

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

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## ORDER R7-2022-0009

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### Order Information

**Dischargers:** Coachella Valley Water District  
**Facility:** Water Reclamation Plant No. 7  
**Address:** 80-609 Avenue 38, Indio, CA 92203  
**County:** Riverside County  
**WDID:** 7A330105071  
**GeoTracker ID:** WDR100029790  
**Prior Order:** R7-2013-0026

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I, PAULA RASMUSSEN, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on February 8, 2022.

*Original signed by*

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PAULA RASMUSSEN  
Executive Officer

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WATER RECLAMATION PLANT NO.7

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

**ORDER R7-2022-0009**

WASTE DISCHARGE REQUIREMENTS  
FOR  
COACHELLA VALLEY WATER DISTRICT  
OWNER/OPERATOR  
IMPROVEMENT DISTRICT #58  
WATER RECLAMATION PLANT NO. 7  
INDIO, RIVERSIDE COUNTY

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) hereby makes the following Findings:

1. Coachella Valley Water District (CVWD or Discharger) owns and operates a wastewater collection, treatment, and disposal system that provides sewerage service to portions of Cathedral City, Rancho Mirage, Palm Desert, Bermuda Dunes, Thousand Palms and unincorporated Riverside County, known as Water Reclamation Plant No. 7 (WRP 7 or Facility).
2. The wastewater treatment plant for the Facility is located at 80-609 Avenue 38 in Indio, in Section 4, Township 5 South, Range 7 East, San Bernardino Base and Meridian, San Bernardino Base and Meridian (SBB&M) shown in **Attachment A**, herein made part of this Order by reference.
3. The Facility was most recently regulated by Waste Discharge Requirements (WDRs) in Order R7-2013-0026, which was adopted by the Regional Water Board on May 21, 2013.
4. On August 21, 2020, the Discharger submitted a Report of Waste Discharge (ROWD) to the Regional Water Board, applying for updated WDRs for the Facility.
5. This Order updates the WDRs to comply with current laws and regulations as set forth in the Water Code and the California Code of Regulations. This Order supersedes R7-2013-0026 upon the effective date of this Order, except for enforcement purposes.

**Wastewater Collection, Treatment, and Disposal System**

6. The Facility consists of preliminary treatment, secondary treatment, tertiary treatment, solids handling, as well as disinfection and disposal systems, as shown in Attachment B – Process Flow Diagram.
  - a. **Preliminary Treatment**. Untreated wastewater flows to the preliminary treatment system, which consists of two (2) automated mechanical bar

screens, one (1) manual bypass bar screen (automated off of level control), influent pump station with three (3) influent pumps, grit removal system, and two (2) muffin monsters for rags. These process units are designed to remove large debris and reduce the size of debris that passes through the bar screen.

- b. **Secondary Treatment.** Effluent gravity flows from the preliminary treatment units to two (2) aeration basins for secondary (biological) treatment. Wastewater from the aeration basins gravity flows to two (2) secondary clarifiers for physical removal of floating and settleable solids. The secondary treated effluent from the secondary clarifiers flows into the wet well of the advanced water treatment (AWT) pump station and then is either pumped to the tertiary treatment system, stored in a 800,000 gallon secondary equalization basin for further treatment, or diverted to either southern or northern percolation ponds for land disposal.
- c. **Tertiary Treatment and Disinfection.** Secondary treated effluent from the AWT pump station or secondary equalization basin can be pumped into the tertiary treatment system for advanced treatment (filtration). The 2.5 million gallon per day (MGD) tertiary system consists of two rapid mix chambers (coagulation and flocculation), three dual-media filters (filtration), chlorination system (disinfection), and a covered 2 million-gallon storage reservoir. Presently, effluent is pumped to rapid mix chambers, where alum, polymer or chlorine solution is added to enhance treatment. Effluent from the rapid mix chamber gravity flows to the three dual-media filters to remove the coagulated and flocculated matter and then gravity flows to a chlorine contact tank. For disinfection, the effluent is injected with chlorine solution at the head of the chlorine contact tank to meet the required chlorine contact time for disinfection.
- d. **Offsite Irrigation Disposal.** Tertiary treated recycled water flows into a wet-well and may be blended with Colorado River water prior to being pumped to offsite facilities. The tertiary treated recycled water from the tertiary storage pond is pumped to an offsite open reservoir located near the golf course at Del Webb Sun City. The effluent is used for golf course and landscape irrigation for Del Webb Sun City and Shadow Hills Country Club. Del Webb Sun City and Shadow Hills Country club are currently enrolled in General Order 97-700, *General Waste Discharge Requirements for Discharge of Recycled Water for Golf Course and Landscape Irrigation*. Disinfected tertiary treated recycled water was previously approved by the California Department of Public Health (CDPH) (now succeeded by the State Water Resources Control Board [State Water Board], Division of Drinking Water) for use as irrigation water on this golf course. CVWD also plans to deliver tertiary treated recycled water to nearby agricultural operations for irrigation in the future.

- e. **Percolation Disposal**. In the event that the Discharger is unable to dispose of disinfected tertiary treated recycled water through off-site irrigation, secondary effluent is diverted to either southern and/or northern percolation ponds for land disposal. Secondary treated effluent from the AWT pump station can be discharged to four (4) southern percolation ponds, which are located immediately adjacent to the wastewater treatment plant (WWTP). In addition, the Discharger can dispose of secondary effluent in the northern percolation ponds. The Discharger uses the northern percolation ponds, which are located farther from the WWTP, to provide additional percolation capacity during months with low demand for recycled water, generally December through February. The northern percolation ponds have a total pond surface area of 37 acres on a 105-acre lot located north of the WWTP. The northern percolation ponds (20-million-gallon capacity) are constructed in the SE  $\frac{1}{4}$  of Section 33, T4S and R7E.
  - f. **Solids Handling and Disposal**. Secondary sludge and scum from the two secondary clarifiers are pumped to the belt thickener for thickening and then gravity flows into a sludge storage tank for holding. Secondary sludge is stored in sludge holding tanks and dewatered using centrifuges prior to being hauled offsite by a private contractor for landfill disposal and/or composting. Spent backwash water from the belt thickener and belt press gravity flows to a pump station and is then pumped to the headworks (preliminary treatment).
7. The secondary treatment design capacity is 5.0 MGD and the tertiary treatment design capacity is 2.5 MGD.
  8. The average influent flow to the WWTP for the past five years was 2.796 MGD and the average secondary effluent flow for the past five years to the percolation ponds was 1.005 MGD.
  9. The northern percolation ponds are located on a separate property from the WWTP and southern percolation ponds, upstream of the United States Bureau of Reclamation (BOR) flood control dike. The flood control dike separates the main treatment facility, located south of the dike, from the northern percolation ponds, located north of the dike. The flood control dike is under the jurisdiction of the BOR as a federal flood control facility. A federal flood easement exists for the dike as well as the 105-acre site.
  10. Two non-potable wells are adjacent to the WWTP. MW-1 is a monitoring well located near the entrance to the wastewater treatment plant on Avenue 38, north of the Facility, and H-1 is used for irrigation supply and is located on private property immediately south of the Facility, approximately 250 feet south of the southern percolation ponds. MW-1 was drilled in 1948 to a depth of 380 feet, and

the depth of the perforations is not known. H-1 was drilled in 1971 to a depth of 980 feet, and perforations begin at 500 feet below ground surface (bgs).

