CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

BOARD ORDER R7-2017-0013

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. The City of Palm Springs owns a wastewater treatment plant (WWTP or Facility) that provides sewerage service to the City residents and businesses. The WWTP is operated by Veolia Water West Operating Services Inc. The City of Palms Springs and Veolia Water West Operating Services, Inc. are hereby collectively or individually referred to as Discharger.

2. The Discharger submitted an application and Report of Waste Discharge (ROWD) in June 2013 to update Waste Discharge Requirements (WDRs) for the WWTP to reflect proposed design modifications to the Facility, which are discussed in Findings 7, 8, 9 and 10.

3. Palm Springs WWTP is at the end of Vella Road, south of E. Mesquite Ave., Palm Springs, as shown on the Location and Vicinity Map, Attachment A, incorporated herein and made part of this Order by reference. The Facility is located in the southeast ¼ 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) No. CW-247435, Waste Discharge Identification (WDID) 7A330114012 and GeoTracker Global ID number WDR100032535.

4. The discharge from the Facility is currently regulated by WDRs Order 93-076, adopted on November 17, 1993. The City of Palm Springs also owns a wastewater collection system that is regulated under State Water Resources Control Board General Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

5. WDRs Order 93-076 must be updated to incorporate design modifications at the Facility and implement the most current water quality laws and regulations applicable to the discharge.

6. The Facility has been regulated by the Colorado River Basin Water Board since its construction in 1960. The Colorado River Basin Water Board action, Resolution 63-3, and subsequent Resolutions and Board Orders contained effluent limitations for sulfate and chloride. This Board Order removes the effluent limits for chloride, fluoride and sulfate and introduces a regulatory approach where these analytes will be regulated as constituents of total dissolved solids (TDS). The Special Provisions of this Board Order require that the Discharger conduct an investigation to control salinity, and develop and implement a source control program for mineralized waste discharges into the collection system. After completion of the investigation, the Discharger will present conclusions and recommendations for a final TDS effluent limit in a technical report. In addition, the Special Provisions of this Order require the Discharger to conduct a nitrogen fate and transport study

and prepare a technical report to investigate the sources of nitrogen in the discharge and determine the relationship between the discharge and the levels of nitrogen nitrates found in the groundwater monitoring network.

Wastewater Treatment Facility and Discharge

7. The Facility is currently designed to treat and discharge up to 10.9 million gallons per day (MGD) of treated domestic wastewater. Attachment B, incorporated herein and made part of this Order by reference, shows the Facility's Schematic Flow Diagram. The treatment system consists of the following processes:

   a. Preliminary Treatment: Preliminary treatment includes one automatic bar screen, which is 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 with both systems 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: Approximately 25 percent of the final WWTP effluent is disposed of to one of six unlined evaporation/percolation ponds (totaling 23.3 acres). This Board Order regulates the discharge to the evaporation/percolation ponds. The effluent discharged to the evaporation/percolation ponds is rotated from pond to pond on a frequency that does not exceed 7 days for each pond. Following the use of an evaporation/percolation pond for disposal of treated wastewater, the Discharger performs maintenance for sludge control and soil scarification to maximize percolation and minimize evaporation, which reduces the increase in salinity of the ponded treated wastewater.

      The balance of the effluent from the WWTP (approximately 75 percent) is conveyed directly via a dedicated treated wastewater pipe to the Desert Water Agency (DWA), Wastewater Reclamation Plant (WRP) for tertiary treatment. The WRP operated by DWA is regulated by WDRs Order R7-2014-0008. DWA distributes tertiary-treated disinfected recycled water for use as landscape and golf course irrigation. Recycled water use has increased from approximately 2.4 mgd in 1998 to approximately 4.5 mgd in 2016.

   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. There 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 flow and pond level data are saved to a permanent archive. The system monitors equipment and sends alarms to operators if problems are detected.

g. Backup Power: Back-up power is available for all treatment processes.

8. The original WWTP was constructed in 1960. A major expansion of the WWTP to its current 10.9 million MGD capacity was completed in 1983. In consultation with Veolia Water West Operating Services, Inc., the City of Palm Springs staff prepared a comprehensive Capital Improvement Plan (CIP) for the WWTP, which addressed on-going maintenance issues at the WWTP that have resulted from aged mechanical equipment. Many of the WWTP's treatment units are past their useful life and are in need of replacement. The CIP identified the need to focus on major capital projects to replace aging equipment and improve inefficient wastewater treatment processes at the WWTP over a period of 20 years. The CIP, submitted to and approved by the City Council in 2010, is estimated at $67,000,000. The CIP assessed all of the major unit processes at the City's WWTP, and recommended a 20-year program consisting of over 30 projects, some of which may be combined into single projects for better cost efficiencies.

9. Over the last eight years the City has completed rehabilitation of the two anaerobic digesters, construction of a new reclaimed water pump station, improvements to the gravity thickeners, construction of an entirely new electrical system, installation of a new backup power generator, and installation of a new WWTP perimeter security fence.

10. As part of its CIP, the Discharger advertised an estimated $24.5-million construction project to upgrade the Facility in late 2016. The project consists of a new influent junction box, a new headworks including metering structure, two mechanical screens with isolation gates, a bypass channel with isolation gates, an influent pump station equipped with four vertical solids-handling turbine pumps, two primary clarifiers, two scum pump stations, two sludge pump stations, one sludge de-gritting station, replacement weir covers for two existing

gravity thickeners, replacement of Digester No. 2 dome cover, a prefabricated electrical building, and associated piping and electrical equipment.

