

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

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**ORDER R4-2023-0089
(FILE NO. 64-148)**

**WASTE DISCHARGE REQUIREMENTS
AND
WATER RECLAMATION REQUIREMENTS
FOR
VENTURA COUNTY WATERWORKS DISTRICT NO. 1
MOORPARK WATER RECLAMATION FACILITY**

The following Permittee is subject to Waste Discharge Requirements (WDRs) and Water Reclamation Requirements (WRRs) set forth in this Order:

Table 1A. Permittee Information

Discharger	Ventura County Waterworks District No. 1 (VCWD or Permittee)
Name of Facility	Moorpark Water Reclamation Facility (Moorpark WRF or Facility)
Facility Address	9550 Los Angeles Avenue, Moorpark, CA 93021 Ventura County

Table 1B. Administrative Information

This Order was Adopted and shall become effective on:	April 27, 2023
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I, Susana Arredondo, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on the date indicated above.

for Susana Arredondo, Executive Officer

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The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) finds the following:

1. BACKGROUND INFORMATION

- 1.1. Ventura County Waterworks District No. 1 (VCWD or Permittee) owns and operates the Moorpark Water Reclamation Facility (Moorpark WRF), formerly referred to as the Moorpark Wastewater Treatment Plant, located at 9550 Los Angeles Avenue, Moorpark, California (Attachment B.1), and maintains its treatment processes.
- 1.2. Domestic, industrial, and commercial municipal wastewater generated from the community of Moorpark is treated at the Moorpark WRF. During normal operation, VCWD may discharge up to 2 million gallons per day (MGD) of undisinfectated secondary-treated effluent from the Moorpark WRF to percolation ponds, under Waste Discharge Requirements contained in Order No. 00-048, adopted by the Los Angeles Water Board on April 13, 2000. The percolation ponds are solely a means of disposal and they are not considered impoundments, nor are they part of a groundwater replenishment project. As such, section 13263 of the California Water Code grants the Los Angeles Water Board the authority to regulate the discharge to the ponds. Attachment B.2 shows an aerial view of the Moorpark WRF's thirty percolation ponds. Up to 1.5 MGD of disinfected tertiary recycled water is beneficially reused for crop and landscape irrigation, under separate Water Reclamation Requirements (WRRs) contained in Order No. R4-2002-0028, adopted on January 24, 2002. The discharge of tertiary-treated effluent to Arroyo Las Posas under a separate National Pollutant Discharge Elimination System (NPDES) permit, No. CA0063274, Order No. R4-2003-0151, has not occurred since April 2002, over twenty years ago. The NPDES permit is no longer necessary because the Moorpark WRF does not discharge to a water of the United States due to sufficient holding capacity in its ponds and because VCWD has increased the production of disinfected tertiary recycled water used for irrigation purposes.

2. PURPOSE OF ORDER

- 2.1. On November 23, 2020, the Los Angeles Water Board requested that VCWD submit a Report of Waste Discharge (ROWD) for the renewal of the Waste Discharge Requirements (WDRs) that regulate the discharge of effluent from the Moorpark WRF to percolation ponds, and so that the pretreatment requirements could be incorporated into the WDRs. On December 14, 2020, VCWD requested a 3-week extension of the deadline to submit an ROWD. On December 16, 2020, the Los Angeles Water Board approved the request and extended the due date for the ROWD submittal from December 21, 2020 to January 11, 2021. On January 13, 2021, VCWD submitted a process flow diagram and a facility map. On January 15, 2021, VCWD submitted a copy of the 2001 Environmental Impact Report for the 5 MGD Moorpark WRF upgrade. On January 27, 2021, VCWD submitted the ROWD and applied for revision of its WDRs. On February 4, 2021, VCWD submitted supplemental water quality data. On February 6, 2021, the Los Angeles Water Board approved VCWD's Pretreatment Program. On March 17, 2021, the ROWD was deemed incomplete. Supplemental information was received on April 1, 2021. The Los Angeles Water Board issued a second notice of incomplete ROWD on November 8, 2021. VCWD submitted supplemental information on November 24, 2021 and December 2, 2021. The Los Angeles Water Board issued a

third notice of incomplete ROWD on December 31, 2021. Supplemental information was received on January 31, 2022. The ROWD was deemed complete on February 28, 2022.