11. Two potable wells are located within 500 feet of the WWTP's southern percolation ponds and/or the northern percolation ponds. The Riverside County Department of Environmental Health has classified both wells as limited-use domestic wells. The potable wells are individual domestic wells that are not used to supply water for public water supply.
  - a. Well Q1 is approximately 185 feet north of the WWTP's southern percolation ponds and below the northern percolation ponds. The well has perforations beginning at 240 feet below ground surface (bgs). The driller's log for this well indicates thick clay layers from 21 to 140 feet and from 206 to 250 feet bgs. Laboratory testing results for samples collected on October 8, 1997 are summarized as follows: Nitrate was not detected, Fluoride was 6.0 mg/L, Arsenic was 0.002 mg/L, and total dissolved solids (TDS) was approximately 900 mg/L.
  - b. Well Q2 is north of the WWTP's southern percolation ponds and approximately 300 feet south of the northern percolation ponds. The well has perforations beginning at 215 bgs. The State of California well completion report for this well indicates a silt, sand, and gravel layer from 0 to 17 feet bgs, a brown clay and silt layer from 17 to 42 feet bgs, and sand, gravel, and cobble layer from 42 to 315 feet bgs. The well has a cement annular seal from 0 to 20 feet bgs. Laboratory test results for samples collected on December 27, 2000, are summarized as follows: Nitrate was 3.0 mg/L, Fluoride was 2.5 mg/L, Arsenic was undetected, and TDS was 720 mg/L. A bacteriological examination performed on December 14, 2000, reported the absence of fecal coliform and total coliform. The Riverside County Department of Environmental Health reported that the fluoride concentration exceeded the drinking water maximum contamination level (MCL) at 2.0 mg/L.
12. Well Q1 was originally constructed as an irrigation well, but at the owner's request, was re-certified. The Riverside County Department of Environmental Health re-certified the well as a limited-use domestic well. With the exception of fluoride and sulfate, the water quality meets drinking water standards.
13. County of Riverside Ordinance 682.3 states that potable wells shall be located at a minimum of 200 feet from any surface sewage disposal system discharging 2,000 gallons per day or more. The Riverside County Department of Environmental Health determined that a separation distance of greater than 200 feet from the surface sewage disposal system and the potable wells located on properties adjacent to the southern and/or northern percolation ponds was not required. With the exception of well Q1, all potable wells have a separation distance greater than 200 feet from any surface sewage disposal systems. Well Q1, located less than

200 feet from a surface sewage disposal system, was permitted by the Riverside County Department of Environmental Health, at the owner's request, as a limited-use domestic well.

14. On September 7, 2012, Regional Water Board staff issued a letter to CVWD requiring an analysis of groundwater data collected from the groundwater monitoring program. The analysis was designed to determine if groundwater degradation had occurred as the result of wastewater discharged to the percolation ponds at the WWTP.
15. On December 14, 2012, CVWD submitted a report entitled "Improvement District No. 58 Water Reclamation Plant No. 7, Groundwater Data Analysis, December 2012." The report provides an analysis of monitoring data collected from the groundwater monitoring wells and the effects of the disposal of treated effluent from the Facility on groundwater. CVWD concludes that the elevated levels of TDS observed in the groundwater monitoring wells in the vicinity of the disposal ponds are naturally occurring. The analysis also finds that the concentrations of TDS in the effluent are significantly lower than the TDS concentrations observed in the monitoring wells. In addition, over 75% of the treated effluent is used for irrigation and landscape purposes, which significantly reduces the relative contribution to groundwater. In summary, CVWD states that discharges of treated effluent have not acted to degrade groundwater in the vicinity of the Facility.
16. The average wastewater characteristics collected in 2020 are as follows:

**Table 1. Wastewater Characteristics**

Constituents	Units	Average Influent Value	Average Secondary Effluent Value	Average Tertiary Effluent Value
cBOD <sup>1</sup>	mg/L <sup>2</sup>	210	2.8	--
TSS <sup>3</sup>	mg/L	250	7.1	--
TN <sup>4</sup>	mg/L	-- <sup>5</sup>	8.2	--
pH	Standard units	--	7.3	--
TDS	mg/L	--	460	--

<sup>1</sup> Carbonaceous biochemical oxygen demand

<sup>2</sup> Milligrams per liter

<sup>3</sup> Total Suspended Solids

<sup>4</sup> Total Nitrogen

<sup>5</sup> Not tested



Constituents	Units	Average Influent Value	Average Secondary Effluent Value	Average Tertiary Effluent Value
Coliform	MPN/100 mL	--	--	<1.0
Turbidity	NTU <sup>6</sup>	--	--	0.47

### Hydrogeologic Conditions

17. WRP 7 is located about one mile south of the San Andreas Fault in a seismically active desert region.
18. WRP 7 is located on the northern edge of the Thermal Subarea of the Indio Subbasin in the Coachella Valley Groundwater Basin. Groundwater generally flows from northwest to southeast, towards the Salton Sea.
19. Southeasterly from the City of Indio to the Salton Sea, the Indio Subbasin is characterized by increasingly thick layers of silt and clay which are remnants of lakebed deposits. The predominance of fine-grained sediments in this area has created three distinct aquifer systems:
  - a. A semi-perched aquifer up to 100 feet thick that is persistent across much of the area southeast of the City of Indio. The fine-grain units that cause the perched conditions are a barrier to deep percolation of applied water.
  - b. An upper aquifer up to 300 feet thick that is confined in the areas of the semi-perched aquifer.
  - c. A lower aquifer that is 500-2,000 feet thick and is confined from the upper aquifer by a fine-grained unit that is 100-200 feet thick. The fine-grained deposits are not regionally extensive or sufficiently thick enough to completely restrict vertical groundwater flow between the upper and lower aquifer zones and are thus referred to as an aquitard.
20. WRP 7 is located at the northern edge of the aquitard. The strata around WRP 7 contains sands and gravels with lenses of fine sand and clay.
21. In 2005, CVWD installed monitoring wells downstream of WRP 7. The average annual depth to groundwater in these monitoring wells since 2018 has ranged from 104.3 to 124.2 feet below ground surface (bgs).

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<sup>6</sup> Nephelometric turbidity units

22. Soil profiles at the 105-acre site where the northern percolation ponds are located show coarser materials consisting of sand, coarse sand, and gravel over the entire site.
23. Groundwater used for potable water supply at Del Webb Sun City contains an average TDS concentration of 250 in 2020.
24. There are four active groundwater monitoring wells located at the Facility: MW-1, MW-2, MW-3, and MW4. Three of the wells, MW-2, MW-3, and MW4, are cluster wells with deep and shallow screenings (MW-2D, MW-2S, MW3D, MW3S, MW4D and MW4S). Average annual groundwater concentrations for 2020 are as follows:

Table 2. 2020 Average Groundwater Concentration

	TDS (mg/L)	Total Nitrogen <sup>7</sup> (mg/L)	E.Coli (MPN/100 mL)	Sulfate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)
MW1	1000	0.020	<1.0	450	130	7.7
MW-2D	1300	0.60	<1.0	620	230	5.2
MW-2S	980	0.73	<1.0	470	120	5.0
MW-3D	770	13	<1.0	190	100	5.7
MW-3S	1040	12	<1.0	320	130	5.9
MW-4D	640	10	<1.0	160	91	2.6
MW-4S	1200	3.3	<1.0	530	190	2.2

25. Annual precipitation in the area is approximately 3.4 inches, and the average temperature is 78 degrees Fahrenheit. The annual evaporation rate is approximately 75 inches.

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

26. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), adopted on November 17, 1993 and most recently amended on January 8, 2019, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Pursuant to Water Code section 13263, subdivision (a), WDRs must implement the Basin Plan and take into consideration the

<sup>7</sup> Total nitrogen is the sum of total kjeldahl nitrogen (ammonia, organic and reduced nitrogen), nitrate and nitrite.

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.

