrogen	mg/L	Grab	Monthly	Monthly
VOCs <sup>13</sup>	µg/L <sup>14</sup>	Grab	Annually	Annually

### Water Supply to the Community

16. The domestic water supply 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>
pH	Standard units	Grab	Annually	Annually
TDS	mg/L	Grab	Annually	Annually

### Groundwater Monitoring

17. The Discharger shall monitor groundwater wells MW-1, 2, and 3 according to the following schedule [report in Geotracker]:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Nitrate as N	mg/L	Grab	Quarterly	Quarterly
Nitrite as N	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms	MPN/100	Grab	Quarterly	Quarterly
Sulfate	mg/L	Grab	Quarterly	Quarterly
Chloride	mg/L	Grab	Quarterly	Quarterly
Fluoride	mg/L	Grab	Quarterly	Quarterly
VOCs	µg/L	Grab	Quarterly	Quarterly
Groundwater elevation <sup>15</sup>	0.01ft	Calculated	Monthly	Monthly
Depth to Groundwater (bgs) <sup>16</sup>	0.01ft	Measurement	Monthly	Monthly
Flow Gradient	feet/foot	Calculated	Monthly	Monthly
Flow Direction	degrees	Calculated	Monthly	Monthly

<sup>13</sup> Analyses of Volatile Organic Compounds shall be test methods EPA 601 and 602 or EPA method 624

<sup>14</sup> Micrograms per Liter

<sup>15</sup> Groundwater elevation shall be based on depth-to-water using a surveyed measuring point elevation on the well and a surveyed reference elevation.

<sup>16</sup> Below ground surface

### Sludge Monitoring

18. 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. 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>Sampling Frequency</u>	<u>Reporting Frequency</u>
Arsenic	mg/kg <sup>17</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>18</sup>	Composite	Annually	Annually

### B. Reporting

#### Operation and Maintenance

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 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).
3. 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.
4. The annual report shall also contain an affirmative statement of the need to establish an industrial pretreatment program.

<sup>17</sup> Milligrams per kilogram

<sup>18</sup> Most Probable Number per gram

5. 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 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".
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's 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. Annual reports shall include an evaluation of the performance of the WWTP, including a discussion of capacity and pretreatment issues, in filtration and inflow rates, nuisance conditions and a two-year forecast of anticipated flow increases.
12. 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 **1st day of the second month after the quarter**. Annual monitoring reports shall be submitted to the Colorado River Basin Water Board by **February 1<sup>st</sup>** of the following year.

13. The Discharger shall submit, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with Chapter 30, Division 3, Title 23 of the California Code of Regulations (CCR), as groundwater raw data uploads electronically over the internet into the State Water Board's GeoTracker <https://geotracker.waterboards.ca.gov/> database. Documents that are normally mailed by the Discharger, such as regulatory documents, narrative technical monitoring program reports, and such reports submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall also be uploaded into GeoTracker in the appropriate Microsoft software application, such as word, excel, or an Adobe Portable Document Format (PDF) file. Documents that are too large or that cannot be easily converted to an electronic format or cannot be uploaded into GeoTracker should be transferred to a disk and emailed to [RB7-wdrs\\_paperless@waterboards.ca.gov](mailto:RB7-wdrs_paperless@waterboards.ca.gov) or otherwise hard copy mailed to the Colorado River Basin Water Board office in Palm Desert. The Facility is assigned the California Integrated Water Quality System (CIWQS) WDID No. 7A330114012 and GeoTracker Global ID T10000006377:

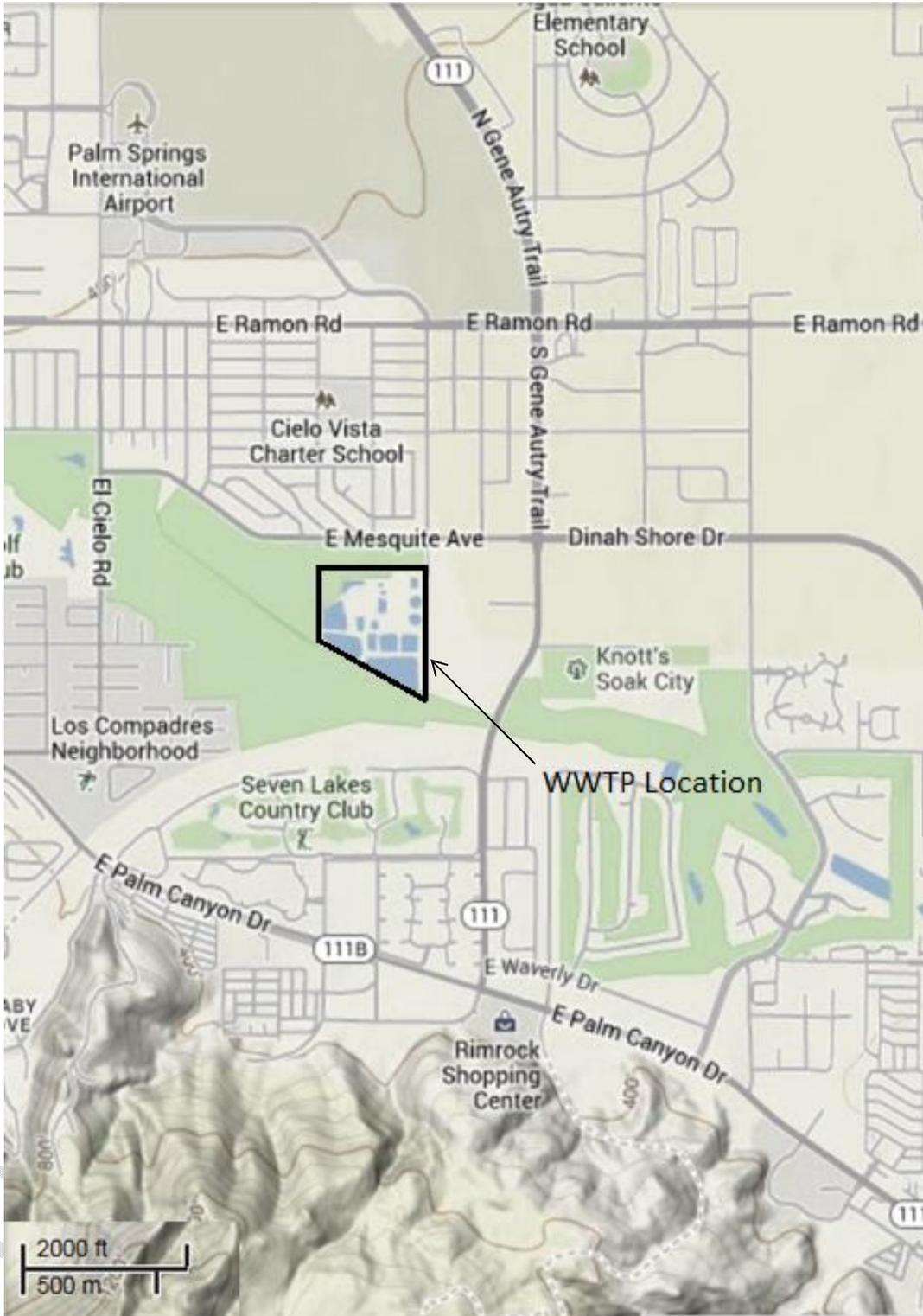
California Regional Water Quality Control Board  
Colorado River Basin Region  
Attention: Waste Discharge Requirements Unit  
WDID No. 7A330114012, GeoTracker Global ID T10000006377  
73-720 Fred Waring, Suite 100  
Palm Desert, CA 92260

Groundwater monitoring reports shall also be submitted to the online GeoTracker database.