- 2.2. On August 8, 2022, VCWD staff emailed Los Angeles Water Board staff confirming that they wanted the WDRs and WRRs combined into one Order.
- 2.3. Currently, the facility is regulated by an NPDES permit, WRRs, and WDRs. The purpose of this Order is to renew WDRs for the Moorpark WRF to require disinfection prior to the discharge of secondary-treated effluent to the percolation ponds, to combine the WDRs and the WRRs into one Order, and to increase the disinfected tertiary recycled water production capacity to 3.0 MGD. This Order also includes updates to the wastewater treatment process, effluent and groundwater limitations based on updated wastewater data, incorporation of pretreatment program requirements, incorporation of a time schedule and interim compliance points for total coliform and an interim limit for total trihalomethanes, and inclusion of a revised groundwater monitoring program to continue to assess the impact of the discharge on the groundwater basin, to ensure protection of the designated beneficial uses set forth in the *Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). Separately, the Board will consider items for the termination of the NPDES permit and historic WRRs, so that this Order will be the sole permit governing the facility.

3. FACILITY AND TREATMENT PROCESS DESCRIPTION

- 3.1. The Moorpark WRF (Attachment B.1) is located along California State Route 118, just west of the Moorpark city limits, south of Los Angeles Avenue between Somis Road and Hitch Boulevard (Latitude 34°16'00", Longitude 118°56'00"), within the Federal Emergency Management Agency's (FEMA's) flood zone with a 1-percent chance of a flood occurring in a 24-hour period in any given year. The secondary treatment system consists of gravity settling. Waste sludge is dewatered using a belt press, stockpiled onsite, and hauled away to a licensed facility for composting.
- 3.2. The Moorpark WRF currently discharges up to 5.0 MGD of undisinfected secondary-treated effluent to an array of 30 onsite unlined percolation/evaporation ponds, located in and around Section 12, Township 2N, Range 20W, San Bernardino Base & Meridian (Attachment C.3). During the summer, five to seven ponds are used to discharge an average volume of 1.03 million gallons of undisinfected secondary-treated effluent per day. In the winter, eight to ten ponds are used to discharge an average volume of 2.2 million gallons of undisinfected secondary-treated effluent per day, due to a lower demand in recycled water and lower evapotranspiration rates. Historically, the secondary-treated effluent discharged directly to the percolation ponds has not been disinfected and has not been a requirement in the historical WDRs. Attachment C.1 depicts the current Process Flow Schematic of the Moorpark WRF. Undisinfected secondary-treated effluent is either discharged to percolation ponds or it can receive additional treatment (filtration and disinfection) so that it may be recycled or discharged to surface waters. Excess disinfected tertiary recycled water may be discharged to ponds one through seven, located at the east side of the plant, when the demand for recycled water use is low. At the present time, that excess disinfected tertiary recycled water cannot be discharged to ponds eight through thirty because there is no