27. The Facility is located within the Coachella Hydrologic Subunit, and the Basin Plan designates the following beneficial uses for groundwater:
  - a. Municipal and Domestic Supply (MUN),
  - b. Industrial Supply (IND), and
  - c. Agricultural Supply (AGR).
28. This Order establishes WDRs pursuant to division 7, chapter 4, article 4 of the Water Code for discharges that are not subject to regulation under Clean Water Act section 402 (33 U.S.C. § 1342).
29. These WDRs implement numeric and narrative water quality objectives for groundwater and surface waters established by the Basin Plan and other applicable state and federal laws and policies. The numeric objectives for groundwater designated for municipal and domestic supply include the maximum contaminant levels (MCLs) specified in California Code of Regulations, title 22, section 64421 et seq. 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.
30. 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 MCLs designed to protect human health and ensure that water is safe for domestic use.
31. The discharge authorized by this Order, except for discharges of residual sludge and solid waste, is exempt from the solid waste requirements of California Code of Regulations, title 27, section 20005 et seq. This exemption is based on section 20090, subdivision (b), which provides that discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields, are not subject to the requirements of title 27 as long as:
  - a. The applicable regional water board has issued WDRs, reclamation requirements, or waived such issuance;
  - b. The discharge is in compliance with the applicable water quality control plan; and
  - c. The wastewater does not need to be managed according to chapter 11, division 4.5, title 22 of the California Code of Regulations as a “hazardous waste.”

32. The discharge of waste authorized by these WDRs satisfies the conditions to be exempted from the requirements of title 27 of the California Code of Regulations, because (1) the discharge is regulated by these WDRs; (2) these WDRs will ensure the discharge complies with the Basin Plan; and (3) the discharge will not include “hazardous waste.”
33. Consistent with Water Code section 13241, the Regional Water Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:
  - a. Past, present, and probable future beneficial uses of water.
  - b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
  - c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
  - d. Economic considerations.
  - e. The need for developing housing within the region.
  - f. The need to develop and use recycled water.
34. Water Code section 13267 authorizes the Regional Water Board to require technical and monitoring reports. The monitoring and reporting requirements in Monitoring and Reporting Program (MRP) R7-2022-0009 are necessary to demonstrate compliance with this Order. The State Water Resources Control Board’s (State Water Board) electronic database, GeoTracker, facilitates the submittal and review of monitoring and reporting data. The burden, including costs, of the MRP bears a reasonable relationship to the need for the information and the benefits to be obtained from that information.
35. Pursuant to Water Code section 13263, subdivision (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.

### **Water Recycling Regulatory Considerations**

36. State policy promotes the use of recycled water to the maximum extent to supplement existing surface water and groundwater supplies to help meet water needs. (Wat. Code, § 13510-13512.) One of the primary conditions placed on the use of recycled water is the protection of public health. (Wat. Code, §§ 13521, 13522, 13550(a)(3).) The discharge as authorized by this Order is consistent with the State Water Board’s *Water Quality Control Policy for Recycled Water* (adopted on February 3, 2009 and amended on December 11, 2018 [effective April 8, 2019])

and meets the requirements of California Code of Regulations, title 22, section 60301 et seq. to assure protection of public health.

37. Title 22 of the California Code of Regulations contains statewide reclamation criteria for the use of recycled water. Recycled water used for surface irrigation of the following is required to be at least disinfected tertiary recycled water, as defined in California Code of Regulations, title 22, section 60301.230:
  - a. Food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop;
  - b. Parks and playgrounds;
  - c. School yards;
  - d. Residential landscaping;
  - e. Unrestricted access golf courses; and
  - f. Any other irrigation use not specified in section 60304 and not prohibited by other sections of the California Code of Regulations.
38. This Order complies with California Code of Regulations, title 22, section 60304 by requiring that the recycled water, which is used for golf course irrigation, consist of disinfected tertiary recycled water.
39. On June 7, 2016, the State Water Board adopted Order WQ 2016-0068-DDW *Water Reclamation Requirements for Recycled Water Use* (General Order). The General Order establishes standard conditions for recycled water use and conditionally delegates authority to an administrator to manage a Water Recycling Program and issue water recycling permits to recycled water users. The Discharger has applied to enroll in the General Order as a water recycling administrator for the WRP 7 service areas. Upon approval, this will replace the enrollment of individual recycled water users in General Order 97-700.

### **Antidegradation Analysis**

40. State Water Board Resolution 68-16, entitled *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Resolution 68-16), generally prohibits the Regional Water Board from authorizing discharges that will result in the degradation of high quality waters, unless it is demonstrated that any change in water quality will (a) be consistent with maximum benefit to the people of the state, (b) not unreasonably affect beneficial uses, and (c) not result in water quality less than that prescribed in state and regional policies (e.g., the violation of one or more water quality objectives). The discharger must also employ best practicable treatment or control (BPTC) to minimize the degradation of high quality waters. High quality waters are surface waters or areas of groundwater that have a

baseline water quality better than required by water quality control plans and policies.

41. Constituents discharged from the Facility effluent that have the potential to degrade groundwater include nitrogen, TDS, and total coliform.<sup>8</sup> Each of these constituents is discussed below:
- a. **Nitrogen.** The Primary Maximum Contaminant Level (MCL) found in California Code of Regulations, title 22, section 64431 for nitrate plus nitrite as nitrogen is 10 mg/L. To account for the fate and transport of the various components of total nitrogen, as a conservative value, it is assumed that all nitrogen present converts to nitrate/nitrite. Background (upgradient) groundwater total nitrogen is 0.73 mg/L at MW 2S and 0.60 mg/L at MW-2D. The downgradient groundwater total nitrogen concentration is 3.3 mg/L at MW 4S and 10 mg/L at MW-4D. This indicates potential degradation from nitrogen due to discharges to the disposal ponds. As a result, this Order imposes a nitrogen effluent limitation for the first time, which is an interim average monthly effluent limitation for total nitrogen of 15 mg/L for secondary treated effluent discharged to the disposal ponds. The Special Provisions of this Order require the Discharger to conduct a nitrogen study and submit a work plan to achieve a final average monthly effluent limitation of 10 mg/L or less for nitrogen, which will ensure compliance with water quality objectives and protection of the municipal and domestic supply beneficial use.
  - b. **TDS.** The Secondary MCL specified in California Code of Regulations, title 22, section 64449 for Total Dissolved Solids (TDS) ranges between the “recommended” consumer acceptance level of 500 mg/L and the “upper” consumer acceptance level of 1,000 mg/L, if it is neither reasonable nor feasible to provide more suitable water. Background groundwater quality measured from the upstream groundwater monitoring well, MW-2S, has a TDS concentration of 980 mg/L. The potable water supply has a TDS concentration of 250 mg/L, which is lower than background groundwater concentrations as the water supply originates from a different aquifer. The typical incremental addition of dissolved solids from domestic water usage in wastewater treatment plants ranges from 150 to 380 mg/L. The potential degradation of groundwater is believed to be greatest underneath the disposal ponds. This Order includes an TDS effluent limitation of 550 mg/L, which is protective of the municipal and domestic supply groundwater beneficial use. The effluent limitation is based on plant performance which shows a maximum TDS concentration of 530 mg/L within the last three years.

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<sup>8</sup> Because the discharge of recycled water is regulated under a separate permit, this antidegradation analysis does not cover the use of recycled water.

