CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

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[TENTATIVE] WASTE DISCHARGE REQUIREMENTS ORDER R7-2024-XXXX

ORDER INFORMATION

Order Type(s):	Waste Discharge Requirements (WDRs)
Status:	TENTATIVE
Program:	Non-15 Discharges to Land
Discharger(s):	Coachella Valley Water District
Facility:	Water Reclamation Plant 10
Address:	4300 Cook Street, Palm Desert, CA 92211
County:	Riverside County
APN(s):	634-040-002 (Facility), 634-030-017 (Discharge Point)
GeoTracker ID:	WDR100029854
WDID:	7A330105012
Prior Order(s):	R7-2018-0001, 00-008, 97-005, 93-014, 90-038, 90-016, 86-77, 80-072, 74-96, 72-7

CERTIFICATION

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 April 9, 2024.

PAULA RASMUSSEN
Executive Officer

GeoTracker ID: WDR100029854
WDID: 7A330105012

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GLOSSARY

AFY .....Acre Feet Per Year

Antidegradation Policy .....Statement of Policy with Respect to Maintaining High Quality Waters in California, State Water Resources Control Board Resolution 68-16

Basin Plan.....Water Quality Control Plan for Colorado River Basin Region (inclusive of all amendments)

BAT.....Best Available Technology Economically Achievable

BCT.....Best Conventional Pollutant Control Technology

bgs.....Below Ground Surface

BOD5 .....Five-Day Biochemical Oxygen Demand at 20°C

BPTC .....Best Practicable Treatment and Control

Ca.....Calcium

CCR .....California Code of Regulations

CDPH.....California Department of Public Health

Cl.....Chlorine

CFR.....Code Federal of Regulations

CO3.....Carbonate

CT .....Contact Time

CRW.....Colorado River Water

CVSC .....Coachella Valley Stormwater Channel

DDW.....Division of Drinking Water

Discharger .....Coachella Valley Water District

GLOSSARY

DO.....Dissolved Oxygen

DTSC .....California Department of Toxic Substances Control

DWR.....California Department of Water Resources

Facility.....Water Reclamation Plant 10

ft/day.....Feet per Day

GPD .....Gallons per Day

GRP .....Groundwater Replenishment Project

HCO3 .....Bicarbonate

K.....Potassium

MB.....megabytes

MCL[s] .....Maximum Contaminant Level[s] for Drinking Water under Title 22

mg/L.....Milligrams per Liter

MG .....Million Gallons

Mg.....Magnesium

MGD.....Millions of Gallons per Day

ml/L.....Milliliters per Liter

MRP .....Monitoring and Reporting Program

MSL.....Above Mean Sea Level

MW.....Monitoring Wells

Na.....Sodium

NPDES.....National Pollutant Discharge Elimination System

GLOSSARY

OES.....Office of Emergency Services

pH .....power of hydrogen

Policy .....State Water Resources Control Board's Recycled Water Policy

Regional Water Board.....Colorado River Basin Regional Water Quality Control Board

ROWD.....Report of Waste Discharge

SMRs .....Self-Monitoring Reports

SO4.....Sulfate

SSO.....Sanitary Sewer Overflow

State Water Board .....State Water Resources Control Board

Title 22.....CCR, Title 22

Title 23.....CCR, Title 23

Title 27.....CCR, Title 27

TDS.....Total Dissolved Solids

USEPA.....United States Environmental Protection Agency

WDRs.....Waste Discharge Requirements

WOTUS.....Waters of the United States

WQO[s].....Water Quality Objective[s]

µg/L.....micrograms per Liter

(findings begin on next page)

FINDINGS

The Colorado River Basin Regional Water Quality Control Board (Regional Water Board) hereby finds as follows:

Introduction

1. This Order prescribes Waste Discharge Requirements (WDRs) for Coachella Valley Water District (Discharger), which owns and operates the Water Reclamation Plant 10 (Facility) in Riverside County.

2. The Facility is located in Palm Desert at 43400 Cook Street, less than a ¼ mile north of the Whitewater River Stormwater Channel[1] (Stormwater Channel), in Riverside County, in the south ½ of the northwest ¼ and the north ½ of the southwest ¼ of Section 15, Township 5 South, Range 6 East, Mount San Bernardino Base and Meridian. The location is also depicted in **Figure 1** of **Attachment B**.

3. Regulatory coverage under this Order is strictly limited in scope to those waste discharges, activities and processes described and expressly authorized herein:

   a. The wastewater collection system is regulated under State Water Resources Control Board (State Water Board) General Order 2022-0103-DWQ, Statewide General WDRs for Sanitary Sewer Systems, adopted December 2, 2022, and became effective on June 5, 2023.

   b. The application of tertiary treated wastewater as recycled irrigation water is regulated by State Water Board Order WQ 2016-0068-DDW (Water Reclamation Requirements for Recycled Water Use).

4. Pursuant to Water Code section 13264, subdivision (a), the Discharger is prohibited from initiating the discharge of new wastes (i.e., other than those described herein), or making material changes to the character, volume and timing of waste discharges authorized herein, without filing a new Report of Waste Discharge (ROWD) per Water Code section 13260. Failure to file a new ROWD before initiating material changes to the character, volume or timing of

[1] The Stormwater Channel is also commonly referred to as the “Coachella Valley Stormwater Channel.”

discharges authorized herein, shall constitute an independent violation of these WDRs.

5. This Order is also strictly limited in applicability to those individuals and/or entities specifically designated above as "Discharger," subject only to the discretion to designate or substitute new parties in accordance with this Order.

Facility

6. The Facility is an activated sludge treatment Facility that treats wastewater from the surrounding communities of Indian Wells, Palm Desert, Rancho Mirage, and a portion of Cathedral City and serves a blend of canal water and disinfected tertiary recycled water to customers for golf course and landscape irrigation in the middle Coachella Valley. As the demand for reclaimed water increases, smaller volumes of secondary treated water are being discharged to the onsite percolation ponds each year. The Facility layout is depicted in **Figure 1** of **Attachment B**.

7. The Facility has been regulated by the Regional Water Board since 1971 for the discharge of secondary treated effluent and reuse of reclaimed wastewater for irrigation and landscape purposes. As reflected in prior orders, the Discharger has slowly expanded the Facility over time.

    a. Order 74-96 described/authorized an average daily influent flow of 2.45 million gallons per day (MGD).

    b. Order 80-72 permitted an expansion to 10 MGD.

    c. Under Order 86-77, the Discharger was initially permitted to discharge tertiary treated wastewater as irrigation and landscape water (10 MGD).

    d. Order 93-014 required the Discharger to add groundwater monitoring wells and permitted the expansion of the Facility to handle up to 18 MGD (secondary treatment).

    e. Order R7-2018-0001 described the Discharger's implementation of a Groundwater Replenishment Project that repurposed the nine northern percolation ponds to now receive canal water from the Colorado River for groundwater replenishment and required the Discharger to investigate the vertical and horizontal extent of TDS and Nitrate concentrations in the groundwater around the Facility. The Discharger submitted a Final Investigation Report on October 30, 2021.

8. The Discharger submitted an updated Report of Waste Discharge (ROWD) on December 23, 2022 (as required per Order R7-2018-0001).

9. The Facility utilizes a preliminary treatment, conventional activated sludge secondary treatment, and tertiary wastewater treatment units. The Facility has the following storage basin components: two lined holding basins for tertiary treated wastewater (one is existing and one is part of the new “T1” project) that hold five million gallons (MG) each, two secondary effluent lined basins with Basin-1 (capacity of 0.9 MG) and Basin-2 (capacity of 1.2 MG), four lined secondary effluent holding ponds with a total volume of 51.42 MG, nine percolation ponds with a total volume of 17.62 MG, and two concrete and PVC lined surface impoundments, the Back Feed Reservoir which holds strictly canal water with a volume of 21.5 MG and the Blending Water Reservoir which holds canal water and has the ability to be blended with tertiary water with a volume of 15 MG. The Facility also has a Headworks raw sewage preliminary treatment Facility that has a pumping capacity of 45.8 MGD.

10. The pretreatment system consists of three mechanical bar screens, one aerated grit chamber, and one vortex type grit chamber. Secondary treatment consists of three activated sludge treatment plants with six 500 horsepower high speed turbo aeration blowers. The A-Plant activated sludge plant is rated at 2.0 MGD, the B-Plant is rated for 8.0 MGD and C-Plant is rated at 8. MGD for a total secondary wastewater dry-weather flow capacity rating of 18 MGD. The secondary treatment system consists of a total of 16 aeration basins, and 14 secondary clarifiers.

11. Secondary sludge is pumped to the solids handling Facility for thickening and dewatering. Biosolids treatment consists of two Dissolved Air Floatation units, a sludge holding tank and two, 2-meter filter belt presses. The design capacity of the solids handling facilities is 36 tons dry weight per day and it can produce unclassified biosolids for potential beneficial reuse.

12. Private contractors haul away the Facility’s treated secondary sludge. If the contractor is unable to provide service for secondary sludge removal and disposal, the Discharger’s contingency plan for temporary storage is to transport secondary sludge to the Discharger's Water Reclamation Plant No. 4. Sludge is not permanently disposed/land-applied onsite.

13. Secondary effluent is further treated in the tertiary treatment plant for use through the existing recycled water distribution system in accordance with seasonal demand. The Facility experiences diurnal flow patterns; therefore, flows peak in the daytime and drop significantly in the nighttime. This causes secondary

effluent to be stored during the day and recirculated back to the headworks at night to maintain tertiary production. The practice is similar during the wet season, when the demand for irrigation/landscape water drops and any excess water that cannot be stored as reclaim is stored as secondary effluent in the secondary effluent ponds. The secondary effluent is returned to headworks during the low flow periods to maintain tertiary production. If returning the flow to headworks is not possible, then the secondary effluent is disposed of in the nine-percolation ponds. Any tertiary water not being used for irrigation is stored in the tertiary lined basins and utilized during peak flow periods.