- infrastructure to convey the disinfected tertiary recycled water to the ponds located at the west side of the plant.
- 3.3. Historically, during extreme wet-weather events, when the flow exceeded the percolation capacity and the demand for reclamation was low, the effluent was discharged to Arroyo Las Posas under an NPDES permit. Unlike the effluent discharged to the percolation ponds, the effluent discharged to Arroyo Las Posas was filtered and disinfected (using sodium hypochlorite) prior to discharge. VCWD requested termination of the NPDES permit for the Moorpark WRF because it has not discharged to Arroyo Las Posas since April 2002, and VCWD plans to eliminate the surface water discharge by maximizing recycled water use and discharging the remaining treated effluent to its percolation ponds. The Los Angeles Water Board concurs that there is no ongoing threat of discharge to Arroyo Las Posas that would require an NPDES permit. On November 17, 2022, staff from the Los Angeles Water Board inspected the Moorpark WRF and confirmed that the former outfall to Arroyo Las Posas was plugged with concrete and that no discharge was taking place or could take place in the future.
 - 3.4. Under existing WRRs (Order No. R4-2002-0028), up to 1.5 MGD of disinfected tertiary recycled water is stored in concrete-lined basins, distributed via the recycled water pump station, and is used for landscape irrigation and other Title 22 non-potable recycled water applications. On occasion, when the actual recycled water demand is less than the projected recycled water demand, excess disinfected tertiary recycled water is conveyed to soft-bottom percolation ponds 1 through 7 for infiltration (regulated under existing WDRs Order No. 00-048). On October 18, 2021, the State Water Resources Control Board's (State Water Board's) Division of Drinking Water (DDW) approved the Title 22 Engineering Report dated May 29, 2019, submitted by VCWD to DDW on September 21, 2021, for the Moorpark WRF. This Engineering Report approved the production of up to 3.0 MGD disinfected tertiary recycled water; however, since the WRRs capped the production of disinfected tertiary recycled water at 1.5 MGD, VCWD requested a revision to the WRRs on February 25, 2022, to increase the allowable amount of disinfected tertiary recycled water produced at the Moorpark WRF. This Order permits the facility to reuse up to 3.0 MGD disinfected tertiary recycled water for non-potable purposes.
 - 3.5. If the Discharger wishes to expand the reuse area, increase the number of recycled water users, or add new recycled water uses, then the Discharger shall submit an updated Engineering Report to the Los Angeles Water Board for review and to DDW for review and approval. Upon approval of the Engineering Report, the Discharger shall consult with the Los Angeles Water Board to determine if an amendment to this Order is needed before implementing the changes described in the approved Engineering Report.
 - 3.6. The Moorpark WRF performed a phased upgrade of its primary and secondary treatment system. Phase I, which was completed on September 30, 2003, consisted of installing an in-channel screening (Aqua Guard® screens), grit removal, Biolac® extended aeration system, and secondary clarification. Phase II, which was completed on February 23, 2010, consisted of constructing a new headworks facility, increasing the secondary treatment system capacity from 3 MGD to 5 MGD, by expanding the Biolac® extended aeration system, providing nitrogen removal, increasing the pumping capacity

of the sewer lift station, upgrading the electrical system, and expanding the tertiary treatment system capacity from 1.5 to 3 MGD.

- 3.7. VCWD owns and operates the sewer collection system. Approximately 2.5% of the sewer collection system is pressurized and the remaining 97.5% is gravity fed. The sewer lift stations are located on Trevino Drive, Championship Drive, Miller Parkway, and at the intersection of Hitch Boulevard and Arroyo Las Posas. VCWD enrolled for coverage under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. 2006-0003-DWQ, as amended, and was assigned WDID No. 4SSO10471 for the Moorpark collection system. As such, VCWD must properly operate and maintain its collection system. VCWD must report any non-compliance and mitigate any discharge from the collection system in violation of this Order.
- 3.8. VCWD is required to implement a Pretreatment Program in section 24 of this Order and to comply with the relevant requirements governing operation and maintenance of the sewer collection system. According to the 2019 Annual Pretreatment Report, there is one significant industrial user (SIU) in the City of Moorpark. Lifetech Resources, LLC, is a pharmaceutical manufacturing point source subject to 40 CFR Part 439.46.
- 3.9. VCWD installed one upgradient monitoring well (MW-1), one downgradient monitoring well in the middle of the plant (MW-3), and one downgradient monitoring well (MW-2) on May 23 and 24, 1996, and began groundwater sampling on June 19, 1996. The groundwater monitoring and reporting program was first implemented during the second quarter of 1996. Groundwater monitoring wells, specified in Attachments B.2 and C.2, are used to assess how the treated effluent may be impacting the groundwater basin. However, Monitoring Well No. MW-2 is often dry and cannot be sampled by VCWD staff due to the depth to groundwater at this location. Moorpark WRF staff intends to acquire funding in fiscal year 2022-23 to drill Well No. MW-2 deeper, so they can collect groundwater samples from Well No. MW-2 in the future. VCWD hired a hydrogeologist to design a replacement to Well No. MW-2. On November 18, 2022, Groundwater Solutions Inc, submitted a proposal for the replacement well design, recommending that the MW-2 replacement well extend 50-55 feet below the surface and be screened from 25 feet to the final depth.