- c. **Total Coliform.** Typical coliform concentration in domestic raw wastewater is about  $10^7$  to  $10^8$  most probable number (MPN)/100 mL, and  $10^5$  to  $10^6$  for secondary treated wastewater effluent. (U.S. environmental Protection Agency, *Design Manual: Municipal Wastewater Disinfection*, EPA/625/1-86/021, October 1986.) The depth to groundwater is approximately 120 feet; it is possible that pathogen-indicator bacteria will reach groundwater in excess of that prescribed in California Code of Regulations, title 22, section 64426.1. However, groundwater monitoring wells adjacent to the disposal ponds have previously been sampled and analyzed for bacteria with results below the detection limits for *E. Coli*. To evaluate potential degradation to groundwater due to pathogens, this Order continues quarterly *E. coli* monitoring in the groundwater monitoring wells and adds quarterly total coliform monitoring.
42. The discharge of wastewater to the disposal ponds, as permitted herein, reflects BPTC. The Facility incorporates:
  - a. Technology for secondary treated domestic wastewater;
  - b. Structural controls to dispose of waste constituents in a designated area;
  - c. A network of groundwater monitoring wells;
  - d. An operation and maintenance manual;
  - e. Staffing to ensure proper operation and maintenance; and
  - f. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.
43. Degradation of groundwater by some of the typical waste constituents associated with discharges from a facility treating domestic wastewater, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from reliance on numerous, concentrated individual wastewater treatment systems (septic), and the impact on water quality will be substantially less. The economic prosperity of surrounding communities and associated industries is of maximum benefit to the people of the state and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

### **Stormwater**

44. Federal regulations for stormwater discharges were promulgated by the U.S. Environmental Protection Agency (USEPA) on November 16, 1990 (40 C.F.R.

parts 122, 123, and 124) to implement the Clean Water Act's stormwater program set forth in Clean Water Act section 402(p) (33 U.S.C. §1342(p)). In relevant part, the regulations require specific categories of facilities that discharge stormwater associated with industrial activity to "waters of the United States" to obtain National Pollutant Discharge Elimination System (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.

45. 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 with a design flow of one million gallons per day or more, or that are required to have an approved pretreatment program under 40 Code of Federal Regulations part 403, must enroll under the Industrial General Permit, unless there is no discharge of industrial stormwater to waters of the United States.
46. The Discharger reports that there are no stormwater discharges from the Facility to waters of the United States, because stormwater generated at the Facility is directed to retention basins and does not leave the boundaries of the Facility. As a result, the Discharger has not enrolled in the Industrial General Permit.

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

47. Pursuant to California Code of Regulations, title 14, section 15301, 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.
48. The Regional Water Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for this discharge and has provided them with an opportunity for a public meeting and to submit comments.
49. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

**IT IS HEREBY ORDERED** that Order R7-2013-0026 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 Water Code, and regulations adopted thereunder, the Discharger shall comply with the following:



**A. Effluent Limitations**

1. The 30-day average monthly dry weather discharge flow for secondary treated effluent shall not exceed 5.0 MGD.
2. Effluent from the WWTP shall not have a pH below 6.0 or above 9.0.
3. Wastewater effluent discharged from treatment plant to the disposal ponds shall not exceed the following effluent limitations:

Table 3: Effluent Limitations for Disposal Ponds

Constituents	Units	Annual Average	30-Day Average	7-Day Average
Total Nitrogen	mg/L	15*		
TSS	mg/L		30	45
cBOD	mg/L		25	40
TDS	mg/L	550		----

\* Interim effluent limitation. The annual average Total Nitrogen and TDS concentration shall be calculated and reported as a rolling average over the last 12 months.

4. Disinfected tertiary recycled water shall conform to the following:
  - a. The filtered wastewater shall be disinfected by either:
    - i. A chlorine disinfection process following filtration that provides a Contact Time (CT) (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or
    - ii. A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage viruses (such as MS2 and polio virus) in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for the purposes of this demonstration. Using total coliform bacteria as the indicator organism, the median concentration of total coliform bacteria measured in the disinfected effluent shall not exceed a most probable number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results

of the last seven days for which analyses have been completed and the number of total coliform bacteria shall not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30-day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

- b. For wastewater that has been coagulated, the wastewater shall be passed through natural undisturbed soils or a bed of filter media pursuant to the following:
  - i. The flow rate shall not exceed 5 gallons per minute per square foot of surface area in mono, dual or mixed media gravity, upflow or pressure filtration systems, or shall not exceed 2 gallons per minute per square foot of surface area in traveling bridge automatic backwash filters; and
  - ii. Turbidity of the filtered wastewater shall not exceed any of the following:
    - (A) An average of 2 Nephelometric Turbidity Units (NTU) within a 24-hour period;
    - (B) 5 NTU more than 5 percent of the time within a 24-hour period; and
    - (C) 10 NTU at any time.
- c. The turbidity of wastewater that has been passed through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane shall not exceed any of the following:
  - i. 0.2 NTU more than 5 percent of the time within a 24-hour period; and
  - ii. 0.5 NTU at any time.
- d. For wastewater that has not been coagulated:
  - i. Filter effluent turbidity shall not exceed 2 NTU;
  - ii. The turbidity of the influent to the filters shall be continuously measured;
  - iii. The influent turbidity shall not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU; and

- iv. The capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 NTU for more than 15 minutes shall be maintained.

**B. Discharge Prohibitions**

1. The discharge of waste classified as “hazardous,” as defined in California Code of Regulations, title 27, section 20164, or “designated,” as defined in Water Code section 13173 and California Code of Regulations, title 27, section 20164, is prohibited.
2. The discharge of treated wastewater at a location other than the designated disposal areas or recycled water used at approved use sites is prohibited.
3. The discharge of wastewater to surface waters or surface drainage courses is prohibited.
4. The Discharger shall not accept waste in excess of the design treatment capacity of the Facility’s disposal system.
5. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
6. The discharge of wastewater in a manner different from that described in this Order is prohibited.
7. The discharge of wastewater to land not owned or controlled by the Discharger, or not authorized for such use, is prohibited.
8. Bypass or overflow of untreated or partially-treated waste is prohibited, except as authorized in Standard Provision G.13.
9. There shall be no surface flow of wastewater away from the disposal ponds.
10. The storage, treatment, or disposal of wastes from the Facility shall not cause contamination, pollution, or nuisance as defined in Water Code section 13050, subdivisions (k), (l), and (m).

**C. Receiving Water Limitations**

1. The discharge of wastewater from the Facility shall not cause groundwater to: exceed applicable water quality objectives; acquire taste, odor, toxicity, or color that create nuisance conditions; impair beneficial uses; or contain constituents in excess of California Maximum Contaminant Levels (MCLs), as set forth in title 22 of the California Code of Regulations (including, but not limited to, section 64426.1 for bacteriological constituents; section

64431 for inorganic chemicals; section 64444 for organic chemicals; and section 64678 for lead and copper).

#### **D. Discharge Specifications**

1. The Discharger shall maintain sufficient freeboard in the disposal ponds to accommodate seasonal precipitation and to contain a 100-year storm event, but in no case less than two feet of freeboard (measured vertically). Freeboard shall be utilized for wake and waves of fluid motion and emergency or natural disaster purposes only.
2. 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 the evaporation/percolation ponds shall not be less than 1.0 mg/L.
3. All treatment, storage, and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
4. Disposal ponds shall be managed to prevent breeding of mosquitoes. In particular:
  - a. An erosion control program to ensure 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.
5. Public contact with wastewater shall be precluded through such means as fences, signs, or other acceptable alternatives.
6. Adequate measures shall be taken to ensure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
7. Objectionable odors originating at the Facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.

#### **E. Pretreatment Provisions**

1. In the event that the Facility receives influent from Industrial Users (as defined in 40 C.F.R. § 403.3(j)) which passes through (40 C.F.R. § 403.3(p)) or interferes (40 C.F.R. § 403.3(k)) with the operation of the Facility, or from

Industrial Users that are otherwise subject to National Pretreatment Standards (40 C.F.R. § 403.3(l)), then the Facility shall have and enforce an adequate pretreatment program in compliance with California Code of Regulations, title 23, section 2233 and 40 Code of Federal Regulations section 403.8.