14. The tertiary treatment system consists of two separate tertiary treatment units with a combined design treatment capacity of 15.0 MGD. One of the tertiary treatment units has a 10.0 MGD treatment capacity and includes coagulation, flocculation, and dual media filtration (sand and anthracite). The second tertiary treatment unit has a 5.0 MGD treatment capacity and includes coagulation and continuous deep-bed, and up-flow sand filtration. There are three separate chlorine contact tanks at the Facility. Contact Tank No. 1 is arranged with 4 passes, each 310 feet in length. Contact Tanks No. 2 and 3 are arranged with 3 passes, each 232 feet in length. Tertiary treated wastewater from the two treatment units is comingled after disinfection and then blended with Coachella Canal water in the “T2” high-pressure and low-pressure pump station wet-well or in one of the lined basins before being used as recycled water for golf-course and landscape irrigation.

15. The Facility’s odor control system is comprised of chlorine/caustic odor scrubbers. Except for Scrubber #5, all scrubbers use Packed-Tower type technology, and use sodium hydroxide (caustic soda) as the absorption agent. Scrubber #5 is a dual bed carbon adsorber type.

16. The Facility experienced an increase in secondary effluent discharge rates from 1975 through the early 2000s, peaking at approximately 7,700-acre-feet-per-year (AFY) in 2003.Then, rates gradually declined to approximately 1,700 AFY in 2020. The average annual secondary effluent discharge rate over the 45-year historical period is 4,700 AFY. The recent increase in local demand for recycled water is reasonably expected to further increase in the future. The Discharger also has planned improvements to optimize treated effluent storage capacity and delivery of recycled water at Facility; secondary effluent discharge at the Facility site is anticipated to no longer be needed by approximately 2035. However, the Facility will still require emergency discharge ponds in the event of unanticipated recycled water distribution system disruptions and/or catastrophic storm events.

17. Tertiary treated water is used as recycled water for golf course and landscape irrigation by 18 customers in Palm Desert and Indian Wells. Some effluent is also used on-site at the Facility for landscape irrigation. Approximately 6 MGD of tertiary treated wastewater is used as recycled water for irrigation purposes while the balance of approximately 3 MGD of tertiary treated wastewater is discharged to the infiltration ponds.

18. **Table 1** below summarizes the Facility's influent between January 2018 and July 2023, as reported via the Discharger's Self-Monitoring Reports (SMRs).

Table 1. Influent Data.

Constituent	Units	Average	Maximum	Minimum
Total Influent Flow	MGD	8.4	9.76	6.99
Total Suspended Solids	mg/L	394.3	1400	220
Five-Day Biochemical Oxygen Demand at 20°C (BOD5)	mg/L	257.7	580	120

19. **Table 2** below summarizes the Facility's secondary effluent between January 2018 and July 2023, as reported via the Discharger's SMRs.

Table 2. Secondary Effluent Data.

Constituent	Units	Average	Maximum	Minimum
pH	pH units	6.6	6.83	6.21
Total Suspended Solids	mg/L	7.3	20	1
20˚C BOD5	mg/L	3.6	7.3	1.3
Total Dissolved Solids (TDS)	mg/L	503	590	420
Nitrate as Nitrogen (N)	mg/L	14.1	24	5.8
Nitrite as Nitrogen (N)	mg/L	0.7	2.6	0.09

Constituent	Units	Average	Maximum	Minimum
Total Nitrogen	mg/L	14.8	26.6	5.89

20. On September 22, 2020, the Discharger experienced a Sanitary Sewer Overflow (SSO), which lasted for approximately one hour, and occurred from a manhole junction structure located on the west side of Cook Street. The untreated wastewater ultimately ended up in the dry Stormwater Channel less than 1000 linear feet from the point of origination. The SSO was caused by an internal component failure of the "Uninterruptible Power Supply" which caused the "Programmable Logic Controller" to deenergize from both commercial and battery back-up power. The lack of power caused a snowball effect which caused other redundancies in the system to also fail. The Discharger vacuum recovered approximately 28,000 gallons of the spill, resulting in a net spill volume of 128,639 gallons to the dry Stormwater Channel. The Discharger has implemented numerous improvements and redundancies to their monitoring system and power supply backups as well as changed operational policies to ensure at least one operator is always in the control room at the Facility.

21. There are no significant industrial generators currently discharging to the Facility.

22. A Facility process flow schematic is included as **Figure 3** of **Attachment B**.

General Site Conditions

23. The Facility is situated within the Indio Subbasin (Whitewater River) of the Coachella Valley Groundwater Basin. The site elevation is approximately 160 feet above mean sea level. The site is relatively flat except for the surface depressions formed by the excavation and construction of the various storage and blending reservoirs across the site.

24. The Stormwater Channel is located immediately south of the Facility. The Stormwater Channel is a water of the United States (WOTUS) and is also a tributary to the Salton Sea, a WOTUS, which serves to receive and store agricultural drainage, seepage, and storm water.

25. The Facility is in a seismically active desert region.

26. Alluvial aquifers in the vicinity of Facility are comprised of interbedded coarse-grained and finer-grained fan, stream wash, and lacustrine deposits. Based on available well driller's logs, the thickness of alluvial deposits in the vicinity of the

Facility exceeds 1,500 feet near the center of the valley and consists of predominantly coarse-grained gravels and sands, constituting the aquifer system that is the main source of water supply in the region. Shallow and deeper aquifers are separated locally by fine-grained (silt and clay) deposits

27. Based on data from the nearest weather station (04-6635, Palm Springs), the Facility has an annual average precipitation of 5.11 inches, and a mean pan evaporation of 105.35 inches per year (Indio Fire Station 1927-2005).

28. According to National Oceanic and Atmospheric Administration (NOAA) Precipitation Frequency Atlas 14, Vol. 6 (rev. 2014), 100-year and 1,000-year, 24-hour rainfall events are estimated to result in 5.51 and 7.86 inches of precipitation, respectively.[2]

29. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (https://msc.fema.gov/portal), the Facility is not located within a 100-year floodplain.

30. Land uses in the vicinity include historically extensive nitrogen-fixing mesquite forests (Huberty, et. al., 1948), irrigated agriculture, low-density residential land uses through the mid-1900s, and more recently medium to high-density residential, commercial office/retail, and industrial land uses, as well as golf courses, landscaping/turf areas, public parks, and schools.

31. The Discharger's SMRs indicate that over the last 5 years (2018-2023), the water supply to the community had an average TDS concentration of approximately 278 mg/L. Previously, the Discharger's SMR data from 2012-2017 indicated the water supply to the community had an average TDS of approximately 230 mg/L.

Proximity to Groundwater Recharge Facilities

32. The Facility is immediately adjacent to two large groundwater recharge facilities that percolate large volumes of Colorado River water to groundwater. The recharge facility to the north uses percolation ponds that were previously used for disposal of the Facility's wastewater. The facility to the south is situated within the Channel. These groundwater recharge operations appear to have resulted in significant mounding of groundwater, as well as the commingling with the

[2] Source: NOAA Precipitation Frequency Data Server (https://hdsc.nws.noaa.gov/hdsc/pfds)

Facility's discharges, as evidenced by the TDS concentrations in upgradient and downgradient monitoring wells.

Groundwater and Subsurface Conditions

33. Alluvial aquifers in the vicinity of the Facility are comprised of interbedded coarse-grained and finer-grained fan, stream wash, and lacustrine deposits. Based on available well driller's logs, the thickness of alluvial deposits in the vicinity of Facility exceeds 1,500 feet near the center of the valley and consists of predominantly coarse-grained gravels and sands, constituting the aquifer system that is the main source of water supply in the region. Shallow and deeper aquifers are separated locally by fine-grained (silt and clay) deposits. Aquifer hydraulic properties in the vicinity of Facility have been characterized on the basis of pumping tests and a basin-wide aquifer textural study. In 2000, Fogg et. al. conducted a kriging analysis of aquifer textures and associated hydraulic properties and prepared a regional MODFLOW model of the Indio (Whitewater River) Subbasin. The model includes four model layers representing the shallow and deep aquifers. The area surrounding the Facility has an average groundwater velocity of 1.3 feet per day (ft/day), hydraulic conductivities range from approximately 5.0 ft/day for low-permeability clay deposits to a maximum horizontal hydraulic conductivity of 224 ft/day for the most permeable sand/gravel deposits.

34. Groundwater production within the area occurs primarily via municipal pumping, with additional private pumping primarily for irrigation. Municipal production wells in the area are generally screened in the lower portions of the aquifer with screen intervals ranging from 500 to 1,200 feet below ground surface (bgs). Screen intervals of private irrigation wells are generally shallower, ranging from 200 to 1,200 feet-bgs. Groundwater has been pumped from a total of 143 wells in the Facility's general area. This includes 60 CVWD wells (35 currently active and 25 currently inactive) and 83 private irrigation wells. Groundwater production has declined steadily, reflecting implementation of water conservation measures and increased use of recycled water and imported water in the area. From 2000 to 2002, the average annual production was 89,870 AFY. Over the three-year period from 2015 to 2017, the average annual production was only 56,267 AFY.

35. Groundwater pumping has resulted in groundwater level declines of about 1 to 3 feet per year from 1985 to 2015. In 1985, groundwater levels ranged from 50 feet above mean sea level (msl) in the northwest to -20 feet msl in the southeast, representing a 70-foot gradient across the general area of the Facility. In 2015, groundwater levels ranged from zero feet msl in the northwest to -120

feet msl in the southeast. These water levels represent water level declines of 50 feet in the northwest to 100 feet in the southeast over the past 30 years. The rate of water level decline between 2005 and 2015 was smaller, amounting to approximately one foot per year on average (10 feet over 10-year period). Between 2015 and 2020, water levels were increasing in response to reduced local pumping due to water conservation measures and increased use of recycled water and imported water, as well as groundwater replenishment activities at the Whitewater River Groundwater Replenishment Project (GRP), immediately upgradient of the Facility, and since 2019, at the Palm Desert GRP.

36. Subsurface inflows to the area occur primarily from the north and west. Groundwater generally flows across the Facility in a northwest-to-southeast direction. South of Highway 111, storm runoff in the San Jacinto Mountains enters the Basin as subsurface inflow, resulting in localized groundwater flow in a northeasterly direction upgradient of Facility. There is also a localized mounding effect that underlies the areas used as secondary effluent percolation ponds.

37. Recharge in the area includes infiltration of Facility secondary effluent discharge, local groundwater replenishment with imported Colorado River Water at the GRPs, outdoor irrigation return flows, and subsurface inflows.