4. GROUNDWATER BASINS AND QUALITY

- 4.1. The Moorpark WRF overlies the Las Posas Valley Ground Water Basin (DWR Basin No. 4-8) South of Los Angeles Avenue between Somis Road and Hitch Boulevard, as shown in Attachment B.3. The exiting beneficial uses of the groundwater are municipal and domestic water supply (MUN), industrial service supply (IND), industrial process supply (PROC), and agricultural supply (AGR). Pleasant Valley, Arroyo Santa Rosa Valley, and Las Posas Valley Basins were formerly subbasins of Ventura Central (DWR, 1980). Agricultural supply wells are located in the vicinity of the Moorpark WRF.
- 4.2. VCWD's water service area overlies groundwater basins in Ventura County, including the Las Posas Valley Ground Water Basin, that are managed by Fox Canyon Groundwater Management Agency (FCGMA), an independent special district, separate from the County of Ventura or any city government, whose jurisdictional area encompasses about 118,000 acres (183 square miles). The FCGMA was created by the California Legislature in 1982 to manage the groundwater in both over-drafted and potentially seawater-intruded areas within Ventura County. The prime objectives and

purposes of the FCGMA are to preserve groundwater resources for agricultural, municipal, and industrial uses in the best interests of the public. Protection of water quality and quantity along with maintenance of long-term water supply are included in those goals and objectives. VCWD's 2015 Urban Water Management Plan describes that the basins within the FCGMA are part of the Transverse Ranges geologic province, in which the mountain ranges and basins are oriented in an east-west rather than the typical northeast- southwest trend in much of California and the western United States. The alluvial basins are filled with substantial amounts of Tertiary and Quaternary sediments deposited in both marine and terrestrial (non-marine) settings.

- 4.3. In 2003, the USGS conducted a Groundwater Ambient Monitoring & Assessment (GAMA) Program's Priority ranking and assigned the Las Posas Valley Basin a Priority Level of 1, meaning that USGS was going to include the Las Posas Valley Basin in the state-wide groundwater quality monitoring effort. In that assessment, the Las Posas Valley Groundwater Basin was identified as having 30 public supply wells, 46 leaking underground fuel and storage tanks, and 16,539 acre feet per year of agricultural pumping.
- 4.4. According to a 2007 Groundwater Basin Report prepared for the Ventura County Basins of the northwest Metropolitan Water District service area, chloride has become a problem along the Arroyo Las Posas, where groundwater from an area in the East and South Las Posas basins must be blended with lower-chloride water to meet irrigation suitability. The high levels of chloride and sulfates along the southern flank of the East and South Las Posas groundwater basins are reportedly due to higher groundwater levels leaching salts from shallow aquifers and transporting them to deeper aquifers. The chloride and sulfate concentrations in the discharge are lower than the respective concentrations upgradient of the Moorpark WRF. Perchlorate has been detected at levels of 5 micrograms per liter in a couple of wells in the South Las Posas basin, but no widespread or significant contamination has been reported. The previous monitoring and reporting program for the Moorpark WRF did not require perchlorate monitoring. Perchlorate is not expected to be present in the Moorpark WRF effluent since the majority of the wastewater is domestic and the one industrial user does not discharge perchlorate. Even though the effluent is not expected to contain perchlorate, this Order still includes a requirement for perchlorate monitoring in the groundwater wells and in the effluent to ensure Moorpark's discharge is not contributing perchlorate to the groundwater basin.
- 4.5. On March 31, 2010, VCWD prepared an addendum to the *March 2009 Final Focused Environmental Impact Report (EIR) for the Moorpark Wastewater Treatment Plant 5.0 MGD Expansion Project* (State Clearing House (SHC) No. 2000111127) because changes relevant to the project occurred since the preparation of the Final EIR. The addendum was based on the *Initial Study Analyzing Changes to the Previously Approved Project (Initial Study)* that was prepared by Padre Associates, Inc., under contract with VCWD. Section C.2.c of the *Initial Study* describes the Fox Canyon aquifer system as being in a state of overdraft, resulting in seawater intrusion near the coast. Groundwater Management Area (GMA) Ordinance No. 5 requires incremental reduction in the amount of groundwater that can be pumped by local water users (including the VCWD) in the GMA boundaries. Considering the status of local water supplies, it is unlikely that potable water freed up would be used to support new residential or

commercial development not already planned within VCWD's service area. VCWD proposes to provide additional reclaimed water service for irrigation of local agricultural lands and landscape irrigation, and thereby conserve water and improve the reliability of its overall supplies.