11. The Discharger's SMRs from November 2011 through October 2016 characterize the WWTP influent as follows:

Constituent	Units	Average	Maximum	Minimum
Flow	MGD	5.938	6.959	5.178
20°C BOD_5 [1]	mg/L [2]	225	338	125
Total suspended solids	mg/L	335	1455	61

12. The Discharger's SMRs from November 2011 through October 2016 characterize the WWTP effluent as follows:

Constituent	Units	Average	Maximum	Minimum
20°C BOD_5	mg/L	12.3	27.9	5.1
Total suspended solids	mg/L	10.7	26.7	3.4
Settleable solids	ml/L	<0.1	<0.1	<0.1
pH	pH units	7.3	7.4	7.1
Total dissolved solids	mg/L	552	700	430
Sulfate	mg/L	102.6	132.2	75.9
Chloride	mg/L	89.4	117.2	72.1
Fluoride	mg/L	0.6	0.8	0.1
Nitrate as N	mg/L	11.1	16.0	6.2
Nitrite as N	mg/L	0.69	1.80	<0.15
Total Nitrogen	mg/L	16.5	26.8	8.8

Hydrogeologic Conditions

13. Annual precipitation in the Palm Springs area averages about 5 inches. Annual evapotranspiration rate is about 66 inches.

14. An ephemeral stream identified as the Tahquitz Creek, a Water of the United States, is adjacent to the Facility immediately to the south of a flood control levee maintained by the Riverside County Flood Control District.

15. A series of groundwater wells supply domestic water to the City. Regional groundwater flow in the area is to the southeast. The average Total Dissolved Solids (TDS) concentration of the municipal water supply is approximately 350 mg/L.

16. The depth to groundwater at the WWTP is approximately 190 feet below ground surface.

[1] 5-day biochemical oxygen demand at 20 degrees Celsius.
[2] milligrams per Liter

17. The Discharger's SMRs provide groundwater monitoring data for three wells in the vicinity of the discharge. Attachment C, incorporated herein and made part of this Order by reference, shows the location of the monitoring wells. Groundwater monitoring samples are collected from the three wells on a quarterly basis. Wells 1 and 2 are located downgradient and Well 3 is upgradient of the evaporation/percolation ponds. A review of the groundwater monitoring data, contained in the table below, indicates that Nitrate, Total Nitrogen, Sulfate and Chloride, show increased concentrations in the downgradient monitoring wells. Groundwater monitoring data from November 2011 through October 2016 show the following average water quality characteristics for groundwater in the vicinity of the discharge:

Constituent	Units	Well 1 Downgradient	Well 2 Downgradient	Well 3 Upgradient
Depth to groundwater	Feet	190	196	192
TDS	mg/L	632	748	616
Nitrate as N	mg/L	9.1	16	7.8
Sulfate	mg/L	117	145	95
Chloride	mg/L	99	119	91
Fluoride	mg/L	0.31	0.35	0.31
Total Nitrogen	mg/L	9.9	18.4	8.5

18. There are two shallow groundwater production wells downgradient of the evaporation/percolation ponds. The wells are operated by DWA for the purpose of supplementing recycled water when demand is high.

19. The site is located in a seismically active desert region.

Basin Plan, Beneficial Uses, and Regulatory Considerations

20. The Water Quality Control Plan for the Colorado River Basin (Basin Plan), which was adopted on November 17, 1993, and amended on March 7, 2017, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (including amendments adopted by the Colorado River Basin Water Board to date). Pursuant to section 13263(a) of the California Water Code (CWC), waste discharge requirements must implement the Basin Plan and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.

21. 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)

22. These WDRs implement numeric and narrative water quality objectives for ground and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply are the Maximum Contaminant Levels (MCLs), and bacteriological limits specified in section 64421 et seq. of Title 22 of the CCR.

The Basin Plan states that:

a. Groundwater for use as domestic or municipal water supply (MUN) must not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.

b. Groundwater designated for use as domestic or municipal supply (MUN), the concentration of coliform organisms shall not exceed the limits specified in Section 64426.1 of Title 22 of the CCR.

23. The Basin Plan, Chapter 3 Water Quality Objectives, Section IV Groundwater Objectives, states that the goal of the Colorado River Basin Water Board is to maintain the existing water quality of all non-degraded ground water basins. Generally, ground water that is pumped returns to the basin after use with an increase in mineral concentrations such as TDS, nitrate etc., that are picked up by water during its use. Under these circumstances, the Colorado River Basin Water Board's objective is to minimize the quantities of contaminants reaching any ground water basin. This could be achieved by establishing management practices for major discharges to land. The Effluent Limitations and Special Provisions of this Order require the Discharger to develop management practices that effectively minimize the quantities of contaminants reaching the groundwater in the area of the evaporation/percolation ponds.

24. 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.

25. Section 13267 of the CWC authorizes the Colorado River Basin Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement state requirements and demonstrate compliance with the Order. The State Water Board's electronic database, GeoTracker Information Systems facilitates the submittal and review of facility correspondence, Discharger requests and monitoring and reporting data.

26. This Order establishes WDRs pursuant to Division 7, Chapter 4, Article 4, of the CWC (for discharges that are not subject to regulation under section 402 of the Clean Water Act (33 U.S.C. Section 1342).

27. 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.

28. The discharge as authorized by this 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 discharge is treated domestic wastewater. This Order regulates the 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. All of these Title 27 exemptions have been met.

29. This Order regulates the discharge of wastes to the onsite evaporation/percolation ponds and allows the Discharger to distribute secondary treated wastewater 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.

30. 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)).

31. The portion of the discharge authorized by this Order that is conveyed to DWA for treatment and reclamation is consistent with the State Water Board's Recycled Water Policy.

32. Section 403.8(a) of Part 40 of the Federal Code of Regulations requires any publicly owned treatment works (POTW) with a total design flow greater than five (5.0) MGD to develop a pretreatment program if it receives pollutants from industrial users that pass through or interfere with POTW operation or if it has industrial users subject to federal categorical Pretreatment Standards.

33. Section 2233 of Title 23 of the CCR requires a pretreatment condition to be included in non-NPDES WDRs for all POTWs. The Discharger's ROWD does not identify industrial discharges into its collection system. The Discharger will be required to provide a routine assessment of its industrial dischargers in the annual Self-Monitoring Reports (SMRs) to determine whether the Discharger is a pretreatment program becomes necessary.