38. In October 2021, the Discharger concluded an investigation into the horizontal and vertical extent of the Facility's TDS and Nitrates impacts, as required by Order R7-2018-0001 (§ F.1). The Discharger analyzed the data from over 120 monitoring (including several newly constructed monitoring wells) and production wells within several miles' radius from the Facility. The Discharger also conducted isotopic and general mineral chemistry analysis of the underlaying aquifer within the proposed study area that was used to assist their groundwater modeling.

39. According to the Discharger's data, depth to groundwater in the vicinity of the Facility is between 202 to 267 feet bgs.

40. This Order requires the Discharger to monitor the groundwater mound elevation created by historic discharges to the percolation ponds using groundwater monitoring wells within the mound's area of influence (MW-1 through MW-3).

41. The water supply to the communities of Palm Desert, Rancho Mirage, and parts of Cathedral City and Indian Wells that are serviced by the Discharger's wastewater collection system is from groundwater production wells within the Coachella Valley Groundwater Basin.

42. Based on the Discharger's investigation (described in Finding 38), there may be evidence of historically elevated nitrate and TDS concentrations in groundwater in the Indian Wells area. Huberty et al. (1948) found that the elevated groundwater concentrations of these constituents were likely a by-product of flood irrigation of nearby date groves, which leached salts and nitrates out of the shallow soil and pushed them deeper into the valley's sediments. This included the remnants of a mesquite forest, which are nitrogen fixing plants, that had been located in this area prior to human occupation. The lateral extent of elevated salt and nitrate concentrations in the groundwater and the change in concentration through time are not known. Regardless, the Discharger's recent investigations strongly suggest anthropogenic sources in groundwater that exceed historical effluent limits in upgradient, cross gradient, and downgradient portions of the upper and lower aquifer[3].

43. There are no domestic wells within 500 feet of the on-site percolation basins.

Groundwater Monitoring Network

44. The Facility's groundwater monitoring network currently consists of the six monitoring wells, which are mapped in **Figure 2** of **Attachment B.** However, it appears that the Discharger has sampled at least four additional wells as part of recent groundwater investigations.

Table 3. Current Groundwater Monitoring Network.

Monitoring Well	Depth / Location	Operation
MW-1	southwest, upgradient of former secondary effluent percolation basins,	1995-2012
MW-2	east, downgradient of former secondary effluent	1995-2012

[3] "Final Report Evaluation of the Influence of WRP 10 on Groundwater Total Dissolved Solids and Nitrate Concentrations," TODD Groundwater.

Monitoring Well	Depth / Location	Operation
MW-3	southeast, downgradient of former secondary effluent	1995-2012
MW-4	west, upgradient of Facility	2012-Present
MW-5	east, downgradient of Facility	2012-Present
MW-6	southeast, downgradient of Facility	2012-Present

45. The Facility monitoring wells allow for the assessment of groundwater level and water quality conditions in the approximately upper 100 feet of saturated aquifer.

46. In 1995, the Discharger installed monitoring well MW-1, which was intended to be upgradient, and monitoring wells MW-2 and MW-3, which were both intended to be downgradient, to monitor the impact of wastewater discharged to groundwater around the percolation ponds. **Table 4** below summarizes groundwater quality in wells MW-1, MW-2 and MW-3 between April 2009 and July 2012. As discussed above, the Discharger does not appear to have monitored these wells since 2012.[4]

47. In January 2011, the Discharger reported that wells MW-1, MW-2 and MW-3 were deteriorating and in need of replacement, and that they were affected by mounding (i.e., resulting from percolation pond discharges). Consequently, the results from 2009 to 2012 may not reflect background conditions or the impacts of Facility discharges (though such concerns extend to the Facility's entire monitoring network due to groundwater mounding and commingling from the adjacent recharge operations).

[4] Although the Discharger purportedly "rehabilitated" wells MW-1, MW-2 and MW-3 in 2019, the Discharger has not reported any monitoring data from them. The Monitoring and Reporting Program included in Attachment A explicitly requires a resumption in their monitoring.

Table 4. Historic Groundwater Quality: Wells MW-1, MW-2 and MW-3.

Constituent	Units	MW-1 (Upgradient)	MW-2 (Downgradient)	MW-3 (Downgradient)
Groundwater Elev. (relative to MSL)	Feet	-30	-28	-35
TDS	mg/L	584	455	464
Sulfate	mg/L	198	72	49
Chloride	mg/L	105	71	78
Fluoride	mg/L	0.12	0.14	0.10
Total Nitrogen	mg/L	7.94	9.20	3.12

48. In 2012, the Discharger constructed three new monitoring wells: MW-4, which was intended to be upgradient; and MW-5 and MW-6, both of which were intended to be downgradient. **Table 5** below summarizes groundwater quality in wells MW-4, MW-5 and MW-6 between August 2012 and September 2017 (first five years of use after installation).[5]

49. Notably, the TDS in the upgradient monitoring well MW-4 (701 mg/L) is significantly higher than downgradient well MW-6 (568 mg/L) and the Facility's average effluent concentrations (503 mg/L). However, downgradient MW-5 contains a higher concentration of TDS (737 mg/L) than either the Facility's average effluent (503 mg/L) or the other downgradient monitoring well (503 mg/L). These results suggest that the upgradient monitoring well (MW-4) may not be reflective of background conditions, and that the downgradient well MW-5 may be impacted by groundwater recharge activities. At the very least, MW-5 is not necessarily reflective of the Facility's effluent discharges alone.

[5] Although MW-4 was intended to be representative of background conditions (i.e., upgradient from the percolation ponds), and MW-5 and MW-6 were intended to be representative of groundwater impacts from Facility discharges (i.e., downgradient from the percolation ponds),

Further, it does not appear possible to distinguish between the Facility's discharges and impacts from the GRPs.

Table 5. Historic Groundwater Quality: Wells MW-4, MW-5 and MW-6.

Constituent	Units	MW-4 (Upgradient)	MW-5 (Downgradient)	MW-6 (Downgradient)
Depth to Groundwater	Feet	211	261	216
TDS	mg/L	701	737	568
Sulfate	mg/L	167	178	161
Chloride	mg/L	47	86	83
Fluoride	mg/L	0.17	0.3	0.16
Total Nitrogen	mg/L	6	19	11

50. In 2020, the Discharger installed two additional monitoring wells, MW-7 and MW-8, as part of its recent groundwater investigation (see Finding 38). Although the wells do not appear to have been decommissioned, the Discharger has not reported any monitoring results since 2021. **Table 6** summarizes the available groundwater quality information.

Table 6. Historic Groundwater Quality: Wells MW-7 and MW-8.

Constituent	Units	MW-7 (Upgradient)	MW-8 (Downgradient)
Depth to Groundwater	Feet	197	212
TDS	mg/L	473	707
Sulfate	mg/L	111	153
Chloride	mg/L	44	84
Fluoride	mg/L	0.27	0.31

Constituent	Units	MW-7 (Upgradient)	MW-8 (Downgradient)
Total Nitrogen	mg/L	10	31

51. The Discharger also used two further wells as part of its recent groundwater investigation (see Finding 38). The investigation was completed in 2021, at which point the Discharger stopped sampling the wells. The average quarterly groundwater quality results are summarized in **Table 7**.[6]

Table 7. Historic Groundwater Quality: PD MW-1 and PD MW-2.

Constituent	Units	PD MW-1 (Upgradient)	PD MW-2 (Downgradient)
Groundwater Depth	Feet	251	205
TDS	mg/L	725	717
Sulfate	mg/L	221	224
Chloride	mg/L	102	85
Fluoride	mg/L	0.25	0.42
Total Nitrogen	mg/L	15	8.33

52. Historical groundwater quality data (2005 to 2018) from nearby monitoring and supply wells and private irrigation wells were used to characterize groundwater quality conditions relative to TDS and nitrate. The historical data indicate that groundwater quality varies laterally and vertically across the area and is under the influence of legacy sources of TDS other than the Facility's effluent discharge. The TDS discharge limit in pre-2018 orders was 500 mg/L, and the interim TDS discharge limit under the Order R7-2018-0001 was 530 mg/L. The

[6] Although the attached Monitoring and Reporting Program does not currently require these wells to be monitored, such monitoring may be required as part of a subsequently issued Revised Monitoring and Reporting Program.

average historical TDS and nitrate concentrations of the Facility's secondary effluent are 460 and 62 mg/L as nitrate, respectively[7].

53. Given that the average historical TDS concentration of secondary effluent is generally below 500 mg/L, and concentrations exceeding 500 to 600 mg/L in shallow wells have been observed indicate that TDS concentrations in shallow local groundwater have been influenced by sources other than the Facility's effluent. The largest contributor to higher TDS concentrations appears to be the groundwater recharge operations.

54. Historical Nitrate-NO3 concentrations in the shallow aquifer were generally higher than in deeper aquifer zones. Nitrate concentrations for deeper wells generally increased from northwest to southeast, along the historical groundwater direction of flow. Nitrate-NO3 concentrations in twelve wells (four shallow and eight deep aquifer) have exceeded 45 mg/L during sampling events. Given that the Discharger's average historical Nitrate effluent exceeds this number, it is possible that the Discharger has historically contributed to the elevated concentrations of nitrate in groundwater. The Discharger's average secondary effluent concentration of Nitrate from 2008 – July 2023 was 14.62.

Regulatory Considerations

Waste Discharge Permitting Authority

55. This Order is issued pursuant to Water Code section 13263, subdivision (a), which provides that "[t]he regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed."

56. The statute further provides that WDRs "shall implement water quality control plans and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste

[7] "Final Report Evaluation of the Influence of WRP 10 on Groundwater Total Dissolved Solids and Nitrate Concentrations," TODD Groundwater.

discharges, the need to prevent nuisance,[8] and the provisions of Section 13241." (Wat. Code, § 13263, subd. (a).)

57. The ability to discharge wastewater is a privilege, not a right. The adoption of this Order shall not be construed as establishing a vested right in the continuance of discharge activities. (Wat. Code, § 13263, subd. (g).)