- 4.6. On February 3, 2009, the State Water Board adopted the first Water Quality Control Policy for Recycled Water (Recycled Water Policy), which encourages the safe use of recycled water from wastewater sources that meets the definition in California Water Code (Water Code) section 13050(n), in a manner that implements state and federal water quality laws and protects public health and the environment. The Recycled Water Policy provides direction to the regional water boards, proponents of recycled water projects, and the public regarding the methodology and appropriate water quality control criteria for the State Water Board and the regional water boards to use when issuing permits for recycled water projects. The Recycled Water Policy was amended on January 22, 2013, and again on December 11, 2018. The latter went into effect on April 8, 2019. Section 6.1.3 of the Recycled Water Policy states that each regional water board shall evaluate each basin or subbasin in its region and identify basins through a resolution or executive officer determination where salts and/or nutrients are a threat to water quality and therefore need salt and nutrient management planning to achieve water quality objectives in the long term. Section 4.8.4.2 of the State Water Board's final staff report for the 2018 Recycled Water Policy Amendment discusses the nexus between the Salt and Nutrient Management Program (SNMP) in the Recycled Water Policy and the Sustainable Groundwater Management Act (SGMA). The State Water Board encourages collaborative work among salt and nutrient management planning groups, the agricultural community, the regional water boards, Integrated Regional Water Management groups, and groundwater sustainability agencies formed under the SGMA to achieve the goals of groundwater sustainability, recycled water use, and water quality protection. The State Water Board encourages local water suppliers, wastewater treatment agencies, and recycled water producers, together with local salt and nutrient contributing stakeholders, to continue locally driven and controlled, collaborative processes open to all stakeholders and the regional water board that will result in the development of salt and nutrient management plans for groundwater basins and the management of salts and nutrients on a basin-wide basis. The State Water Board also plans to work in coordination with regional water boards and DWR to develop guidance for Groundwater Sustainability Agencies (GSAs) on how to incorporate the essential elements of an SNMP into their groundwater sustainability plan (GSP) and continue to work to find ways to harmonize the two programs.
- 4.7. In May 2020, the State of California Department of Water Resources (DWR) published the SGMA 2019 Basin Prioritization Process and Results. The report described the background, process, and results of the SGMA 2019 Basin Prioritization. DWR prioritized the California's 517 groundwater basins and subbasins as either high, medium, or low. The Las Posas Valley Basin was assigned a high priority ranking by DWR, which means that a GSA must be formed to manage the groundwater basin, and that the GSA must manage the basin in accordance with a locally-developed GSPs or Alternatives to GSPs. Under the Recycled Water Policy, the regional water board may determine that a groundwater management plan for a basin, subbasin, or other regional planning area is functionally equivalent to a salt and nutrient management plan. For

example, the regional water board may find that groundwater sustainability plans developed pursuant to the Sustainable Groundwater Management Act include water quality components that sufficiently address the components of section 6.2.4 of the Recycled Water Policy and therefore are functionally equivalent to a salt and nutrient management plan.