- a. The Discharger shall immediately notify the Regional Water Board of any planned discharges that would trigger pretreatment requirements.
- b. Within one year of notification that a pretreatment program is required, the Discharger shall submit a revised Report of Waste Discharge and formal pretreatment program for Regional Water Board review and approval.

#### **F. Sludge and Solids Limitations**

1. Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes shall be pursuant to title 27 of the California Code of Regulations.
2. Sludge use and disposal shall comply with federal and state laws and regulations, including permitting requirements, and technical standards in 40 Code of Federal Regulations part 503.
3. Any proposed change in use or disposal of biosolids requires the approval of the Regional 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.
4. The Discharger shall maintain a permanent log of all solids hauled away from the 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 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 40 Code of Federal Regulations part 503. The results of the analyses shall be submitted to the Regional Water Board as part of the MRP.

#### **G. Special Provisions**

1. **Nitrogen Control Strategy Technical Report.** Within six (6) months of the adoption of this Order, the Discharger shall submit to the Regional Water Board's Executive Officer for review and approval a technical report that includes a work plan to propose an effluent limitation for total nitrogen of 10 mg/L or lower for treated wastewater discharged to the evaporation/percolation ponds and a time schedule for any facility improvements or other activities

necessary to achieve the proposed effluent limitation. Alternatively, the Discharger may also submit a work plan describing its plans to eliminate discharges to disposal ponds to satisfy this special provision.

2. **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 Discharger shall submit progress reports in the quarterly Self-Monitoring Report (SMR) to the Colorado River Basin Water Board.
3. **Requests for Extension.** If the Discharger is unable to timely comply with any of the deadlines in the Special Provisions, the Discharger may request an extension from the Colorado River Basin Water Board's Executive Officer. The extension request must be submitted in writing as soon as a delay is recognized and prior to the compliance date. The extension request should include justification for the delay. The request must be approved by the Executive Officer in writing.

#### H. Standard Provisions

1. **Noncompliance.** The Discharger shall comply with all of the terms, requirements, and conditions of this Order and MRP R7-2022-0009. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.) and grounds for: (1) an enforcement action; (2) termination, revocation and reissuance, or modification of these waste discharge requirements; or (3) denial of an Order renewal application.
2. **Enforcement.** The Regional Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code section 13308, or referral to the California Attorney General for recovery of judicial civil liability.
3. **Proper Operation and Maintenance.** 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 but is not limited to, 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 Regional Water Board upon request.

4. **Reporting of Noncompliance.** The Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Regional Water Board office and the Office of Emergency Services within twenty-four (24) hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, the Discharger shall leave a message on the Regional Water Board's office voicemail. A written report shall also be provided within five 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. All other forms of noncompliance shall be reported with the Discharger's next scheduled Self-Monitoring Report (SMR), or earlier if requested by the Regional Water Board's Executive Officer.
5. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.
6. **Material Changes.** Prior to any modifications which would result in any material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board, and if required by the Regional Water Board, obtain revised requirements before any modifications are implemented.
7. **Design Capacity Report.** The Discharger shall provide a report to the Regional Water Board when it determines that the Facility'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.
8. **Operational Personnel.** The Facility shall be supervised and operated by persons possessing certification of appropriate grade pursuant to California Code of Regulations, title 23, section 3680.
9. **Familiarity with Order.** The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order and maintain a copy of this Order at the site.
10. **Inspection and Entry.** The Discharger shall allow the Regional Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- i. Enter the premises regulated by this Order, or the place where records are kept under the conditions of this Order;
  - ii. Have access to and copy, at reasonable times, records kept under the conditions of this Order;
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - iv. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.
11. **Records Retention.** The Discharger shall retain copies of all reports required by this Order and the associated MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board's Executive Officer.
12. **Change in Ownership.** This Order is not transferable to any person without written approval by the Regional Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Regional Water Board's Executive Officer in writing at least 30 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The Regional Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.
13. **Bypass** (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is prohibited. The Regional Water Board may take enforcement action against the Discharger for bypass unless:
  - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur



in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in fee collection; and

- ii. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent bypass occurring during equipment downtime, or preventative maintenance; or
- iii. Bypass is (1) required for essential maintenance to ensure efficient operation; (2) neither effluent nor receiving water limitations are exceeded; and (3) the Discharger notifies the Regional Water Board ten (10) days in advance.

In the event of an unanticipated bypass, the Discharger shall immediately report the incident to the Regional Water Board. During non-business hours, the Discharger shall leave a message on the Regional Water Board's office voicemail. A written report shall be provided within five (5) business days after the Discharger is aware of the incident. The written report shall include a description of the bypass, 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.

14. **Backup Generators.** Standby, power generating facilities shall be available to operate the Facility during a commercial power failure.
15. **Format of Technical Reports.** The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with California Code of Regulations, title 23, division 3, chapter 30, as groundwater raw data uploads electronically over the Internet into the State Water Board's GeoTracker database, found at: <https://geotracker.waterboards.ca.gov/>. Documents that were formerly mailed by the Discharger to the Regional Water Board, such as regulatory documents, narrative monitoring reports or materials, and correspondence, shall be uploaded into GeoTracker in the appropriate Microsoft Office software application format, such as Word or Excel files, or as a Portable Document Format (PDF) file. Large documents must be split into appropriately labelled, manageable file sizes and uploaded into GeoTracker.
16. **Qualified Professionals.** In accordance with 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, describe the conduct of investigations and studies, or 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.

17. **Certification Under Penalty of Perjury.** 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 ensure that qualified personnel properly gathered 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.
18. **Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.
19. **Property Rights.** 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.
20. **Modification, Revocation, Termination.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for an Order modification, rescission, or reissuance, or the Discharger's notification of planned changes or anticipated noncompliance, does not stay any Order condition. Causes for modification include, but are not limited to, the violation of any term or condition contained in this Order, a material change in the character, location, or volume of discharge, a change in land application plans or sludge use/disposal practices, or the adoption of new regulations by the State Water Board, Regional Water Board (including revisions to the Basin Plan), or federal government.
21. **Severability.** The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of these requirements shall not be affected.

Any person aggrieved by this Regional Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of

Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the statutes and regulations applicable to filing petitions are available on the State Water Board's website and can be provided upon request.