58. For purposes waste discharge fees under California Code of Regulations, title 23 (Title 23), section 2200, the Facility has a threat-complexity rating of **2-B**.

    a. **Threat Category "2"** reflects waste discharges that can impair receiving water beneficial uses, cause short-term water quality objective violations, cause secondary drinking water standard violations, and cause nuisances.

    b. **Complexity Category "B"** reflects any discharger not included in Category A, with either (1) physical, chemical or biological treatment systems (except for septic systems with subsurface disposal), or (2) any Class II or Class III WMUs.

Basin Plan Implementation

59. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) designates beneficial uses of groundwater and surface water within the region, establishes numeric and narrative water quality objectives (WQOs) protective of such uses, and incorporates applicable State Water Board plans and policies.

60. This Order prescribes WDRs for discharges to groundwater within the Coachella Valley Planning Area, Whitewater Hydrologic Unit, Coachella Subunit (719.40), for which the designated beneficial uses of groundwater are as follows:

    a. Municipal and Domestic Supply (MUN);

    b. Agricultural Supply (AGR); and

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[8] "Nuisance" is defined by statute as a condition that: "(1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property[;] [¶] (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons…[;] [and] [¶] (3) Occurs during, or as a result of, the treatment or disposal of wastes." (Wat. Code, § 13050, subd. (m).)

c. Industrial Supply (IND).

61. The Basin Plan establishes the following WQOs for MUN-designated groundwater:

a. Tastes and Odors (Narrative): Groundwater shall not contain taste or odor-producing substances that adversely affect beneficial uses as a result of human activity (Ch. 3, § IV.A);

b. Coliform Bacteria (Numeric): Groundwater shall not contain coliform organisms in exceedance of the limits specified in CCR, title 22 (Title 22), section 64426.1 (Ch. 3, § IV.B); and

c. Chemical Constituents (Numeric): Groundwater shall not contain organic and inorganic chemical constituents in concentrations exceeding the Primary Maximum Contaminant Levels (MCLs) established for drinking water per Title 22, sections 64431, 64444 and 64678 (Ch. 3, § IV.C).

62. Although they are not universally incorporated into the Basin Plan as numeric WQOs for MUN-designated groundwater, the Secondary MCLs, established for drinking water per Title 22, section 64449, are appropriate in most cases for use as site-specific numeric limits supporting the narrative WQO for groundwater tastes and odors.

63. With respect to the narrative WQO for tastes and odors, specifically regarding TDS, the Title 22 Secondary MCL specifies a recommended limit of 500 mg/L, and an upper limit of 1,000 mg/L. Generally, the numeric limit should be within this range, with a preference towards the lower recommended limit. Further, the numeric limit should be somewhat reflective of existing background groundwater conditions and municipal/domestic beneficial uses in the area. Although the Board is not establishing a definitive numeric limit supporting the narrative objective at this time, this Order establishes an effluent limit of 530 mg/L.

Antidegradation Policy

64. The Basin Plan incorporates the State Water Board's *Statement of Policy with Respect to Maintaining High Quality Waters in California*, Resolution 68-16 (Antidegradation Policy), which prohibits the Regional Water Board from authorizing discharges that will result in the degradation of "high quality waters," unless it is demonstrated that any such degradation in water quality:

a. Will not unreasonably affect beneficial uses,[9] or otherwise result in water quality less than that prescribed in applicable plans and policies (e.g., violation of WQOs);

b. Will be mitigated through best practicable treatment and control (BPTC);

c. Is consistent with maximum benefit to the people of the state of California.

65. Based on experiences with similar facilities, Regional Water Board staff have identified the following constituents with the potential to degrade groundwater in the Facility's effluent:

a. Total Nitrogen (Nitrate plus Nitrite plus Kjeldahl Nitrogen),

b. TDS (Salinity),

c. Chloride and Sulfates, and

d. Coliform Organisms.

66. Groundwater underlying the Facility and downgradient is considered "high quality" with respect to these constituent categories, each of which is discussed below:

a. **Total Nitrogen:** The numeric WQO for Total Nitrogen is 10 mg/L (Primary MCL under Title 22).

i. The Discharger's SMRs from January 2018 through July 2023 indicate that total nitrogen in the effluent ranges from 5.8 to 26.6 mg/L and average 14.8 mg/L. Groundwater monitoring samples have been collected from five wells around the Facility. MW-4 and MW-7 are designated as "upgradient wells." These wells show total nitrogen concentrations averaging 8.74 and 9.9 mg/L, respectively.

Downgradient wells MW-5, MW-6, and MW-8 show total nitrogen concentrations averaging 19.04, 13.24, and 30.9 mg/L, respectively. These data indicate that the discharge of treated

[9] The Water Code defines "Pollution" in relevant part as the "alteration of the quality of the waters of the state by waste to a degree which unreasonably affects … [¶] [t]he waters for beneficial uses." (Wat. Code, § 13050, subd. (l)(1)(A).)

wastewater to the percolation ponds is contributing nitrate to groundwater. Groundwater concentrations in downgradient wells exceed the Primary MCL prescribed Title 22, section 64431.

ii. Because the Discharger's effluent from 2012-2017 exceeded the recommended MCL, Order R7-2018-0001 required that the Discharger investigate the vertical and lateral extent of groundwater containing nitrogen in excess of 10 mg/L, evaluate options for reducing nitrogen in the effluent, and evaluate Discharger's contribution to nitrogen concentrations in the groundwater. The results of the nitrogen investigation were used to develop a final nitrogen effluent limit that is consistent with water quality and public health goals.

iii. Using increasingly more reclaimed wastewater for golf courses and landscape irrigation has reduced the amount of nitrogen entering the groundwater. The Discharger currently recycles approximately 60 percent of the secondary treated wastewater and plans to recycle 100 percent of it by 2035. Even with reductions in nitrogen loading due to increased water recycling, continuation of the existing treatment and percolation pond as an emergency disposal method poses a potential threat to the beneficial use of groundwater.

iv. In order to comply with the Antidegradation Policy, this Order incorporates an effluent limitation of 10 mg/L total nitrogen.[10]

b. **TDS (Salinity):** As explained in **Finding 63**, this Order incorporates a numeric limit of 530 mg/L as supportive of the narrative WQO for tastes and odors.

i. The Discharger's SMRs from January 2018 through July 2023 indicate that TDS in the effluent ranges from 420 to 590 mg/L and average 503 mg/L. Domestic water supply to the community showed an average TDS concentration of about 277.8 mg/L from January 2018 to July 2023. The average TDS increase in the

[10] Although not all Total Nitrogen will convert to Nitrate or Nitrite (which depends on site-specific conditions), this Order reflects a conservative approach that assumes 100 percent conversion.

effluent for this Facility over the domestic water supply over the same period was about 228 mg/L.

ii. Although the Discharger has installed and sampled numerous groundwater monitoring wells in the Facility's vicinity, the resulting data suggests that they may not be reflective of either the Facility's impacts or background conditions. Absent data concretely demonstrating the true background water quality with respect to TDS, this Order implements a conservative TDS effluent limit of 530 mg/L.

67. **Coliform Organisms:** The most probable number (MPN) of coliform organisms in untreated domestic wastewater is typically 10^7 to 10^8 per 100 mL, and in secondary-treated wastewater, an MPN of 10^5 to 10^6 organisms per 100 mL. (USEPA, Design Manual: Municipal Wastewater Disinfection, EPA/625/1-86/021, Oct. 1986.). Given the depth to groundwater, it is not likely that a significant number of pathogen-indicator bacteria organisms will reach groundwater (due to significant attenuation and removal in the soils in the vadose zone). Although this Order does not establish an effluent limit for bacteria, the attached Monitoring and Reporting Program (Attachment A) requires the Discharger to monitor groundwater wells for total coliform and E. coli on a quarterly basis.

a. **Chloride and Sulfate:** WDRs Order 00-008 contained annual effluent limitations of 70 mg/L for chloride and 70 mg/L for sulfate. The Discharger's monitoring data indicates an increase in chloride and sulfate concentrations in the effluent has occurred over the past 20 years. Chloride and sulfate are present in the water supply, and one of the causes for the increased concentrations of these constituents may be water conservation measures in the community that have significantly reduced influent flow to the Facility. The Discharger's monitoring from 2012-2017 found maximum chloride concentrations of 140 mg/L and maximum sulfate concentrations of 82 mg/L. The Discharger's monitoring from 2018-2023 found maximum chloride concentrations of 290 mg/L and maximum sulfate concentrations of 400 mg/L. 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. Order R7-2018-0001 replaced the individual effluent limitations for chloride and sulfate with an interim TDS effluent limitation. The TDS investigation, described above, was 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.

68. The Discharger's wastewater treatment system represents the best practicable treatment and control (BPTC) of the wastewater generated at the Facility. Moreover, the discharge has been and will continue to be confined to a reasonable area (leach field) and is not anticipated to result in a condition of pollution or nuisance.

69. The discharge of wastewater from the Facility, as permitted herein, reflects best practicable treatment or control (BPTC) for the treatment technology currently in use at the Facility (activated sludge for secondary treatment and tertiary treatment for recycled water use). The controls assure the discharge does not create a condition of pollution or nuisance, and that water quality will be maintained, which is consistent with the policy. The Facility incorporates:

    a. Technology for secondary and tertiary treated domestic wastewater;

    b. Solids handling facilities;

    c. An operation and maintenance manual;

    d. A network of groundwater monitoring wells;

    e. Staffing to assure 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.

70. This Order also establishes a groundwater monitoring program to ensure compliance with the receiving groundwater limitations of this Order and determine whether additional or revised effluent limitations are necessary to protect water quality.

71. Degradation of groundwater by some of the typical waste constituents associated with discharges from a regional utility treating municipal 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 regional utility service for the relevant municipalities far exceed any benefits derived from reliance on numerous, concentrated individual wastewater systems, and the impact on water quality will be substantially less. The economic prosperity of

valley 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.

72. Notwithstanding implementation of BPTC (see above), a limited degree of groundwater quality degradation will occur as a result of the Facility's operation—specifically in terms of nitrate/nitrite and TDS (and possibly total coliform). However, such degradation nevertheless is consistent with the maximum benefit to the people of the state of California. The Facility supports the economic prosperity of the community by the employment of full-time and part-time personnel. 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 under this Order.

73. Based on the foregoing considerations, the wastewater discharges authorized under this Order are consistent with the Antidegradation Policy.