State Anti-Degradation Policy

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."

    If an activity may result in degradation to high quality waters, 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. The Colorado River Basin Water Board has determined that some degradation of groundwater from the discharge to the evaporation/percolation ponds is consistent with Resolution 68-16, provided that the degradation:

    a. Is confined to a reasonable area;

    b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures;

    c. Is limited to waste constituents typically encountered in domestic wastewater; and

    d. Does not result in the loss of any beneficial use as prescribed in the applicable basin plan, or violation of any water quality objective.

36. Constituents in the WWTP effluent that have the potential to degrade groundwater include nitrogen, coliforms (pathogen-indicator organisms), TDS, and chloride and sulfate. Each of these constituents is discussed below:

    a. **Nitrogen.** The Discharger's SMRs from November 2011 through October 2016 show a range of 8.8 to 26.8 mg/L with an average 16.5 mg/L for total nitrogen in the effluent. Upgradient monitoring well MW3 shows nitrate as nitrogen concentrations averaging 7.8 mg/L and total nitrogen averaging 8.5 mg/L. Downgradient monitoring wells show nitrate as nitrogen concentrations averaging 9.1 mg/L (total nitrogen averaging 9.9 mg/L) in well MW1 and 16.0 mg/L (total nitrogen averaging 18.4) in well MW2. Well MW2 nitrate data indicate that the discharge of treated wastewater may be impacting groundwater at a rate or in concentrations causing groundwater to exceed the Primary MCL prescribed in Title 22, CCR section 64431.

    Using recycled water for golf course and landscape irrigation has mitigated the rate of increase and extent of the elevated nitrogen concentrations in groundwater in the area of the evaporation/percolation ponds. The Discharger currently conveys approximately 75 percent of the secondary treated wastewater to DWA for further treatment and distribution as recycled water. Additionally, DWA has installed two shallow groundwater wells downgradient of the evaporation/percolation ponds to supplement reclaim water supplies. Groundwater extraction from these two wells has further mitigated the amount of nitrogen in the aquifer.

    Nevertheless, monitoring data of the groundwater wells in the vicinity of the WWTP indicate that the effluent may be causing or contributing to nitrogen/nitrate impairment in the groundwater in the area of the evaporation/percolation ponds. Even with reductions in nitrogen loading due to increased water recycling, continuation of the existing treatment and evaporation/percolation pond disposal practices may pose a threat to the beneficial use of groundwater. The Colorado River Basin Water Board recognizes that immediate compliance with groundwater objectives for nitrogen may not be achievable due to historic land use practices. This Order introduces a groundwater limitation for nitrogen. Special Provisions section E.4 of this Order also requires that the Discharger conduct a comprehensive investigation of the sources of nitrogen and the fate of transport in the groundwater The Discharger is also required to evaluate the feasibility of achieving a 10 mg/L total nitrogen effluent limit. The results of this investigation may require the Discharger to: (1) develop and implement a nitrogen source control program, (2) enhanced management practices, and/or (3) install advanced treatment systems to reduce or eliminate nitrogen discharges to groundwater.

b. **Coliforms.** 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 (U. S. Environmental Protection Agency, *Design Manual, Municipal Wastewater Disinfection*; October 1986). Given the depth to groundwater, which is approximately 190 feet in the vicinity of the WWTP, it is not likely that pathogen-indicator bacteria will reach groundwater in excess of that prescribed in Title 22, CCR, due to significant attenuation and removal in the soils in the vadose zone. To verify no degradation due to pathogen-indicator organisms is occurring, this Board Order adds quarterly total coliform and E. coli monitoring in the groundwater monitoring wells.

c. **TDS**. During the period of November 2011 through October 2016, the Discharger's SMRs show that effluent from the WWTP had a TDS range of 430 to 700 mg/L with an average of 552 mg/L. Under Board Order, 93-076, TDS was measured based on the incremental addition of TDS above that of the community water supply. Domestic water supply to the community showed an average TDS concentration of about 350 mg/L from 2011 to 2015. The average TDS increase in the effluent for this facility over the domestic water supply for the same time period was about 175 mg/L. Salinity, measured as TDS of the groundwater in the vicinity of the WWTP ponds, ranges from 667 mg/L at Well 3 (upgradient) to 694 mg/L at Well 2 (downgradient). Title 22 of the CCR lists a Recommended Secondary MCL for TDS of 500 mg/L, an Upper Level of 1000 mg/L and a Short Term Level of 1500 mg/L. To minimize further degradation of the groundwater from TDS, this Order establishes restrictions on the WWTP intended to minimize TDS discharges and to prevent long-term impacts to beneficial uses. This Order introduces an interim effluent limitation for TDS based on based on the 99th percentile of the of the WWTP effluent TDS data over the previous three years. Because the interim effluent limit exceeds the recommended secondary MCL, Special Provisions 4 of this Order also requires that the Discharger conduct a comprehensive investigation of the sources of salinity to the collection system and to develop and implement a source control program for salts and mineralized wastes. The results of this investigation will be used develop a final TDS effluent limit.

d. **Chloride and Sulfate**. The Discharger's monitoring data and June 26, 2013 ROWD show 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 concentration of 117 and 132 mg/L, respectively. Chloride and sulfate are present in the water supply. The concentration of these inorganic constituent increases from contributions of municipal wastewater and water softening brines. One of the causes for the increased concentrations has likely 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 5.9 MGD in 2016. Board Order 93-076 contained effluent limitations of 70 mg/L for chloride and 90 and mg/L for sulfate. However, Title 22 of the CCR lists a Recommended Secondary MCL for both chloride and sulfate of 250 mg/L, an Upper Level of 500 mg/L and a Short Term Level of 600 mg/L. This Order replaces the individual effluent limitations for chloride and sulfate with an interim TDS effluent limit. The TDS source control study and program, described above, will be used to develop a final TDS effluent limit consistent with water quality and public health goals. The TDS effluent limit is expected to provide the necessary protection to groundwater beneficial use, while giving the Discharger the flexibility to continue and expand water conservation efforts.