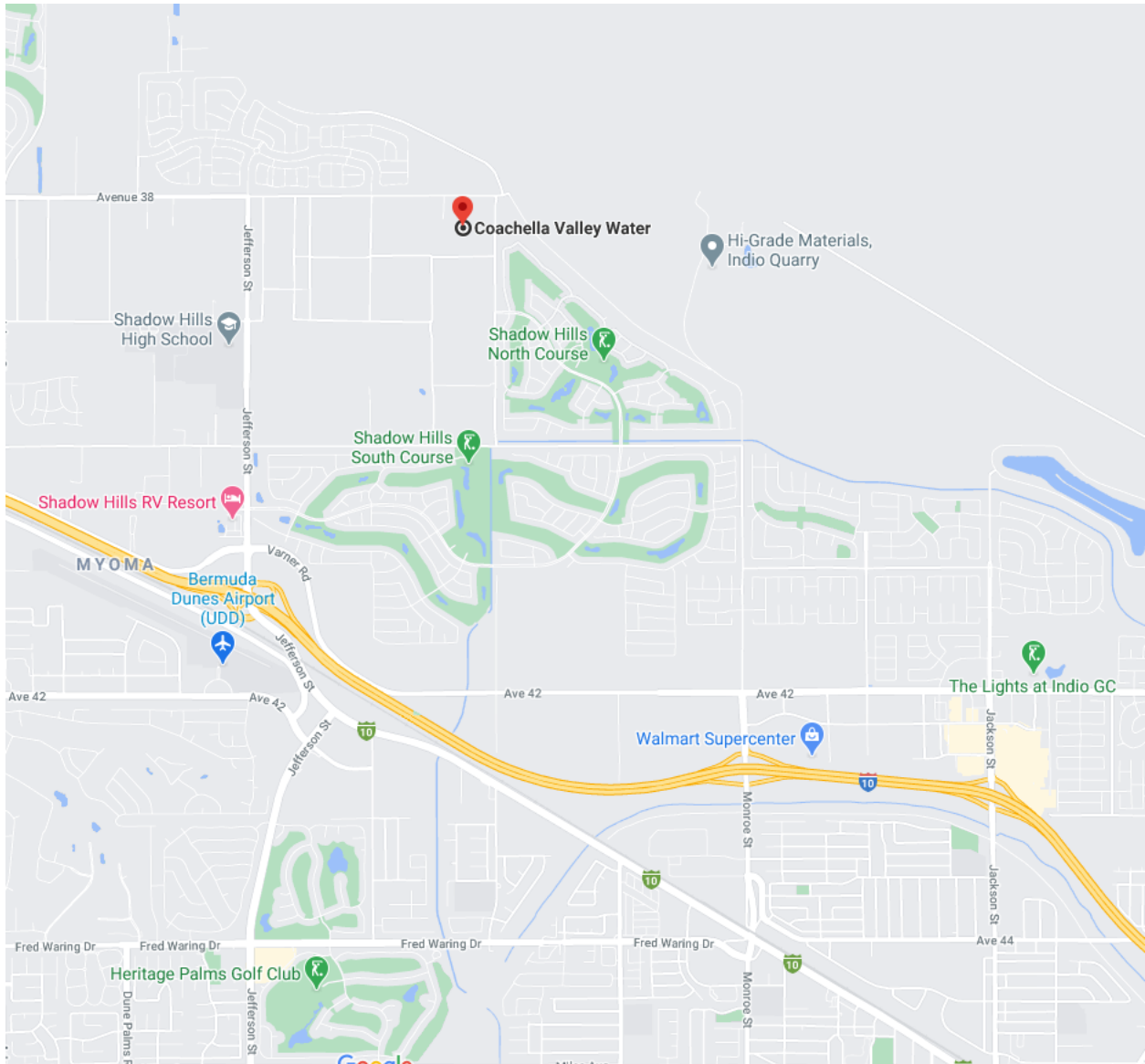
**Order Attachments**

Attachment A—Vicinity Map

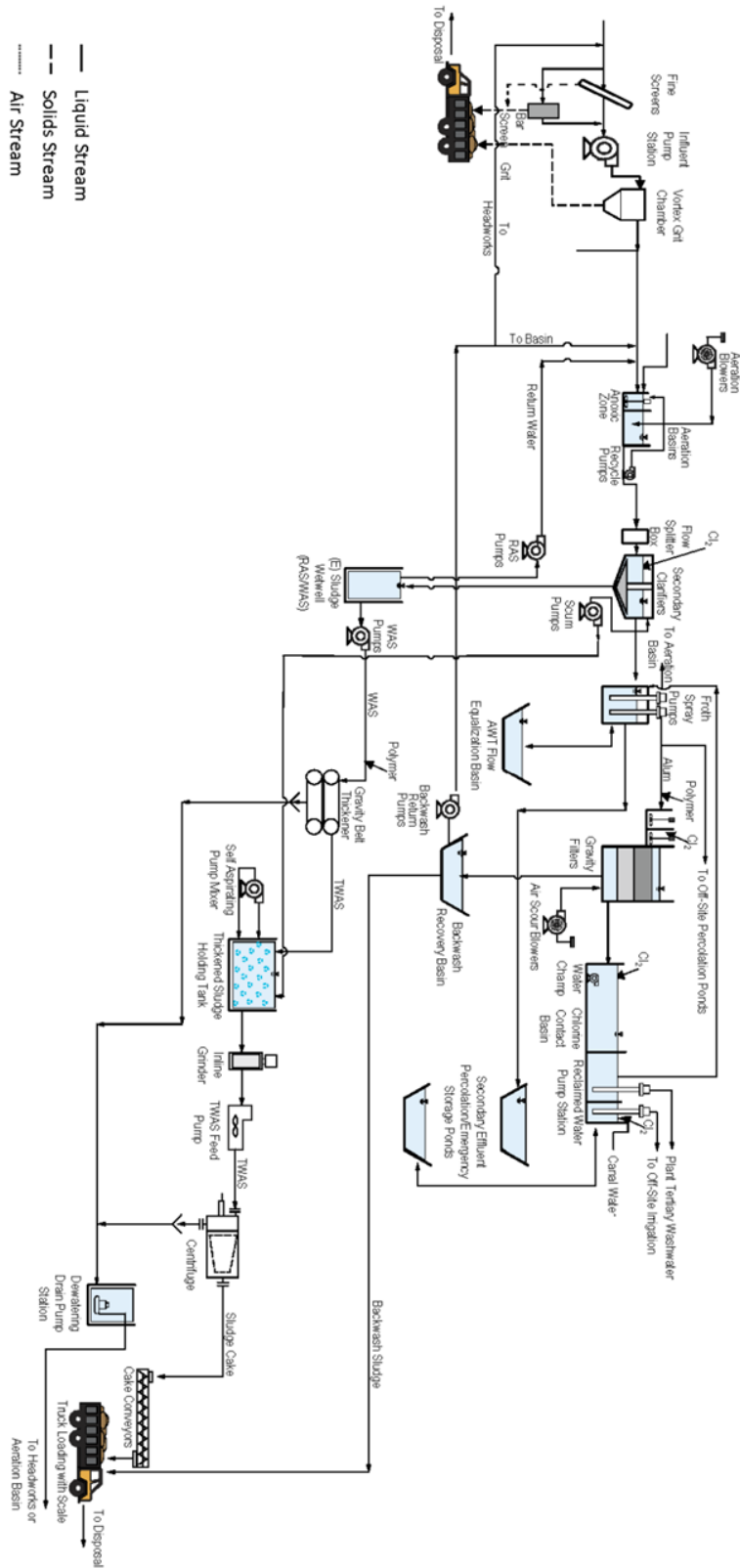
Attachment B—Site Map

Attachment C—Groundwater Monitoring Well location  
Monitoring and Reporting Program R7-2022-0009