Stormwater

74. 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. §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 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.

75. On July 1, 2015, the State Water Board adopted Water Quality Order 2014-0057-DWQ (National Pollutant Discharge Elimination System Permit No. CAS000001), *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial General Permit). 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 WOTUS.[11] This Order makes no determination as to the Discharger's need for enrollment under the Industrial General Permit.

76. This Order does not authorize discharges of stormwater to the WOTUS.

Additional Water Quality Considerations

77. This Order, which prescribes WDRs in accordance with the Basin Plan, for wastewater that does not need to be managed as "hazardous waste," is exempt from the prescriptive requirements of Title 27, section 20005 et seq. (Cal. Code Regs., tit. 27, § 20090.)

78. Water Code section 106.3, subdivision (a) provides that it is "the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." Although subdivision (a) does not apply directly to the prescribing of WDRs (see Wat. Code, § 106.3, subd. (b)), this Order nevertheless furthers the stated policy by requiring that the receiving groundwater comply with WQOs protective of MUN beneficial uses.

79. For purposes of Water Code section 13149.2, subdivision (d), although this Order incorporates a time schedule that allows the Discharger time to come into compliance with WQOs, the Facility's discharges are not anticipated to impact

[11] USEPA regulations for stormwater discharges were promulgated 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 WOTUS to obtain NPDES permits and to require control of such pollutant discharges using BAT and BCT to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.

any disadvantaged[12] or tribal communities.[13] Accordingly, no additional findings are necessary under section 13149.2.

Water Recycling Regulatory Considerations

80. The Discharger's application of recycled water is separately regulated under the State Water Board's 2022 general order. (See Finding 1.b.)

California Environmental Quality Act

81. The adoption of this Order, which prescribes WDRs for an "existing facility" with no substantial expansions in uses, is categorically exempt from the procedural requirements of the California Environmental Quality Act, Public Resources Code section 21000 et seq. (Cal. Code Regs., tit. 14, 15301.)

Monitoring and Reporting Requirements

82. This Order is also issued pursuant to Water Code section 13267, subdivision (b)(1), which provides that the Regional Water Board may require that persons discharging waste within the region "shall furnish, under penalty of perjury, technical or monitoring program reports," provided that the discharger's burdens of compliance, including costs, is reasonable relative to the need for the submittals and the benefits to be obtained.

83. The various notifications, technical reports and monitoring program reports required under this Order, including those contained within the Monitoring and Reporting Program (MRP) in **Attachment A**, are necessary to ensure compliance with the WDRs.

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[12] For the purposes of this requirement, a "disadvantaged community" is defined as a "community in which the median household income is less than 80 percent of the statewide annual median household income level." (Wat. Code, § 13149.2, subd. (f)(1).)

[13] For the purposes of this requirement, a "tribal community" is defined as a "community within a federally recognized California Native American tribe or nonfederally recognized Native American tribe on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004." (Wat. Code, § 13149.2, subd. (f)(2).)

84. In accordance with section 13267, the burdens of monitoring and reporting imposed on the Discharger under this Order and the separately adopted MRP, are reasonable relative to the need for compliance described above.

85. The Executive Officer may issue a Revised MRP as a standalone order, pursuant to her delegated authority under Water Code section 13223 and Regional Water Board Resolution R7-2022-0036. Upon issuance, the Revised MRP shall supersede the provisions of Attachment A.

Scope of Order

86. Nothing in this Order should be construed as preempting or superseding otherwise applicable regulatory requirements issued by local, state, or federal agencies.

Public Participation

87. In developing these WDRs, Colorado River Basin Water Board staff have complied with Water Code section 189.7, subdivision (a)(1), which requires "equitable, culturally relevant community outreach to promote meaningful civil engagement from potentially impacted communities of proposed discharges of waste that may have disproportionate impacts on water quality in disadvantaged communities or tribal communities…."

88. The Dischargers and other interested public agencies and persons were notified of the Board's intent to prescribe the WDRs in this Order and provided an opportunity to submit their written views and recommendations at a public hearing. (Wat. Code, § 13167.5.)

89. The Regional Water Board, in a public meeting, heard and considered all timely comments pertaining to this discharge.

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267, that R7-2018-0001 is rescinded (except for enforcement purposes), and that the Discharger shall comply with the following requirements.

A. Prohibitions

1. Waste classified as “hazardous,” as defined in Title 27, section 20164, or constituting “designated waste,” as defined in Water Code section 13173, shall not be discharged at the Facility.

2. The storage, treatment, or disposal of waste at the Facility shall not cause conditions constituting a “contamination,” “pollution,” or “nuisance,” as defined per subdivisions (k), (l), and (m) of Water Code section 13050.

3. Wastewater shall not be permitted to bypass the treatment units relied upon for compliance with this Order, or otherwise be permitted to overflow from its designated containment structures.

4. Waste shall not be discharged at a location other than the Designated Disposal Area, or in a manner other than as identified in the findings.

5. Wastewater shall not be discharged from the Facility into surface waters or surface drainage courses.

6. The discharge of wastewater to land not controlled by the Discharger, or not authorized for such use, is prohibited.

7. Objectionable odors, originating from the Facility and associated with the generation, treatment, storage or disposal of waste, shall not be perceivable beyond the boundaries of the Facility or areas not owned/controlled by the Discharger.

B. Discharge Specifications

1. All systems and equipment shall be operated to optimize discharge quality.

    1. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

2. Public contact with wastewater at the Facility shall be prevented through such means as fences, signs, or acceptable alternatives.

3. The DO content in the upper one foot of any wastewater treatment or storage pond shall not be less than 1.0 mg/L for three consecutive

sampling events. Notwithstanding the DO monitoring frequency specified in the MRP, if the DO in any single pond is below 1.0 mg/L for any single sampling event, the Discharger shall implement daily DO monitoring of that pond until the minimum DO concentration is achieved for at least three consecutive days. If the DO in any single pond is below 1.0 mg/L for three consecutive days, the Discharger shall report the findings to the Regional Water Board. The written notification shall include a specific plan to resolve the low DO results within 30 days of the first date of violation.

4. The Discharger shall design, construct, operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. The operating freeboard in any pond shall never be less than two feet (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in each pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.

5. Wastewater treatment, storage, and disposal ponds or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring compliance with all requirements of this Order. 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.

6. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. Specifically:

    a. An erosion control program shall be implemented 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.

    d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.

7. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.

8. Wastewater contained in any unlined pond shall not have a pH less than 6.0 or greater than 9.0.

9. The Discharger shall monitor sludge accumulation in the wastewater treatment/storage ponds at least every five years beginning in 2025 and shall periodically remove sludge as necessary to maintain adequate storage capacity. Specifically, if the estimated volume of sludge in the reservoir exceeds five percent of the permitted reservoir capacity, the Discharger shall complete sludge cleanout within 12 months after the date of the estimate.

10. The percolation ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration during the non-irrigation season. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

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

12. The Facility shall be operated and maintained to comply with BPTC.

C. Effluent Limitations

1. Treated wastewater from the Facility shall comply with the effluent limitations specified in **Table 8**, which shall be determined at the designated point of discharge:

Table 8. Effluent Limitations.

Parameter	Units	Limitation	Determination
Average Daily Influent Flow	gpd	18 MGD	Calculated based for each calendar month.

Parameter	Units	Limitation	Determination
Average Daily Tertiary Effluent Flow	gpd	15 MGD	Calculated based for each calendar month.
pH	Std. Units	≥ 6.00 ≤ 9.00	--
Total Suspended Solids	mg/L	30 20	7-Day Average 30-Day Average
Total Settleable Solids	ml/L	0.5 0.3	7-Day Average 30-Day Average
Total Nitrogen	mg/L	10 [14]	30-Day Rolling Average
BOD5	mg/L	30 20	7-Day Average 30-Day Average
TDS	mg/L	530	Annual (4th Quarter) Average

2. Disinfected Tertiary recycled water directly reused 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

[14] Except as provided in a Time Schedule approved by the Executive Officer (see § G.1.d), this effluent limit shall be effective within five years of the adoption of this Order, and in no case later than 10 years from the adoption date.

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. 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 5 minutes shall be maintained.

D. Groundwater Limitations

Discharge of wastewater from the Facility shall not cause groundwater to:

1. Exceed applicable WQOs;

2. Acquire taste, odor, toxicity, or color that create nuisance conditions;

3. Impair beneficial uses; or

4. Contain constituents or organisms in excess of applicable Title 22 MCLs (see, e.g., Title 22, § 64426.1 [bacteriological constituents], § 64431 [inorganics], § 64444 [organics], § 64678 [lead, copper]).

E. Solids Disposal Requirements[15]

1. Sludge and Solid Waste shall be removed from screens, sumps, ponds, and clarifiers as needed to ensure optimal plant operation.

2. Onsite handling and storage of Residual Sludge, Solid Waste, and Biosolids shall be temporary (6 months or less); and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the Groundwater Limitations of this Order.

3. Residual sludge, biosolids, and solid waste shall be disposed to an active Municipal Solid Waste Landfill permitted under California Code of Regulations, title 27, section 20000 et seq.

F. Monitoring, Reporting and Notification Requirements

1. **Compliance with Monitoring and Reporting Program.** The Discharger shall comply with the MRP in **Attachment A**, or in the event of a subsequently issued Revised MRP, the provisions of that Revised MRP, which shall supersede the provisions of Attachment A as the operative MRP.

2. **Noncompliance Notifications.** 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 (OES) within 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.

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[15] For the purposes of this section: "sludge" means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes; "solid waste" includes grit and screenings generated during preliminary treatment at the Facility; "residual sludge" means sludge that will not be subject to further treatment at the Facility; and "biosolids" refers to sludge that has been treated and tested and shown to be capable of being beneficially used as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities pursuant to federal and state regulations.

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. A final certified report must be submitted through online GeoTracker. Additional information may be added to the certified report, in the form of an attachment, at any time.

All other forms of noncompliance shall be reported in the next scheduled SMR, or earlier if requested by the Executive Officer.

3. **Capacity Notification.** The Discharger shall provide a report to the Regional 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.