37. 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 the highest water quality consistent with maximum benefit to the people of the State 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. A City ordinance that is comprised of a comprehensive set of rules and regulations governing the design, construction, maintenance and use of public and private sewer facilities within City jurisdictional limits;

    e. A network of groundwater monitoring wells;

    f. Staffing to assure proper operation and maintenance; and

    g. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.

Storm Water

38. Federal regulations for storm water discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990, (40 CFR Parts 122, 123, and 124) to implement the Clean Water Act's storm water program set forth in Clean Water Act section 402(p) (33 U.S.C. section 1342(p).). In relevant part, the regulations require specific categories of facilities that discharge storm water associated with industrial activity to "waters of the United States" to obtain NPDES permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.

39. The State Water Board adopted Water Quality Order 2014-0057-DWQ (NPDES No. CAS000001), General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit) on July 1, 2015. Facilities used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge, that are within the confines of the facility, with a design flow of one million gallons per day or more, or required to have an approved pretreatment program under 40 CFR Part 403, are required to enroll under the Industrial General Permit unless there is no discharge of industrial storm water to waters of the U. S.. There are no storm water discharges from the WWTP to waters of the U. S. because all storm water generated at the facility is directed to the evaporation/percolation ponds, and does not leave the boundaries of the WWTP. Therefore, the Discharger is not required to enroll under the Industrial General Permit.

CEQA and Public Participation

40. In accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.) and implementing Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), The City of Palm Springs (City), acting as the Lead Agency, prepared a Mitigated Negative Declaration (MND) for the City of Palm Springs Wastewater Treatment Plant Headworks and Clarifier Upgrade Project (SCH2014041060).

The draft MND was circulated for a mandatory 30-day public commenting period. Based on the MND, the City determined that although the proposed project could have a significant effect on the environment, the City explained in the MND that it would avoid the effects or mitigate the effects to a point where no significant effect on the environment would occur. On June 18, 2014, the City approved the MND and on June 25, 2014, filed a Notice of Determination (NOD) with the Clerk of the Board, County of Riverside. The Colorado River Basin Water Board is a responsible agency under CEQA (Public Resources Code, § 21167.3). The Colorado River Basin Water Board considered the findings of the MND and concludes that compliance with these waste discharge requirements will prevent any significant adverse impacts to water quality.

41. 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.

42. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that 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. Discharge of treated wastewater in a manner or a location, other than as described in the findings, is prohibited.

3. The WWTP shall be operated and maintained to prevent untreated sewage or partially or fully treated effluent from surfacing or overflowing.

4. The discharge of any wastewater from the facility to any surface waters or surface drainage courses is prohibited.

5. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.

6. Bypass or overflow of untreated or partially treated waste is prohibited.

B. Effluent Limitations

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

Constituent	Units	Monthly Average	Weekly Average
20° C BOD_5[3]	mg/L[4]	30	45
Total Suspended Solids (TSS)	mg/L	30	45
Settleable Solids	ml/L[5]	0.3	0.5

2. The combined 30-day monthly average daily discharge from the WWTP to the evaporation/percolation ponds and recycled water re-use shall not exceed design treatment capacity of 10.9 MGD.

3. The interim TDS concentration of the effluent should not exceed 700 mg/L.

4. The 30-day average removal of the pollutant parameters BOD_5 and TSS shall not be less than 80 percent.

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

C. Groundwater Limitations

1. Discharge from the WWTP shall not cause groundwater to exceed water quality objectives; acquire taste, odor, toxicity, or color that creates nuisance conditions; impair beneficial uses; or 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; and section 64678 for determination of exceedances of lead and copper action levels).

D. Discharge Specifications

1. The Discharger shall not accept waste in excess of the design treatment capacity of the disposal system.

2. A minimum depth of two feet of freeboard shall be maintained at all times in the evaporation/percolation ponds.

3. For purposes of odor control, the evaporation/percolation ponds shall be maintained so they will be kept in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of evaporation/percolation ponds shall not be less than 1.0 mg/L.

4. 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.

5. Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration. 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.

[3] 5-day biochemical oxygen demand at 20 °C
[4] milligrams per Liter
[5] milliliters per Liter

6. The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in Sections 13050(I) and 13050(m) of Division 7 of the CWC.

7. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.

8. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.

9. The WWTP shall be operated and maintained to comply with BPTC.

E. Provisions

Special Provisions[6]

1. **Groundwater Monitoring Network Technical Report and Work Plan: Within six (6) months** of the adoption of this Order, the Discharger shall submit to the Colorado River Basin Water Board's Executive Officer for review and approval a technical report on the adequacy of the existing groundwater monitoring network. The technical report shall describe the current condition of the groundwater monitoring network and evaluate whether this network adequately monitors the effects of the discharge from the disposal ponds on groundwater. In addition, the technical report shall provide an analysis of the groundwater data collected from the existing groundwater monitoring wells. The analysis shall include maps (e.g., equipotential maps) showing the direction of flow and identification of upgradient and downgradient monitoring wells. Further, it shall include an appropriate statistical analysis for constituents of concern (COCs) for the upgradient and downgradient wells, based on the groundwater data collected to date. COCs in this case are TDS and its major ions: sulfate, chloride, nitrogen (total nitrogen, nitrite, and nitrate), and fluoride.

   If the technical report indicates that repair of monitoring wells or addition of monitoring wells is necessary, the Discharger shall submit a work plan to the Colorado River Basin Water Board's Executive Officer for review and approval **within four (4) months** of Technical Report approval. The work plan shall include a description proposed changes to the groundwater monitoring network (e.g., monitoring locations, monitoring frequency, sampling protocol, or quality assurance/quality control) and a time schedule for the implementation of these changes. **Within 30 days** of approval of the work plan by the Executive Officer, the Discharger shall begin implementation of the work plan in accordance with the time schedule. The time schedule for implementation shall be **18 months**.