### ATTACHMENT A—VICINITY MAP

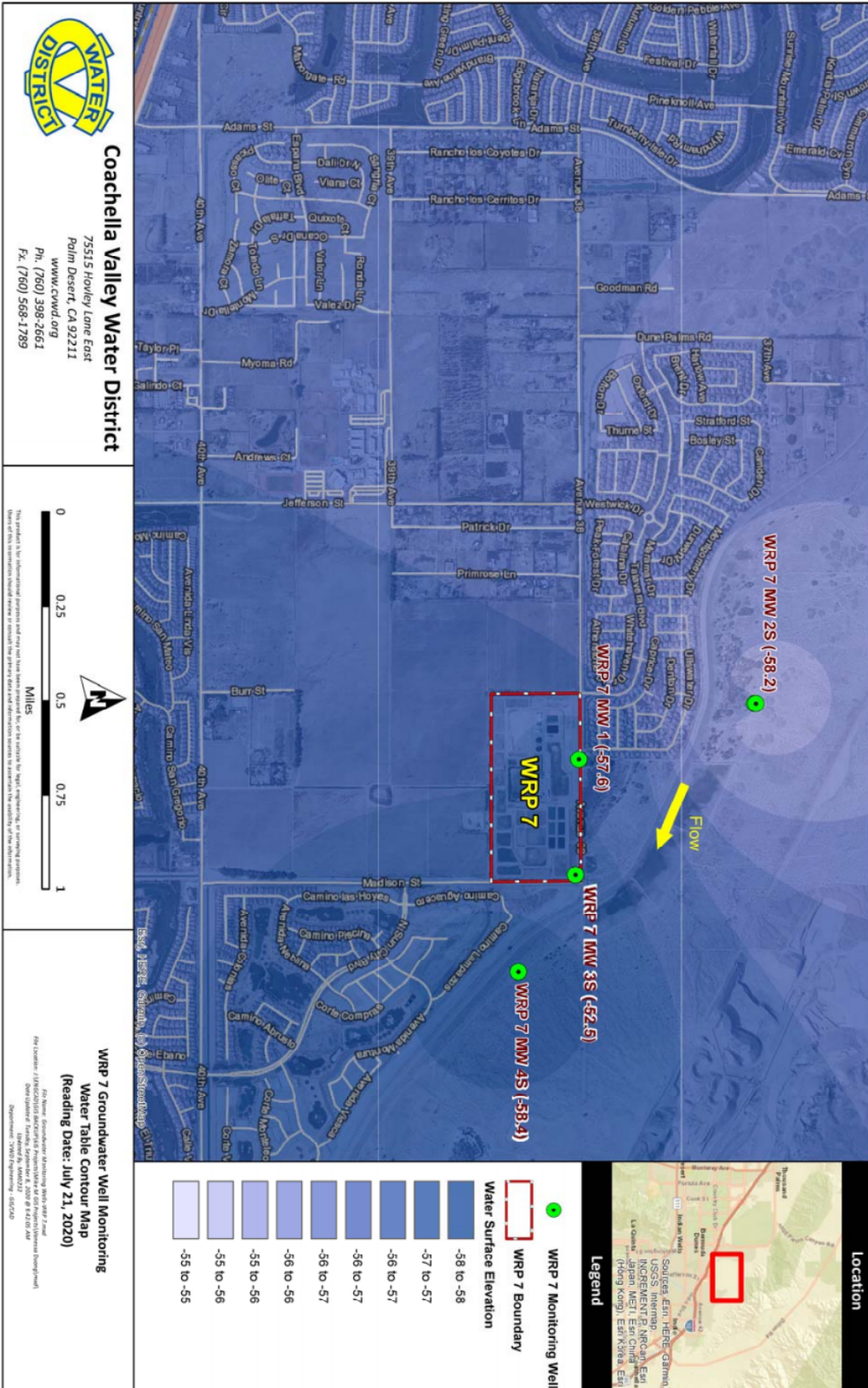


**Attachment B – Process Flow Diagram**





# ATTACHMENT D – GROUNDWATER MONITORING WELLS LOCATION



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

**MONITORING AND REPORTING PROGRAM R7-2022-0009**

FOR  
COACHELLA VALLEY WATER DISTRICT, OWNER/OPERATOR  
IMPROVEMENT DISTRICT #58  
WATER RECLAMATION PLANT NO. 7  
PALM SPRINGS, RIVERSIDE COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267 and describes requirements for monitoring the relevant wastewater system and groundwater quality. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Board or its Executive Officer.

The Discharger owns and operates the wastewater treatment system that is subject to Order R7-2022-0009. The reports required herein 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 monitoring reports described herein.

**A. Sampling and Analysis General Requirements**

1. **Testing and Analytical Methods.** The collection, preservation, and holding times of all samples shall be in accordance with U.S. Environmental Protection Agency (USEPA)-approved procedures. All analyses shall be conducted in accordance with the latest edition of either the USEPA's *Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act* (40 C.F.R. part 136) or *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium* (SW-846), unless otherwise specified in the MRP or approved by the Regional Water Board's Executive Officer.
2. **Laboratory Certification.** All analyses shall be conducted by a laboratory certified by the State Water Board, Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP), unless otherwise approved by the Regional Water Board's Executive Officer.
3. **Reporting Levels.** All analytical data shall be reported with method detection limits (MDLs) and with either the reporting level or limits of quantitation (LOQs) according to 40 Code of Federal Regulations part 136, Appendix B. The laboratory reporting limit for all reported monitoring data shall be no greater than the practical quantitation limit (PQL).



4. **Sampling Location(s).** Samples shall be collected at the location(s) specified in the WDRs. If no location is specified, sampling shall be conducted at the most representative sampling point available.
5. **Representative Sampling.** 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 chain of custody form for the sample. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Regional Water Board staff.
6. **Instrumentation and Calibration.** All monitoring instruments and devices used by the Discharger shall be properly maintained and calibrated to ensure their continued accuracy. Any flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices. In the event that continuous monitoring equipment is out of service for a 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.
7. **Field Test Instruments.** 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.
8. **Records Retention.** The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, for a minimum of five years from the date of the sampling or measurement. This period may be extended by request of the Regional Water Board's Executive Officer at any time. Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurement(s);
- b. The individual(s) who performed the sampling or measurement(s);
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or method used; and
- f. All sampling and analytical results, including:
  - i. units of measurement used;
  - ii. minimum reporting limit for the analyses;
  - iii. results less than the reporting limit but above the method detection limit (MDL);
  - iv. data qualifiers and a description of the qualifiers;
  - v. quality control test results (and a written copy of the laboratory quality assurance plan);
  - vi. dilution factors, if used; and
  - vii. sample matrix type.

**B. Influent Monitoring**

Constituents	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow (To Plant influent)	MGD	Flow Measurement	Daily	Monthly
20° C Carbonaceous Biochemical Oxygen Demand (cBOD <sub>5</sub> )	mg/L	24-Hr. Composite	Monthly	Monthly
Total Suspended Solids (TSS)	mg/L	24-Hr. Composite	Monthly	Monthly

**C. Percolation Pond Monitoring**

Constituents	Units	Sample Type	Sample Frequency	Reporting Frequency
pH	pH units	Grab	Monthly	Monthly
Dissolved Oxygen	mg/L	Grab	Monthly	Monthly
Freeboard	0.1 feet	Measurement	Monthly	Monthly
Berm Condition	--	Observation	Monthly	Monthly
Odor	--	Observation	Monthly	Monthly

**D. Secondary Effluent Monitoring**

1. The secondary treated effluent wastewater shall be sampled for the following constituents:

Table 1. Effluent Monitoring

Constituents	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow (To percolation Ponds)	MGD	Flow Measurement	Daily	Monthly
Hydrogen Ion (pH)	Standard Units	Grab	Daily	Monthly
20° C cBOD	mg/L	24-Hr. Composite	Monthly	Monthly
Total Suspended Solids (TSS)	mg/L	24-Hr. Composite	Monthly	Monthly
Nitrite (NO <sub>2</sub> -N) as Nitrogen	mg/L	24-Hr. Composite	Monthly	Monthly
Nitrate (NO <sub>3</sub> -N) as Nitrogen	mg/L	24-Hr. Composite	Monthly	Monthly
Total Nitrogen	mg/L	24-Hr. Composite	Monthly	Monthly

Constituents	Units	Sample Type	Sample Frequency	Reporting Frequency
Total Dissolved Solids (TDS)	mg/L	Grab	Monthly	Monthly
Volatile Organic Compounds (VOCs)	µg/L	Grab	Quarterly	Quarterly

### E. Water Supply Monitoring

- The domestic water supply shall be sampled for the following constituent:

Table 2. Water Supply Monitoring

Constituents	Units	Sample Type	Sample Frequency	Reporting Frequency
Total Dissolved Solids (TDS)	mg/L	Grab	Annual	Annual

### F. Disinfected Tertiary Treated Recycled Water Monitoring

- Disinfected tertiary treated recycled water shall be sampled for the following:

Table 3 Disinfected Tertiary Treated Recycled Water Monitoring:

Constituents	Units	Sample Type	Sample Frequency	Reporting Frequency
Chlorine Residual	mg/L	Meter Reading	Continuous	Monthly
Turbidity	NTU	Meter Reading	Continuous	Monthly
Volume of Wastewater used for irrigation	MGD	Flow Measurement	Daily	Monthly
Total Coliform	MPN/100 mL	Grab	Daily	Monthly
CT <sup>9</sup>	mg/L	Calculated	Daily	Monthly

<sup>9</sup> CT - product of total residual chlorine and modal contact time measured at the same point.