- 4.8. FCGMA, Camrosa Groundwater Sustainability Agency (GSA), and County of Ventura GSA (collectively, the GSAs) submitted the GSP for the Las Posas Valley Groundwater Basin (Las Posas Valley Basin) to DWR for evaluation and assessment as required by SGMA. On January 13, 2022, DWR approved the GSP submitted for the Las Posas Valley Basin.
- 4.9. VCWD’s self-monitoring reports, submitted by VCWD to the Los Angeles Water Board to the GeoTracker database, indicate that the Las Posas Valley Basin groundwater upgradient of the Moorpark WRF does not meet the water quality objectives for nitrate as nitrogen, total dissolved solids (TDS), sulfate, chloride, and boron, as seen in Table 4 below for upgradient Well No. MW-1. However, the quality of the groundwater gradually improves as it moves downgradient. Data from Well No. MW-3, which is downgradient of Well No. MW-1, shows that the nutrient concentrations were reduced by two thirds and the salts concentrations no longer exceed the water quality objectives. Data from the furthest downgradient Well No. MW-2 shows that the groundwater objectives for nutrients and salts are met in the groundwater, as presented in the following tables for each monitoring well:

Table 2. Groundwater Data - Well No. MW-2 (furthest downgradient)

Date	Pollutant	Units	Result	Water Quality Objective (WQO)
11/15/2011	Nickel	µg/L	164	100
11/27/2012	Nickel	µg/L	161	100
5/22/2012	Total coliform	MPN/100 mL	> 23	1.1
5/22/2012	Fecal coliform	MPN/100 mL	> 23	1.1

Table 3. Groundwater Data - Well No. MW-3 (downgradient)

Date	Pollutant	Units	Result	WQO
2/28/2012	Nitrate as nitrogen	mg/L	32.2	10
5/22/2012	Nitrite as nitrogen	mg/L	12.1	1
8/1/2018	Oil and grease	mg/L	26	10

Table 4. Groundwater Data - Well No. MW-1 (upgradient)

Date	Nitrate as N (10 mg/L WQO)	TDS (1500 mg/L WQO)	Sulfate (700 mg/L WQO)	Chloride (250 mg/L WQO)	Boron (1 mg/L WQO)
2/8/2011	137	--	--	--	--
5/18/2011	113	3064	1143	254	1.34
8/18/2011	138	--	--	--	--
11/15/2011	160	3840	1470	310	1.8

Date	Nitrate as N (10 mg/L WQO)	TDS (1500 mg/L WQO)	Sulfate (700 mg/L WQO)	Chloride (250 mg/L WQO)	Boron (1 mg/L WQO)
2/28/2012	103	--	--	-	--
5/22/2012	104	2980	1140	260	1.4
8/23/2012	130	--	--	--	--
11/27/2012	150	3770	1400	300	1.7
2/28/2013	159	--	--	--	--
5/21/2013	144	3600	1380	310	1.7
8/29/2013	148	--	--	--	--
11/26/2013	144	3060	1360	310	1.5
2/8/2014	< 0.2	--	--	--	--
5/29/2014	105	3010	1110	270	1.4
8/25/2014	< 0.2	--	--	-	--
11/25/2014	116	3160	1010	240	1.5
2/26/2015	< 0.2	--	--	-	--
5/28/2015	101	2810	1000	240	1.4
9/15/2015	< 0.2	--	--	--	--
11/25/2015	120	3100	1060	247	1.5
2/25/2016	< 0.2	--	--	--	--
5/24/2016	123	2920	1140	250	1.5
8/11/2016	< 0.2	--	--	--	--
11/29/2016	107	2890	1030	255	1.4
3/2/2017	< 0.2	--	--	--	--
5/9/2017	102	2810	983	240	1.4
8/29/2017	< 0.2	--	--	--	--
11/8/2017	79.6	2550	808	208	1.4
2/8/2018	< 0.1	--	--	--	--
5/3/2018	92	2710	914	230	1.4
8/1/2018	< 0.1	--	--	--	--
11/28/2018	100	2780	906	230	1.4
11/8/2018	79.6	2550	808	208	1.4
2/27/2019	59.5	--	--	--	--
7/9/2019	96	2730	912	240	1.2
8/13/2019	105	--	--	--	1.2
11/13/2019					
12/11/2019	104	2840	911	249	1.2
2/13/2020	--	--	--	--	--
5/13/2020	97	2900	915	243	1.35
8/27/2020	118	--	--	--	--
11/19/2020	128	3240	990	282	1.9