2. **Operations and Maintenance Manual: Within six (6) months** of completion of the portions of the CIP that affect the operations of the WWTP, the Discharger shall submit a copy of the Operations and Maintenance Manual for the WWTP.

3. **Nitrogen Control Strategy Technical Report: Fate and Transport Investigation, and Effluent Limit Feasibility Study. Within six (6) months** determining sufficient adequacy of the groundwater network,, the Discharger shall submit to the Colorado River Basin Water Board's Executive Officer for review and approval a technical report that includes a work plan and time schedule to: (1) determine if wastewater discharged to the

[6] Dates for all deliverables in Special Provisions are summarized in Attachment D.

evaporation/percolation ponds is causing nitrogen impairment to groundwater; (2) determine the feasibility of achieving a 10 mg/L total nitrogen effluent limit; and (3) ensuring the limit does not cause exceedance of the Nitrogen receiving water limitation.

a. The fate and transport investigation section of the work plan shall include but not be limited to the following:

   i. An evaluation of nitrogen removal technology provided by the Discharger.

   ii. Characterization for total nitrogen and nitrates of the wastewater discharged to the evaporation/percolation ponds and in the receiving groundwater.

   iii. Evaluation of the impact of the wastewater discharged on the groundwater in the vicinity of the percolation ponds with respect to nitrogen concentrations.

b. The feasibility study section of the work plan shall include, but need not be limited to, discussion of the practicability of achieving a 10 mg/L total nitrogen effluent limit, including projected costs and sewer rate increases. The Discharger shall evaluate alternative methods of treatment that are available and may be implemented to achieve a 10 mg/L total nitrogen effluent limit. The alternative analysis should include the costs of the alternatives, expressed in dollars per ton, of nitrogen removed from the discharge.

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. The time schedule for implementation shall not be longer than **24 months**. The Discharger shall submit progress reports in the quarterly SMR to the Colorado River Basin Water Board.

d. **Within 2 months** of completion of the nitrogen control strategy: fate and transport investigation, and effluent limitation feasibility study, the Discharger shall submit a final technical report that includes the Discharger's findings, recommendations and conclusions. The report shall include a tentative work plan and time schedule for facility plant improvements required to accomplish nitrogen removal and comply with the effluent and groundwater water quality limits if applicable.

4. **TDS Source Control Program Technical Report: Within nine (9) months** of adoption of this Order, the Discharger shall submit to the Colorado River Basin Water Board's Executive Officer for review and approval a technical report that includes a work plan and time schedule to develop and implement a TDS Source Control Program. The objective of the Source Control Program is to evaluate source control and methods to reduce TDS concentrations in the discharge to the evaporation/percolation ponds. A public outreach program component may be included as part of the work plan. The technical report must identify the major sources of salinity into the WWTP collection system, including but not limited to contributions from domestic sources, commercial and industrial, and water softener regeneration brines.

   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 rules and regulations that address the topic of controlling salinity in wastewater.

      ii. Identification and description of entities responsible for controlling each source, if available.

iii. Overall TDS mass balance for the influent into the WWTP.

iv. Description of wastewater treatment strategies available and employed at the facility to remove identified pollutants.

v. Characterization for TDS of the wastewater discharged to the evaporation/percolation ponds and in the receiving groundwater.

b. **Within 30 days** of approval by the Executive Officer, the Discharger shall begin implementation of the work plan in accordance with the time schedule. The time schedule for implementation shall not be longer than **three (3) years**.

c. 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 quarterly SMRs to the Colorado River Basin Water Board.

d. **Within 2 months** of completion of implementation, the Discharger shall submit a final technical report that summarizes the Discharger's findings, recommendations and conclusions addressing the effectiveness of the source control program. The final report shall evaluate the incremental increase of TDS above the source water (community water supply) and the impact the discharge has on the beneficial uses of the receiving groundwater. The final technical report may also provide recommendations on the final TDS effluent limitation.

5. **By December 31, 2022**, the Discharger shall submit an updated ROWD (Form 200 and all necessary application documentation) that describes upgrades and modifications performed to the WWTP and any planned upgrades and modifications to be completed.

6. **Certification**

a. **Requests for Extension**: If the Discharger is unable to comply with any of the above Special Provisions in compliance with the applicable schedule, the Discharger may request an extension with written approval of the Colorado River Basin Water Board Executive Officer. The extension request must be in writing submitted as soon as a delay is recognized and prior to the compliance date. The extension request should include justification for the delay.

b. In accordance with California Business and Professions Code Sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field activities are to be conducted under the direct supervision of one or more of these professionals.

c. All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the state of California, that the reports were prepared under his or her supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluated the information submitted, and that based on his or her inquiry of the person or persons who manage the system, the information submitted is, to the best of his or her knowledge and belief, true, complete,

and accurate.

Standard Provisions

1. The Discharger shall comply with all of the conditions of this 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 the Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under Monitoring and Reporting Program (MRP) R7-2016-0013, and future revisions thereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and pdf monitoring reports to the State Water Resources Control Board GeoTracker https://geotracker.waterboards.ca.gov/ database. Documents that are normally mailed by the Discharger, such as regulatory documents, narrative technical monitoring program reports, and such reports submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall also be uploaded into GeoTracker in the appropriate Microsoft software application, such as word, excel, or an Adobe Portable Document Format (PDF) file. Large documents are to be split into manageable file sizes appropriately labelled and uploaded into GeoTracker.

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 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 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 Order, and shall maintain a copy of this 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 Order, or the place where records are kept under the conditions of this Order;

b. Have access to and copy, at reasonable times, records kept under the conditions of this Order;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this 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 shall 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 Colorado River Basin Water Boards are delegated the authority to implement 40 CFR Part 503 regulations, this Order may be revised to incorporate appropriate time schedules and technical standards. The Discharger shall comply with the standards and time schedules in 40 CFR part 503, whether or not part of this Order.