4. **Supplemental Monitoring Activity.** The results of any monitoring activity conducted in addition to those activities already required under the MRP (or conducted on a more frequent basis) shall be reported in the next regularly submitted Self-Monitoring Report required under the MRP.

5. **General Monitoring Requirements.**

   a. **Testing and Analytical Methods.** The collection, preservation, and holding times of all samples shall be performed in accordance with USEPA-approved procedures. Except as otherwise specified in the MRP or as approved in writing by the Executive Officer, all analyses shall be conducted in accordance with the latest editions of either of 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).

   b. **Laboratory Certification.** Except as otherwise approved in writing by the Executive Officer, all analyses shall be conducted by a laboratory certified by the State Water Board, DDW's Environmental Laboratory Accreditation Program.

c. **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 in writing by Regional Water Board staff.

d. **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.

e. **Field Test Instruments.** Field test instruments (such as those used to test pH, DO, and electrical conductivity) may be used provided:

i. The user is trained in proper use and maintenance of the instruments;

ii. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;

iii. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and

iv. Field calibration reports are submitted.

6. **General Reporting Requirements.** The Discharger shall comply with the following General Reporting Requirements:

a. **Electronic Submittal.** All materials shall be submitted electronically via the GeoTracker Database (https://geotracker.waterboards.ca.gov).[16] After uploading, Dischargers shall notify Regional Water Board staff via email to RB7_WDRs_paperless@waterboards.ca.gov, or another address specified by staff. The following information shall be included in the body of the email:

Attention:	Land Disposal Unit
Report Title:	[Report Title]
Upload ID:	[Number]
Facility:	Water Reclamation Plant 10
County:	Riverside County
GeoTracker ID:	WDR100029854

b. **Qualified Professionals.** All technical reports[17] submitted under this Order shall be prepared by, or under the direct supervision of, a competent licensed civil engineer or engineering geologist (Qualified Professional). The submittal shall be signed and stamped by the Qualified Professional and contain a brief summary of the Qualified Professional's qualifications.

c. **Data Presentation and Formatting.** In reporting monitoring data, the Discharger shall arrange data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. Additionally, data shall be summarized in a manner that clearly illustrates compliance/noncompliance.

d. **Non-Detections / Reporting Limits.** Unless reporting limits are specified in the same table, non-detections and sub-RL concentrations shall be reported as "< [limit]" (e.g., "< 5 µg/L").

e. **Units.** Absent specific justification, all monitoring data shall be reported in the units specified herein.

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[16] Large files must be split into appropriately labelled, manageable file sizes and uploaded into GeoTracker.

[17] A "technical report" is a one incorporating the application of scientific or engineering principles.

f. **Certification.** All submittals under this Order shall be accompanied by a transmittal containing the following certification that is signed by either the Required Signatory or their Authorized Representative:

> I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments 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.

i. The Required Signatory shall be the individual identified in **Table 9** below.

ii. To act as an Authorized Representative for a Required Signatory (Table 9), an individual must be identified[18] and duly authorized in writing by the Required Signatory; this written authorization shall be provided to the Board beforehand, or concurrently with the first submittal signed by the Authorized Representative.

[18] This identification may be in reference to the Authorized Representative's title or position, provided it is one that customarily has the responsibility of supervising the Facility's overall operation (e.g., facility manager, superintendent).

Table 9. Required Signatories for Submittals.

Category of Discharger	Required Signatory
Corporations	Senior Vice President or Equivalent Principal Executive
Limited Liability Companies (LLCs)	Manager
General Partnerships and Limited Partnerships (LPs)	General Partner
Sole Proprietorships	Sole Proprietor
Public Agencies	Principal Executive or Ranking Elected/Appointed Official

G. Other Provisions

1. **Total Nitrogen Effluent Limit Compliance Time Schedule.** Within six months of adoption of this Order, the Discharger shall submit, for Executive Officer approval, a Time Schedule for compliance with a 10 mg/L effluent limit for Total Nitrogen, within 10 years of the adoption of this Order.

    a. The Time Schedule shall include proposed dates incorporating the following actions:

        i. Submittal of a technical report identifying and assessing treatment options for compliance with the effluent limit within 10 years;

        ii. Submittal of a technical report on the Discharger's selection of a treatment option, with designs included;

        iii. Notification that construction/installation activities have commenced;

        iv. Submittal of a technical report demonstrating that the Facility upgrades have been completed in accordance with the selected option (including the submitted designs);

v. Startup of any new components at the Facility; and

vi. Full compliance with the 10 mg/L effluent limitation.

b. Upon Executive Officer written approval of the Time Schedule,[19] the approved deadlines for required actions shall be incorporated and made enforceable as part of this Order.

c. Upon adoption of this Order, the Discharger shall submit quarterly progress reports to the Executive Officer until full compliance with the effluent limit is achieved.

d. Although the Executive Officer may grant extensions for required actions under the Time Schedule, in no case shall the full compliance date extend beyond 10 years from the date of this Order's adoption.

2. **Facility Inspection.** Dischargers and their agents shall permit Board staff to inspect the Enrolled Facility during business to verify compliance with WDRs. Failure to consent to a reasonable request for inspection constitutes a violation of this Order.

3. **Facility 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 Colorado River Basin Water Board on request.

4. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a

[19] The Executive Officer may approve the Discharger's time schedule with any changes that are deemed necessary and appropriate to achieve compliance with WQOs in the most expeditious manner possible. (See Cal. Code Regs., tit. 23, § 2231, subd. (d).)

reasonable likelihood of adversely affecting human health or the environment.

5. **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 Colorado River Basin Water Board, and if required by the Colorado River Basin Water Board, obtain revised requirements before any modifications are implemented.

6. **Operational Personnel.** The Facility shall be supervised and operated by persons possessing the necessary expertise in the operation and maintenance of the wastewater treatment system.

7. **Changes in Ownership.** Prior to any change in ownership of this operation, the Discharger shall notify the Executive Officer in writing at least 30 days in advance. The notice shall include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement shall 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 Board may require modification or revocation and reissuance of this Order to formally substitute the permitted parties, and to incorporate other requirements as appropriate.

8. **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

9. **Bypass.** 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:

    a. 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 due to disruption of business activities; and

b. 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

c. 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.

10. **Backup Generators**. Standby, power generating facilities shall be available to operate the wastewater treatment equipment during a commercial power failure.

LIST OF ATTACHMENTS

Attachment A—Monitoring and Reporting Program
Attachment B—Maps and Facility Diagrams

ENFORCEMENT

If, in the opinion of the Executive Officer, the Dischargers fail to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Regional Water Board reserves the right to take any enforcement actions authorized by law.

ADMINISTRATIVE REVIEW

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. To be timely, the petition must be received by the State Water Board by 5:00 pm 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 pm on the next business day. The law and regulations applicable to filing petitions are available on the State Water Board website (http://www.waterboards.ca.gov/public_notices/petitions/water_quality). Copies will also be provided upon request.

ATTACHMENT A—MONITORING AND REPORTING PROGRAM

A. General Requirements

1. 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 Regional Water Board staff.

2. Field test instruments (e.g., those testing pH, DO, 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.

3. 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 Regional Water Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Water Board DDW. 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.

4. 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 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.

5. 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.

6. 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.

7. 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 MRP, and records of all data used to complete the application for this MRP, 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. Date, exact place, and time of sampling/measurements.

        ii. Individual(s) who performed the sampling/measurements.

        iii. Date(s) analyses were performed.

        iv. Individual(s) who performed the analyses.

        v. Analytical techniques or methods used; and

        vi. Results of such analyses.

8. 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 Regional Water Board indicating that there has been no activity during the required reporting period.

B. Monitoring Requirements:

1. The Facility's influent shall be monitored in accordance with **MRP Table 1**.

2. The Facility's Secondary-Treated Effluent shall be monitored in accordance with **MRP Table 2**.

3. The Facility's Tertiary-Treated Effluent shall be monitored in accordance with **MRP Table 3**. Additionally, The Discharger shall provide the following information regarding off-site use of disinfected tertiary recycled water:

    a. Name and location of the golf courses/landscape areas irrigated.

    b. Quantity and quality of the recycled water provided to individual customers.

    c. The discharger shall immediately notify the Regional Water Board's Executive Officer of any changes regarding the location and quantity of recycled water provided to individual customers.

4. The Discharger shall monitor each of the wastewater treatment and percolation ponds in accordance with **MRP Table 4**.

5. The Discharger shall monitor the domestic water supply in accordance with **MRP Table 5**.

6. The Discharger shall monitor groundwater wells MW-1, MW-2, and MW-3, MW-4, MW-5, MW-6, MW-7 and MW-8, as identified in **Attachment B**, **Figure 2** of the WDRs Order, in accordance with **MRP Table 6**.

7. Sludge Monitoring

    a. Sludge that is generated at the Facility shall be sampled and analyzed in accordance with **MRP Table 7**. The Discharger shall report annually (4th Quarter) on the quantity, location and method of disposal of all sludge and similar solid materials being produced at the Facility. If no sludge is disposed of during the year being reported, the Discharger shall state "No Sludge Removed" in the annual (4th Quarter) monitoring report.

    b. 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.

8. To assess impacts from the Discharger's two adjacent groundwater recharge activities (i.e., Whitewater River GRP and Palm Desert GRP), the Discharger shall monitor each GRP in accordance with **MRP Table 8**.