### G. Groundwater Monitoring

- WRP7 monitoring wells (MW-1, MW-2S, MW-2D, MW-3S, MW-3D, MW-4S, and MW-4D) shall be monitored for the following:

Constituents	Units	Sample Type	Sample Frequency	Reporting Frequency <sup>10</sup>
Groundwater Elevation <sup>11</sup>	0.01 Feet	Calculated	Quarterly	Quarterly
Depth to Groundwater	0.01 Feet	Measurement	Quarterly	Quarterly
pH	Std. Units	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Nitrate + Nitrite as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Chloride	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms	MPN/100 mL	Grab	Quarterly	Quarterly
<i>E. Coli</i>	MPN/100 mL	Grab	Quarterly	Quarterly
Volatile Organic Chemicals (VOCs)	ug/L	Grab	Annually	Annually

### H. Sludge Monitoring

The Discharger shall report annually on the quantity, location, and method of disposal of all sludge and similar solid materials being produced at the wastewater treatment plant facility.

The sludge that is generated at the treatment facility shall be sampled and analyzed for the following:

<sup>10</sup> Analysis of data by a California-licensed professional is required at least annually.

<sup>11</sup> Groundwater elevation shall be based on depth to water using a surveyed measuring point elevation on the well and a surveyed reference elevation.

Constituents	Units	Sample Type	Sample Frequency	Reporting Frequency
Arsenic	mg/kg <sup>12</sup>	Grab <sup>13</sup>	Annually	Annually
Cadmium	mg/kg	Grab	Annually	Annually
Copper	mg/kg	Grab	Annually	Annually
Lead	mg/kg	Grab	Annually	Annually
Mercury	mg/kg	Grab	Annually	Annually
Molybdenum	mg/kg	Grab	Annually	Annually
Nickel	mg/kg	Grab	Annually	Annually
Selenium	mg/kg	Grab	Annually	Annually
Zinc	mg/kg	Grab	Annually	Annually
Fecal Coliform	MPN/gram	Grab	Annually	Annually

**I. Operation and Maintenance Monitoring**

The Discharger shall report the following:

<b><u>Activity</u></b>	<b><u>Reporting</u></b>
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.	Annually

**J. Pretreatment Reporting**

In the event that significant industrial wastewater is being discharged to the treatment facility, the Discharger shall in the annual report describe the pretreatment program activities over the prior twelve (12) month period, including:

1. A summary of actions taken by the discharger which ensures industrial-users compliance;
2. An updated list of industrial users (by SIC categories) which were issued permits, and/or enforcement orders, and a status of compliance for each user; and

<sup>12</sup> mg/kg – Milligrams-per-Kilogram

<sup>13</sup> The grab samples shall be representative samples of the sewage sludge

3. The name and address of each user that received a revised discharge limit.

As specified in Pretreatment Provision E.1, in the event that an approved pretreatment program is required, the Discharger shall submit a pretreatment program for review and approval by the Regional Water Board.

## K. Reporting Requirements

1. Monthly Self-Monitoring Reports (SMRs) shall be submitted by the 15th day of the following month following the monitoring period. Quarterly SMRs shall be submitted by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup>. Annual SMRs shall be submitted by January 31<sup>st</sup> of the following year.
2. Monthly and quarterly SMRs shall include, at a minimum, the following:
  - i. **Cover Letter.** A transmittal letter summarizing the essential points in the report.
  - ii. **Summary of Monitoring Data.** Tables of the data collected. Each row shall be a monitoring event and each column shall be a separate parameter at a single location (or a single average, as appropriate).
  - iii. **Compliance Summary.** Identification of any violations found since the last report was submitted, and actions taken or planned for correcting each violation. If the Discharger previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. If no violations have occurred since the last submittal, this shall be stated.
  - iv. **Nitrogen Control Strategy Summary (Quarterly Only).** Following approval of the nitrogen control strategy work plan as provided in Special Provision G.2, a summary of activities and progress implementing the work plan.
3. Annual SMRs shall include, at a minimum, the following:
  - a. **Cover Letter.** A transmittal letter summarizing the essential points in the report.
  - b. **Maps.** Maps depicting the Facility layout and the location of sampling points.
  - c. **Summary of Monitoring Data.** Summary tables of the data collected. The table shall include summary data from the last five

years from the reporting period. The following parameters shall be included in the summary:

- i. Influent Monitoring data for monthly average flow, cBOD and TSS.
  - ii. Effluent monitoring data for monthly average Total Nitrogen, TDS, TSS and cBOD.
  - iii. Groundwater monitoring data for TDS, Total Nitrogen, Nitrate, Nitrite and depth to groundwater.
- d. **Graphical Display.** Graphs depicting monitoring parameters through time, with the concentrations being the y-axis and time being the x-axis. Logarithmic scales can be used for values that vary by orders of magnitude. Individual graphs can combine multiple locations or multiple chemicals if that allows the data to be compared more easily. The summary shall include effluent monitoring data for TDS and Total Nitrogen and groundwater monitoring data for TDS, Total Nitrogen, Nitrate, and depth to groundwater.
- e. **Pretreatment Report.** Information concerning significant industrial wastewater discharged to the treatment facility, and an affirmative statement concerning whether there is a need to establish an industrial pretreatment program.
- f. **Operation and Maintenance Summary.** Information concerning operation and maintenance of the facility, including documentation showing the calibration of flow meters and equipment, modifications to the Operation and Maintenance Manual, and any modifications or updates to the Discharger's wastewater rules and/or regulations.
- g. **Compliance Summary.** Identification of any violations found since the last annual report was submitted, and actions taken or planned for correcting each violation. If the Discharger previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. If no violations have occurred since the last submittal, this shall be stated.
- h. **Nitrogen Control Strategy Summary.** Following approval of the nitrogen control strategy work plan as provided in Special Provision G.2, a summary of activities and progress implementing the work plan for the past year.



4. SMRs shall be certified under penalty of perjury to be true and correct. Each SMR submitted to the Regional Water Board shall contain the following completed declaration:

“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 fine and imprisonment for knowing violations.

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_

\_\_\_\_\_ (Signature)

\_\_\_\_\_ (Title)”

5. SMRs and any other information requested by the Regional Water Board shall be signed by a principal executive officer or ranking elected official. 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 Regional Water Board’s Executive Officer.
6. The results of any analysis performed more frequently than required at the locations specified in this MRP shall be reported to the Regional Water Board.
7. As specified in Standard Provision H.15, technical reports shall be prepared by or under the direction of appropriately qualified professional(s). Each technical report submitted shall contain a statement of qualification of the responsible licensed professional(s) as well as the professional’s signature and/or stamp of the seal.
8. As specified in Standard Provision H.16, the Discharger shall comply with Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under MRP R7-2022-0009 and any future revision(s) thereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and PDF

monitoring reports to the State Water Board's GeoTracker database. Documents too large to be uploaded into GeoTracker should be broken down into smaller electronic files and labelled properly prior to uploading into GeoTracker.