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 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 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 as necessary.

18. Prior to a change in ownership or management of WWTP, the Discharger shall transmit a copy of this Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Colorado River Basin Water Board prior to the effective of the change. The Colorado River Basin Water Board may amend this Order to the name the new owner or operator.

19. The Discharger shall provide adequate notice to the Colorado River Basin Water Board Executive Officer of the following:

    a. Any substantial change in the volume or character of pollutants introduced into any treatment facility described in the Findings of this Order, by an existing or new source; and

    b. Any planned physical alteration or addition to the facilities described in this Order, or change planned in the Discharger's sludge use or disposal practice, where such alterations, additions, or changes may justify the application of Order conditions that are different from or absent in the existing Order, including notification of additional disposal sites not reported during the 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.

Industrial 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 Order, including avoidance of nuisance conditions. If a pretreatment program becomes necessary pursuant to 40 CFR section 403.8, this Order may be reopened to require the Discharger to develop, adopt, and enforce an adequate industrial pretreatment program.

General Conditions

24. This Order does not authorize violation of any federal, state, or local laws or regulations.

25. This 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 Order may be modified, rescinded, or reissued, for cause. The filing of a request by the Discharger for an Order modification, rescission or reissuance, or notification of planned changes or anticipated noncompliance, does not stay any 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, Jose L. Angel, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of the Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on September 21, 2017.

Jose L. Angel

JOSE L. ANGEL, P.E.
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2017-0013
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."

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2017-0013
FOR
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4. The Discharger owns and operates the wastewater system that is subject to Board Order R7-2017-0013. The reports are necessary to ensure that the Discharger complies with the Board Order. Pursuant to Water Cole 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 R7-2017-0013, 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:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	MGD[1]	Meter	Daily[2]	Monthly
20°C BOD_5[3]	mg/L[4]	24-Hr. Composite	Weekly	Monthly
TSS[5]	mg/L	24-Hr. Composite	Weekly	Monthly
TDS	mg/L	24-Hr. Composite	Weekly	Monthly

Pond Monitoring

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

[1] Million Gallons per Day
[2] Reported daily with average monthly flow calculated
[3] Biochemical Oxygen Demand
[4] Milligrams per Liter
[5] Total Suspended Solids

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
pH	pH units	Grab	Weekly	Monthly
Dissolved Oxygen	mg/L	Grab	Weekly	Monthly
Freeboard	0.1 feet	Measurement	Weekly	Monthly
Berm Condition	----	Observation	Weekly	Monthly
Odors	mg/L	Observation	Weekly	Monthly

Samples shall be collected from opposite the inlet at a depth of one foot and from each pond in use. 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:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow to Desert Water Agency	MGD	Estimated[6]	Daily	Monthly
Flow to Ponds[7]	MGD	Calculation	Daily	Monthly
20°C BOD_5	mg/L	24-Hr. Composite	Semi-Weekly[8]	Monthly
TSS	mg/L	24-Hr. Composite	Semi-Weekly	Monthly
Settleable Solids (1 hour)	ml/L[9]	Grab at Peak Flow	Daily	Monthly
pH	pH units	Grab	Daily	Monthly
Sulfate	mg/L	24-Hr. Composite	Monthly	Monthly
Chloride	mg/L	24-Hr. Composite	Monthly	Monthly
Fluoride	mg/L	24-Hr. Composite	Monthly	Monthly
TDS	mg/L	24-Hr. Composite	Weekly	Monthly
Dissolved Oxygen	mg/L	Grab	Monthly	Monthly
Nitrate as N	mg/L	Grab	Monthly	Monthly

[6] The WWTP does not currently have a method of metering effluent flow to DWA.
[7] Flow to evaporation ponds calculated as difference between influent and flow to DWA for tertiary treatment
[8] Twice weekly
[9] Milliliters per Liter

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Nitrite as N	mg/L	Grab	Monthly	Monthly
Total Nitrogen	mg/L	Grab	Monthly	Monthly
VOCs[10]	μg/L[11]	Grab	Quarterly	Quarterly

Domestic Water Supply to the Community

16. Composite samples that are representative of the domestic water supply shall be monitored according to the following schedule:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
pH	Standard units	Composite	Monthly	Monthly
TDS[12]	mg/L	Composite	Monthly	Monthly

Groundwater Monitoring

17. The Discharger shall monitor groundwater wells MW1, MW2, and MW3, and any new monitoring wells according to the following schedule [reported to GeoTracker in Electronic Data Format (EDF)]:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Depth to Groundwater (bgs)[13]	ft	Measurement	Quarterly	Quarterly
Groundwater elevation(msl)[14]	ft	Calculated	Quarterly	Quarterly
Flow Gradient	feet/foot	Calculated	Quarterly	Quarterly
Flow Direction	degrees	Calculated	Quarterly	Quarterly
TDS	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
Sulfate	mg/L	Grab	Quarterly	Quarterly
Chloride	mg/L	Grab	Quarterly	Quarterly
Fluoride	mg/L	Grab	Quarterly	Quarterly

[10] Analyses of Volatile Organic Compounds shall be test methods EPA 601 and 602 or EPA method 624
[11] Micrograms per Liter
[12] TDS and pH data may be acquired from Desert Water Agency
[13] Below ground surface
[14] Above Mean Sea Level. Groundwater elevation shall be based on depth-to-water using a surveyed measuring point elevation on the well and a surveyed reference elevation

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
VOCs	µg/L	Grab	Quarterly	Quarterly
Total Coliforms	MPN/100mL	Grab	Quarterly	Quarterly
E. coli	MPN/100mL	Grab	Quarterly	Quarterly

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:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Arsenic	mg/kg[15]	Composite	Annually	Annually
Cadmium	mg/kg	Composite	Annually	Annually
Copper	mg/kg	Composite	Annually	Annually
Chromium	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[16]	Composite	Annually	Annually

B. Reporting

1. The Discharger shall inspect and document any operation/maintenance problems by inspecting each unit process including groundwater monitoring wells. 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 annual Operation and Maintenance report shall include the following:

   a. Documentation showing the calibration of flow meters and equipment as performed in

[15] Milligrams per kilogram
[16] Most Probable Number per gram

a timely manner annually;

b. Modifications and updates to the Operation and Maintenance Manual;

c. Operator certification status update including number of staff and grade certification.

d. Modifications and updates to the City's waste water ordinance or rules and regulations.