Ordered By: \_\_\_\_\_  
ROBERT PERDUE  
Executive Officer

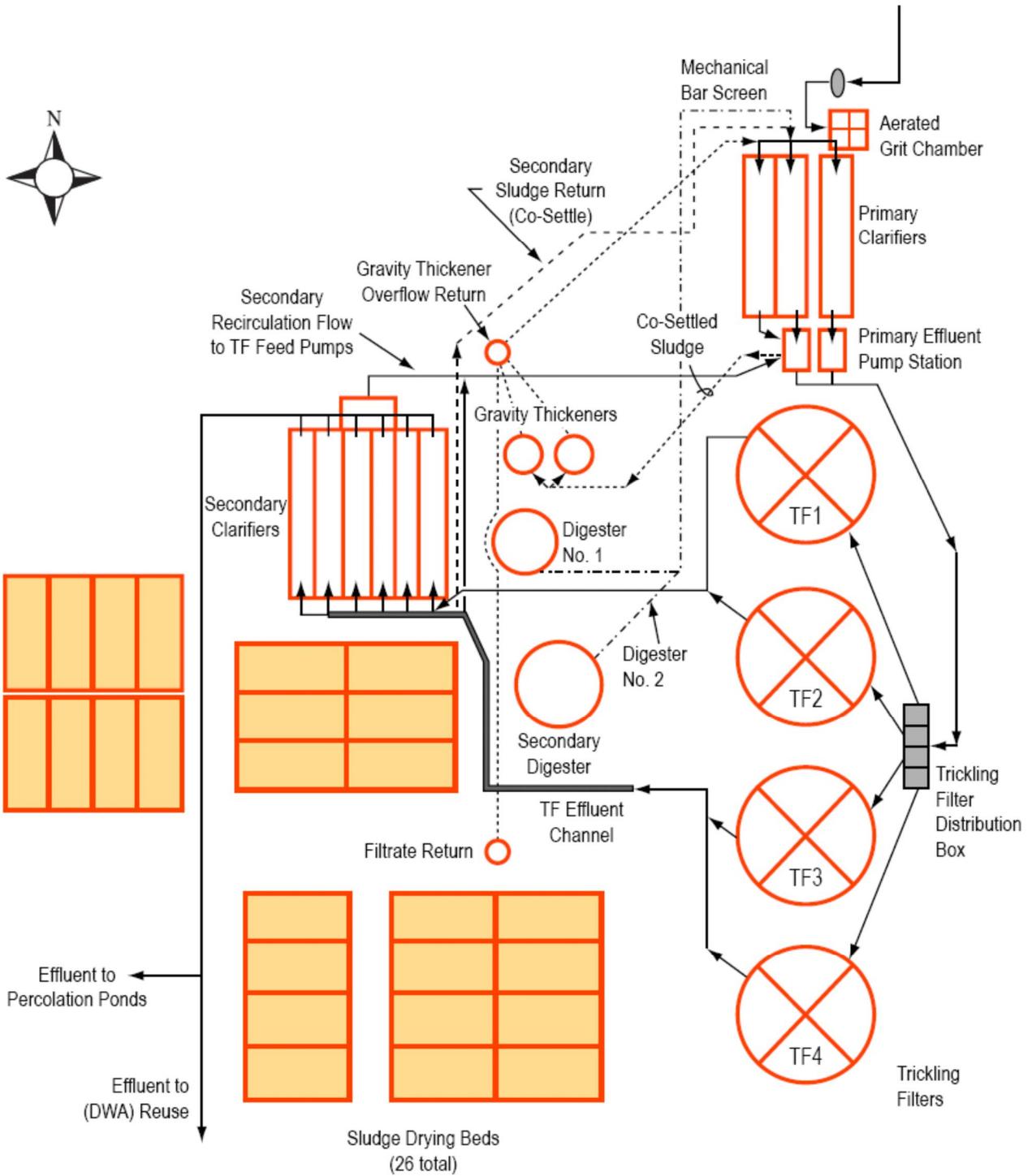
\_\_\_\_\_  
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION



CITY OF PALM SPRINGS  
WASTEWATER TREATMENT PLANT  
Palm Springs - Riverside County  
Discharge Location: SE ¼ of Section 19, T4S, R5E, SBB&M

CALIFORNIA REGIONAL WATER QUALITY CONTROLBOARD  
COLORADO RIVER BASIN REGION



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION



Monitoring Well 1 – 33 48.184N, 116 29.15W  
Monitoring Well 2 – 33 48.105N, 116 29.125W  
Monitoring Well 3 – 33 48.579N, 116 30.477W