MRP Table 1. Influent Monitoring Schedule

Constituent	Units	Sample	Monitoring Freq.	Reporting Freq.
Total Flow	MGD	Flow Measurement	Daily	Quarterly
BOD5	mg/L	24-Hour Composite	Weekly	Quarterly
Total Suspended Solids	mg/L	24-Hour Composite	Weekly	Quarterly

MRP Table 2. Secondary Effluent Monitoring Schedule

Constituent	Units	Type	Monitoring Freq	Reporting Freq
BOD5	mg/L	24-Hour Composite	Twice Weekly	Quarterly
pH	Std. Units	Grab	Daily	Quarterly
Total Suspended Solids	mg/L	24-Hour Composite	Twice Weekly	Quarterly
Settleable Matter	ml/L	Grap at Peak Flow	Twice Weekly	Quarterly
TDS	mg/L	Grab	Monthly	Quarterly

Constituent	Units	Type	Monitoring Freq	Reporting Freq
Nitrate as N	mg/L	Grab	Monthly	Quarterly
Nitrite as N	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
VOCs	µg/L	Grab	Quarterly	Quarterly
Major Anions (Cl, SO4, HCO3, CO3)	mg/L	Grab	Annually (4th Quarter)	Annually (4th Quarter)
Major Cations (Na, K, Mg, Ca)	mg/L	Grab	Annually (4th Quarter)	Annually (4th Quarter)

MRP Table 3. Tertiary Effluent Monitoring Schedule

Constituent	Units	Type	Monitoring Freq	Reporting Freq
Volume of Wastewater used for Irrigation at each Location	MGD	Flow Measurement	Daily	Quarterly
Total Coliform	MPN/100 mL	Grab	Daily	Quarterly
Turbidity	NTU	Continuous	Meter Reading	Quarterly
Chlorine Residual	mg/L	Continuous	Meter Reading	Quarterly
Chlorine Contact Time	mg*min/L	Calculation	Daily	Quarterly
Priority Pollutants	mg/L	Grab	Annually (4th Quarter)	Annually (4th Quarter)

Constituent	Units	Type	Monitoring Freq	Reporting Freq
Major Anions (Cl, SO4, HCO3, CO3)	mg/L	Grab	Annually (4th Quarter)	Annually (4th Quarter)
Major Cations (Na, K, Mg, Ca)	mg/L	Grab	Annually (4th Quarter)	Annually (4th Quarter)

MRP Table 4. Pond Monitoring Schedule[20]

Constituent	Units	Type	Monitoring Freq	Reporting Freq
pH	Std. Units	Grab	Weekly	Quarterly
DO	mg/L	Grab	Weekly	Quarterly
Freeboard	0.1 feet	Observation	Monthly	Quarterly
Berm Condition	--	Observation	Monthly	Quarterly
Odors	--	Observation	Monthly	Quarterly

[20] If there is little or no water in the percolation ponds, the monitoring report shall state "No standing water in ponds" in place of reporting dissolved pH and DO concentration.

MRP Table 5. Community Water Supply Monitoring[21]

Constituent	Units	Type of Sample	Monitoring Freq	Reporting Freq
pH	Std. Units	Grab	Monthly	Quarterly
TDS	mg/L	Grab	Monthly	Quarterly
Nitrate	mg/L	Grab	Monthly	Quarterly
Major Anions[22] (Cl, SO4, HCO3, CO3)	mg/L	Grab	Annually (4th Quarter)	Annually (4th Quarter)
Major Cations (Na, K, Mg, Ca)	mg/L	Grab	Annually (4th Quarter)	Annually (4th Quarter)

MRP Table 6. Groundwater Monitoring

Constituent	Units	Type of Sample	Monitoring Freq	Reporting Freq
TDS	mg/L	Grab	Quarterly	Quarterly
Nitrate as N	mg/L	Grab	Quarterly	Quarterly
Nitrite as N	mg/L	Grab	Quarterly	Quarterly

[21] For the major ion analyses, these samples shall be obtained from multiple wells within the service area of the Facility to evaluate the range of concentrations found in the area, and from a potable water outlet (tap water) to represent blended concentrations.

[22] For the major ion analyses, these samples shall be obtained from multiple wells within the service area of the Facility to evaluate the range of concentrations found in the area, and from a potable water outlet (tap water) to represent blended concentrations.

Constituent	Units	Type of Sample	Monitoring Freq	Reporting Freq
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms	MPN/100mL	Grab	Quarterly	Quarterly
Major Anions (Cl, SO4, HCO3, CO3)	mg/L	Grab	Quarterly	Quarterly
Major Cations (Na, K, Mg, Ca)	mg/L	Grab	Quarterly	Quarterly
E. Coli	MPN/100mL	Grab	Quarterly	Quarterly
VOCs	µg/L	Grab	Quarterly	Quarterly
Groundwater Elevation (MSL)	0.01 ft	Calculated	Quarterly	Quarterly
Depth to Groundwater (bgs)	0.01 ft	Measurement	Quarterly	Quarterly
Flow Gradient	Feet/Foot	Calculated	Quarterly	Quarterly
Flow Gradient	Degrees	Calculated	Quarterly	Quarterly

MRP Table 7. Sludge Monitoring.

Constituent	Units	Type	Monitoring Freq	Reporting Freq
Arsenic	mg/kg	Composite	Annually (4th Quarter)	Annually (4th Quarter)
Cadmium	mg/kg	Composite	Annually (4th Quarter)	Annually (4th Quarter)

Constituent	Units	Type	Monitoring Freq	Reporting Freq
Copper	mg/kg	Composite	Annually (4th Quarter)	Annually (4th Quarter)
Lead	mg/kg	Composite	Annually (4th Quarter)	Annually (4th Quarter)
Mercury	mg/kg	Composite	Annually (4th Quarter)	Annually (4th Quarter)
Molybdenum	mg/kg	Composite	Annually (4th Quarter)	Annually (4th Quarter)
Nickel	mg/kg	Composite	Annually (4th Quarter)	Annually (4th Quarter)
Selenium	mg/kg	Composite	Annually (4th Quarter)	Annually (4th Quarter)
Zinc	mg/kg	Composite	Annually (4th Quarter)	Annually (4th Quarter)
Fecal Coliform	MPN gram	Composite	Annually (4th Quarter)	Annually (4th Quarter)

MRP Table 8. Groundwater Recharge Project Monitoring

Parameter	Units	Type	Monitoring Freq	Reporting Freq
Volume Applied to Recharge Basins	Millions of Gallons	Measurement	Monthly	Quarterly
TDS	mg/L	Grab	Monthly	Quarterly

C. Reporting Requirements[23]

1. **Quarterly Reporting.** The Discharger shall submit Quarterly Self-Monitoring Reports (SMRs) that include the results of all monitoring activities conducted during the subject period. Daily, weekly, and monthly monitoring shall be included in the Quarterly Self-Monitoring Reports (SMRs). Quarterly SMRs shall be submitted by May 15th (1st Quarter covering January 1st through March 31st), August 15th (2nd Quarter covering April 1st through June 30th), November 30th (3rd Quarter covering July 1st to September 30th), and February 15th (4th Quarter covering October 1st through December 31st). Quarterly SMRs shall include, at a minimum, the following:

   a. Cover Letter containing**:**

      i. Summary of essential points in report.

      ii. Identification of any violations found since the last report was submitted, and actions taken or planned for correcting each violation[24].

   b. Maps depicting:

      i. Facility layout and the location of sampling points and monitoring wells.

      ii. Groundwater elevations in the monitoring wells, including the inferred direction of groundwater flow[25].

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[23] See WDRs Order for general reporting requirements applicable to all SMRs.

[24] 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.

[25] This map shall include all of the elevations obtained from monitoring wells located within a one-mile radius of the Facility boundary to which the Discharger has access.

c. **Summary of Monitoring Data** including:

i. **Tables** of the data collected. The tables shall include all the data collected, to date, at each monitoring point, organized in chronological order, with the oldest data in the top row and progressively newer data in rows below the top row. Each row shall be a separate date and each column shall be a separate parameter at a single location (or a single average, as appropriate). The tables shall be submitted in electronic (Excel or other tab delimited) format.

ii. **Graphs** depicting groundwater elevations through time, and TDS and nitrate concentrations through time, at each monitoring point, with the concentrations being the y-axis and time being the x-axis. Logarithmic scales can be used for values that vary by order of magnitude . Individual graphs can combine multiple locations and/or multiple chemicals if that allows the data to be compared more easily.

iii. **Piper (trilinear) diagrams** of the major anions and cations, with sodium in the lower right portion of the cation triangle and chloride in the lower left portion of the anion triangle. The Discharger can include additional figures, tables, and graphs if it improves the readability of the document.

d. **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.

The contour intervals on the groundwater elevation map shall be small enough to show areas of groundwater mounding, if present.

2. **Annually (4th Quarter) Reporting.** In addition to the contents described in section C.1, the 4th Quarter SMR (due Feb. 15th), shall also contain the following:

    a. **Industrial Pretreatment.** An affirmative statement concerning whether there is a need to establish an industrial pretreatment program.

    b. **Performance Evaluation.** An evaluation of the performance of the Facility, including a discussion of capacity and pretreatment issues (if necessary), infiltration and inflow rates, nuisance conditions, on-going constituent trend analysis, and a two-year forecast of anticipated flow increases.

    c. **Operation and Maintenance.** A discussion with the following:

        i. Documentation showing the calibration of flow meters and equipment as performed in a timely manner;

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

        iii. Operator certification status update including number of staff and grade certification; and

        iv. Modifications and updates to the Discharger's wastewater ordinance or rules and regulations.

ATTACHMENT B—MAPS AND FACILITY DIAGRAMS

Figure 1. Map with Facility Location.