3. The Discharger shall provide an operator certification status update including number of staff and grade certification annually.

4. 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).

5. 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.

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

7. SMRs shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this MRP.

8. Each Report shall contain an affirmation in writing that states:

   "All analyses were conducted at a laboratory certified for such analyses by and in accordance with current USEPA procedures or as specified in this Monitoring and Reporting Program."

9. Each Report shall contain the following completed declaration:

   "I certify under the penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. 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.

   Executed on the _____day of _____ at _____

   _____(Signature)

   _____(Title)"

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

11. 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.

12. The Discharger shall attach a cover letter to the SMRs. 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.

13. Quarterly progress reports shall be submitted for Special Provisions 3 and 4 that describe activities completed and planned for compliance with the due dates and deliverables of the Provisions. The progress reports shall be submitted with the Quarterly SMRs.

14. 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, on-going constituent trend analysis, and a two-year forecast of anticipated flow increases.

15. 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 following the monitoring period**. Quarterly monitoring reports shall be submitted by **January 15th, April 15th, July 15th, October 15th**. Annual monitoring reports shall be submitted to the Colorado River Basin Water Board by **January 15th of the following year.**

16. The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under Monitoring and Reporting Program (MRP) R7-2017-0013, and future revisions thereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and pdf monitoring reports to the State Water Resources Control Board GeoTracker database. Documents that are 300 MB or larger should be broken down into smaller electronic files, labelled properly and uploaded into GeoTracker.