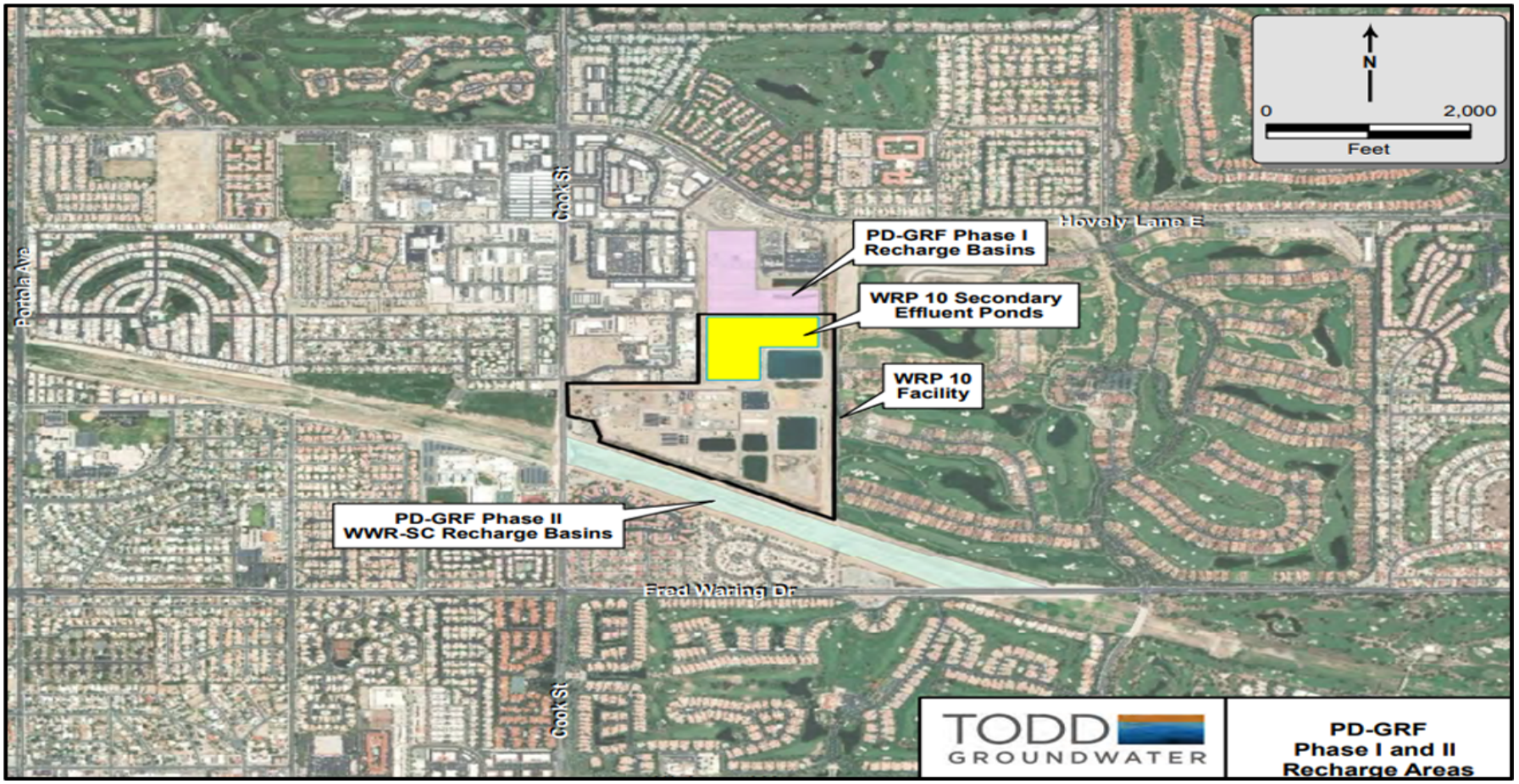
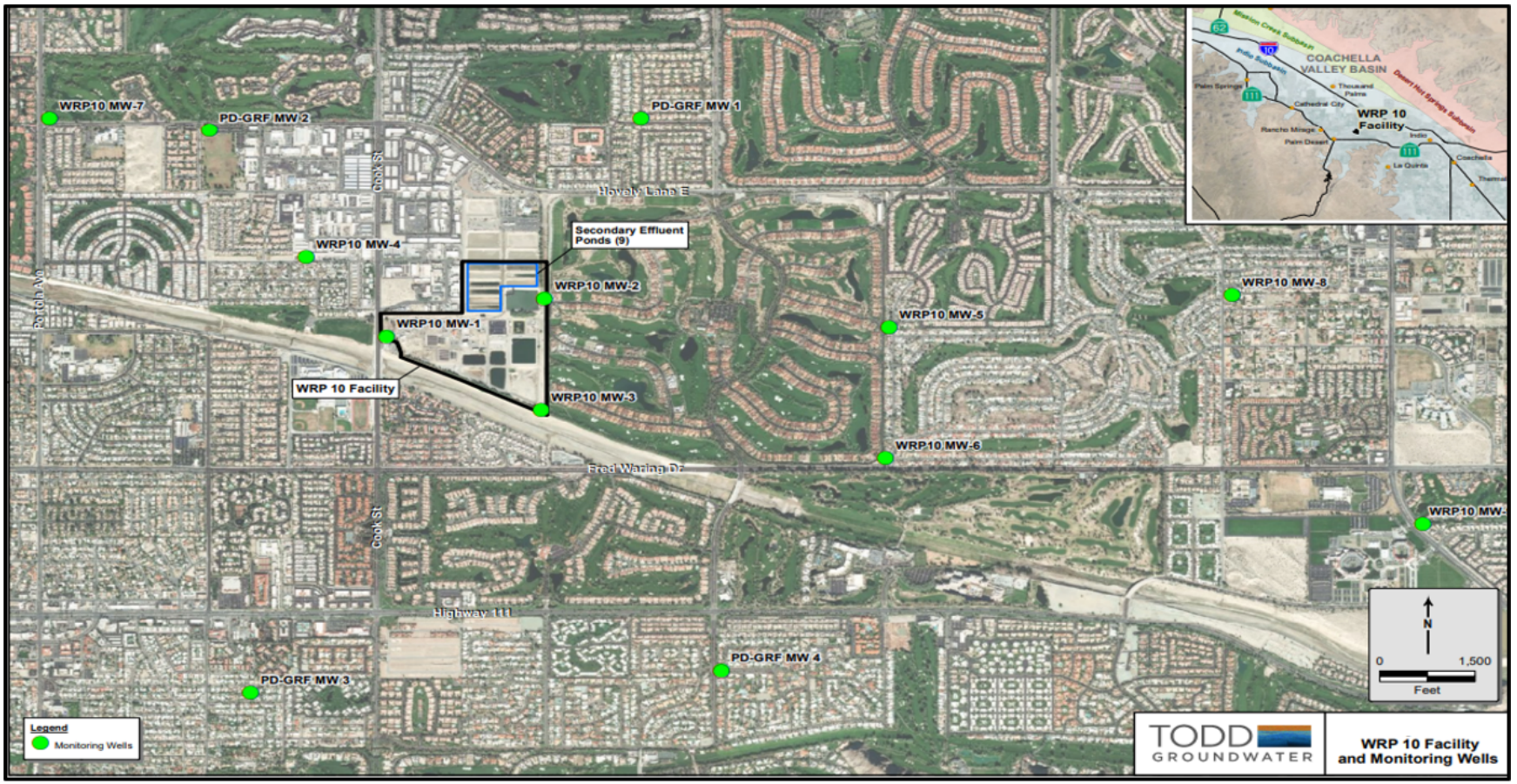
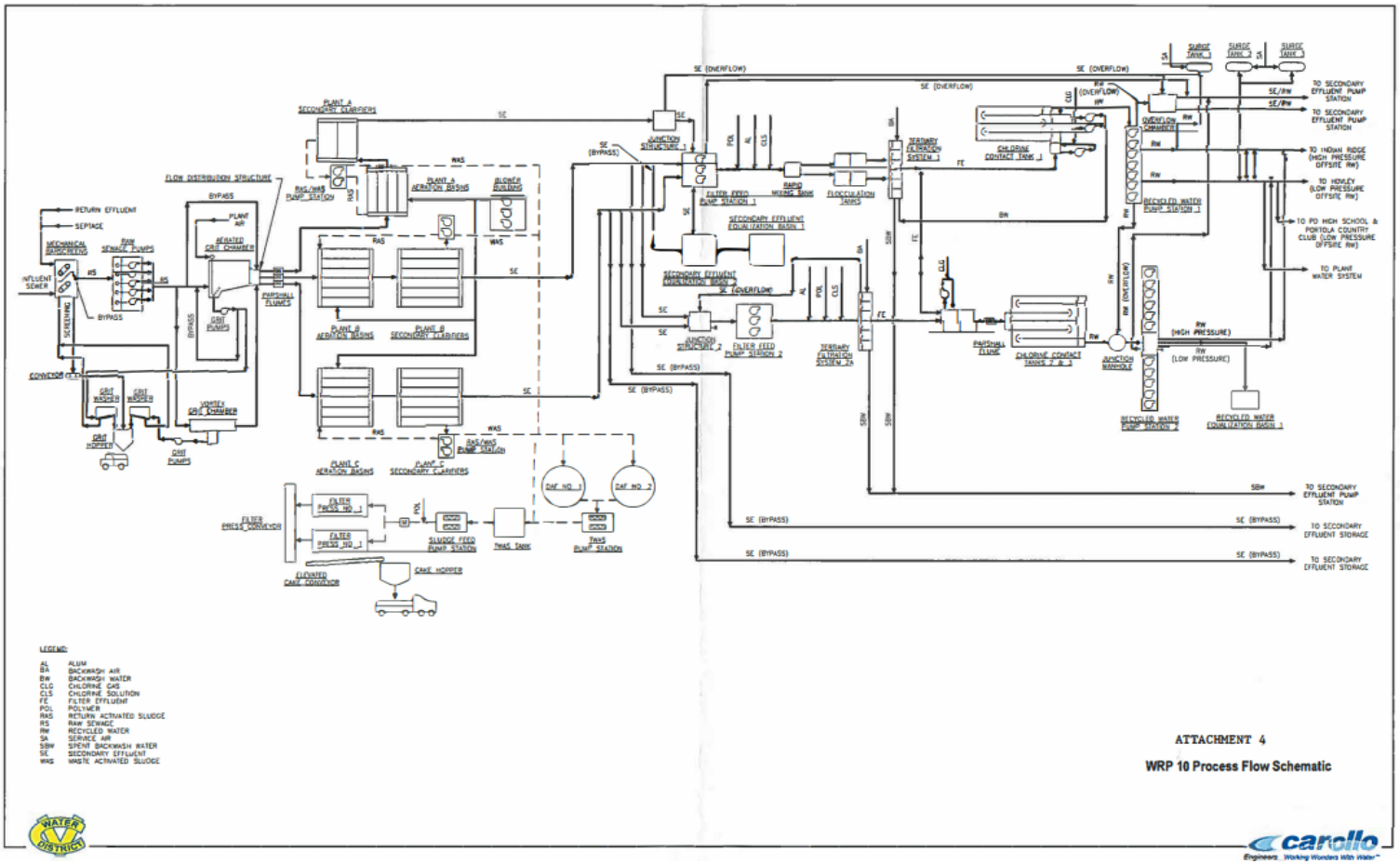


Figure 2. Monitoring Well Locations.



ATTACHMENT B—MAPS AND FACILITY DIAGRAMS

Figure 3. Process Flow Diagram



ATTACHMENT B—MAPS AND FACILITY DIAGRAMS

Figure 4. Facility Layout.