Jose L. Angel

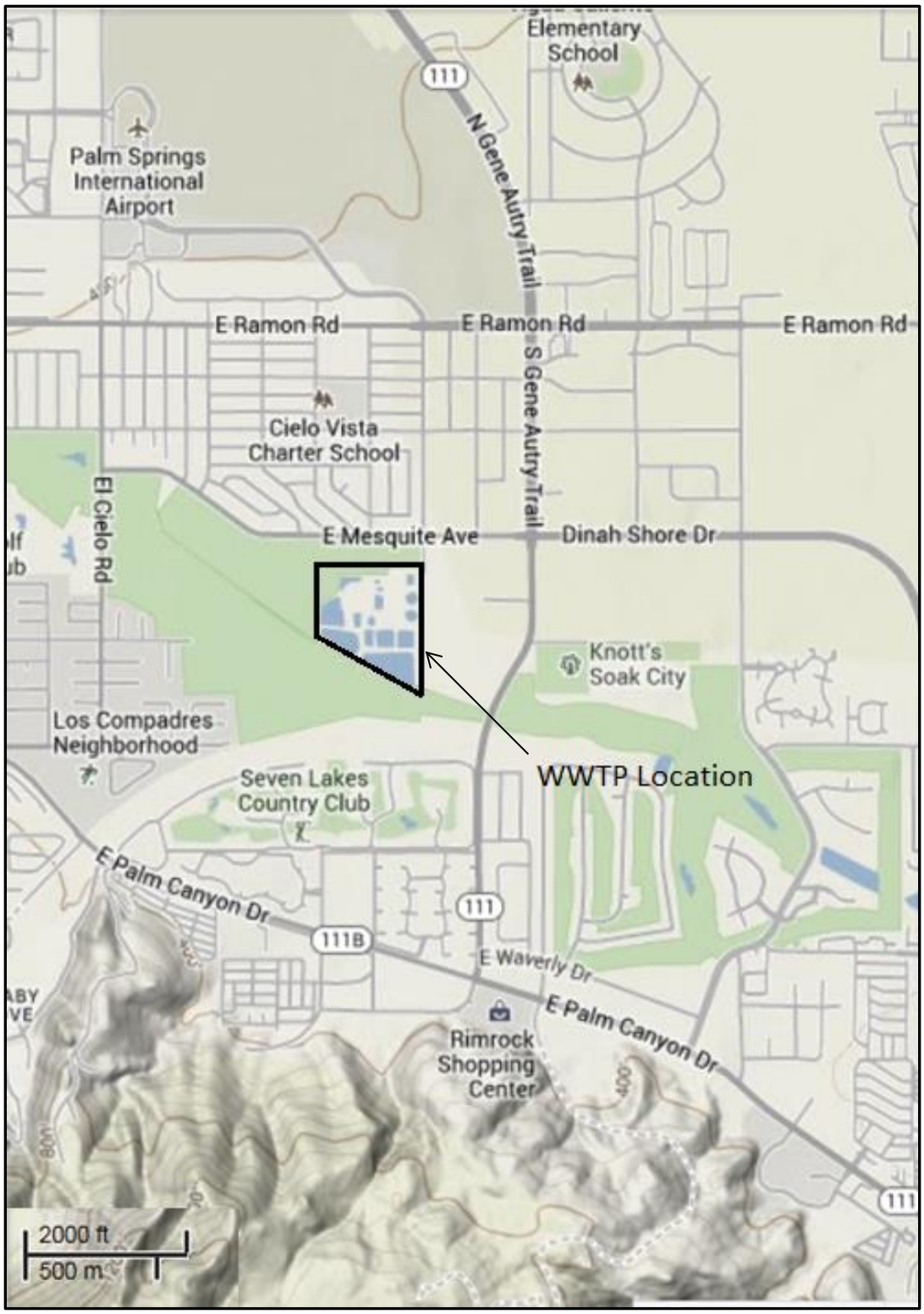
JOSE L. ANGEL, P.E.
Executive Officer

September 21, 2017
Date

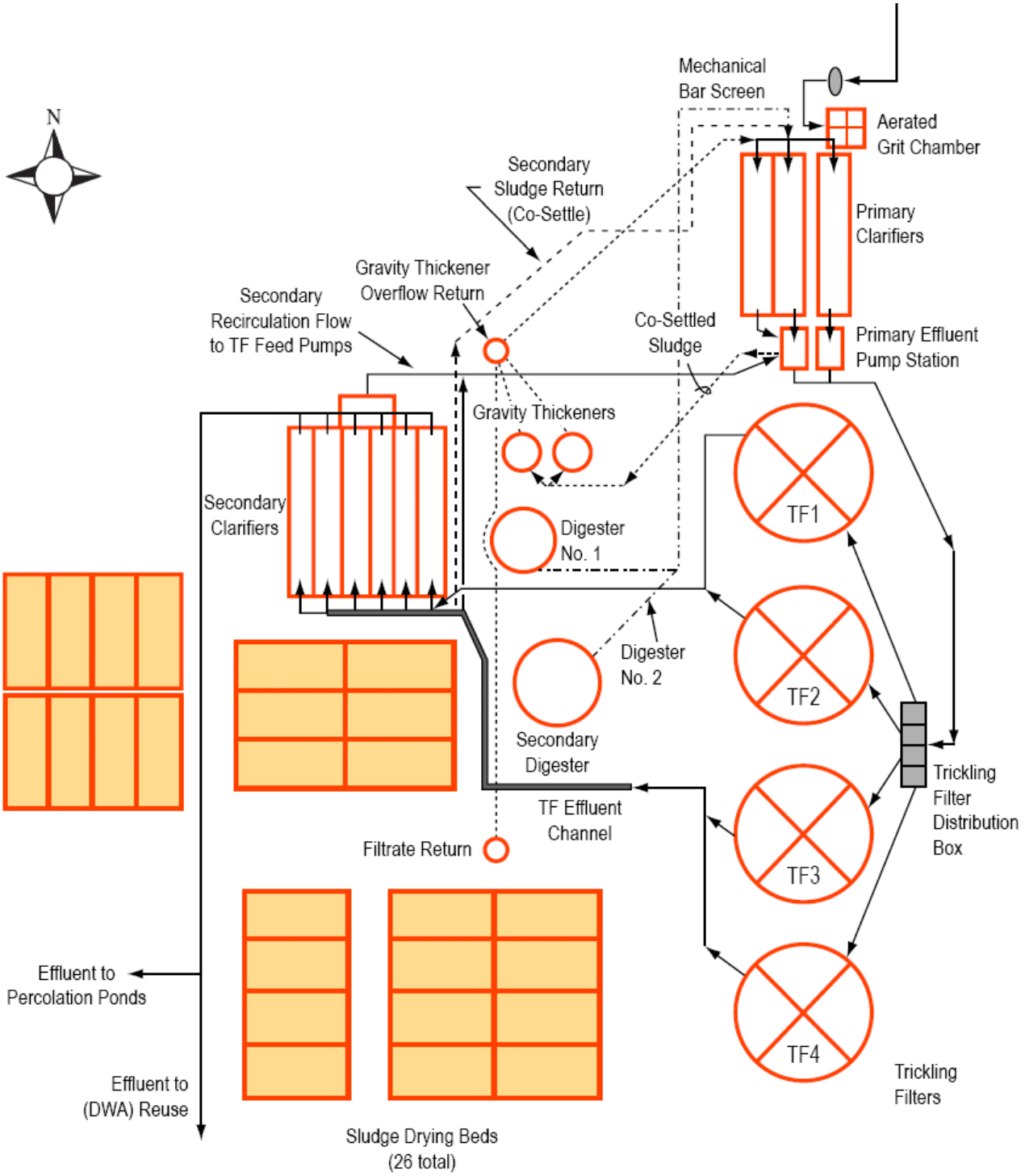
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

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 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


N
Mechanical
Bar Screen
Aerated
Grit Chamber
Secondary
Sludge Return
(Co-Settle)
Primary
Clarifiers
Gravity Thickener
Overflow Return
Secondary
Recirculation Flow
to TF Feed Pumps
Co-Settled
Sludge
Primary Effluent
Pump Station
Gravity Thickeners
Secondary
Clarifiers
Digester
No. 1
TF1
Digester
No. 2
TF2
Secondary
Digester
TF Effluent
Channel
Trickling
Filter
Distribution
Box
Filtrate Return
TF3
Effluent to
Percolation Ponds
TF4
Effluent to
(DWA) Reuse
Trickling
Filters
Sludge Drying Beds
(26 total)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

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

Deliverable	Due Date
Groundwater Monitoring Well Investigation	March 14, 2018
Work Plan to correct Groundwater Monitoring Well issues (if necessary).	Within 4 months of Technical Report Approval
Completion of changes to Groundwater Monitoring Well (if necessary)	Within 18 months of Work Plan Approval
Work plan and time schedule to perform Nitrogen investigation/study	Within 6 months of determining adequacy of groundwater network
Work plan and time schedule to perform TDS source control program	June 14, 2018
Begin implementation of work plan and time schedule to perform Nitrogen investigation/study	Within 30 days of approval by Executive Officer
Begin implementation of work plan and time schedule to perform TDS source control study	Within 30 days of approval by Executive Officer
Operations Maintenance and Manual	Within 6 months of completion of CIP
Complete TDS source control program	Within 3 years of work plan approval
Complete Nitrogen investigation/study	Within 24 months of work plan approval
Submit final report for TDS source control	Within 2 months of completion
Submit final report for Nitrogen investigation/study	Within 2 months of completion
Submit Complete ROWD	September 14, 2022