Date	Nitrate as N (10 mg/L WQO)	TDS (1500 mg/L WQO)	Sulfate (700 mg/L WQO)	Chloride (250 mg/L WQO)	Boron (1 mg/L WQO)
2/18/2021	93	--	--	--	--
5/27/2021	125	3340	1020	300	1.5
8/11/2021	113	--	--	--	--
11/30/2021	136	3350	890	280	1.5
2/17/2022	103	--	--	--	--

5. RECYCLED WATER DISTRIBUTION SYSTEM

- 5.1. VCWD generates disinfected tertiary recycled water at its Moorpark WRF. The 2019 Title 22 Engineering Report, approved by DDW on October 18, 2021, allows the following uses of recycled water:
 - 5.1.1. Irrigation of turf, landscape, open space, nursery stock, and citrus agriculture and other food crops,
 - 5.1.2. Impoundment,
 - 5.1.3. Construction water or backfill consolidation, soil compaction, mixing concrete, dust control at construction sites, and
 - 5.1.4. On-site uses at the Moorpark WRF.
- 5.2. On October 22, 2021, DDW approved VCWD’s Use Site Report for the expansion of the recycled water distribution system for landscape irrigation of the Masters Housing Tract No. 5463, the Masters Home Owner Association (HOA) #1, HOA #2, and irrigation of a vegetated storm water detention basin. On November 16, 2021, the Los Angeles Water Board approved the proposed expansion of VCWD’s Moorpark WWTP recycled water use area to include HOA Area #1, HOA Area #2, and the City of Moorpark’s Detention Basin, for the recycled water project.
- 5.3. VCWD currently distributes disinfected tertiary recycled water to local farmers for crop irrigation, a nursery for plant irrigation, the HOA for landscape irrigation, and golf courses for turf irrigation. VCWD also uses disinfected tertiary recycled water for impoundment, in-plant purposes at the Moorpark WRF, and for dust control off-site. Table 5 below lists the thirteen current disinfected tertiary recycled water users and the total amount of disinfected tertiary recycled water used onsite during 2021, as reported in the 2021 annual report. Attachment C.4 depicts a map of the 2019 Recycled Water Expansion in the distribution area. Attachment C.5 depicts a map of the existing disinfected tertiary recycled water users.

TABLE 5. DISINFECTED TERTIARY RECYCLED WATER USERS

Recycled Water User	Amount of Recycled Water Used (gallons)	Amount of Recycled Water Used (Acre-feet)	Use Type
Moorpark Country Club	128,376,248	394	Golf Course Irrigation

Recycled Water User	Amount of Recycled Water Used (gallons)	Amount of Recycled Water Used (Acre-feet)	Use Type
Rustic Canyon Golf	123,662,352	379.5	Golf Course Irrigation
Moorpark WRF	42,966,700	131.9	Facility Operations, Urinal Flushing, and Landscape Irrigation
Country Club Estates - Moorpark HOA	9,940,172	30.5	Landscape Irrigation
Guadalupe Guzman	3,975,620	12.2	Irrigation of Lemons
Lazy Lemon Farms, LLC	9,738,960	29.9	Irrigation of Lemons
Frank Young	9,683,608	29.7	Irrigation of Lemons
VCWW Well 20	1,510,960	4.6	Facility Operations and Landscape Irrigation
City of Moorpark	1,798,940	5.5	Landscape Irrigation
VCWW Recycled Water Reservoir Site	177,276	0.5	Facility Operations and Landscape Irrigation
Tom Lucas	0	0	Irrigation of Nursery Stock
Ventura County PWA	33,660	0.1	Dust Control
Warwar Property	0	0	Irrigation of Lemons
Total Recycled Water Used	331,864,496	1018.4	--

5.4. VCWD plans on expanding its disinfected tertiary recycled water use area (Attachment C.6) and adding a new industrial disinfected tertiary recycled water use in 2023. On July 29, 2022, VCWD submitted a Draft Supplemental Title 22 Engineering Report to DDW for approval. However, VCWD will not be able to deliver disinfected tertiary recycled water to the new use area or to the new users until after DDW approves the Title 22 Engineering Report and after the Los Angeles Water Board incorporates DDW’s conditions of approval into this Order, if any.

6. EFFLUENT QUALITY AND MONITORING DATA

6.1. Undisinfected Secondary-Treated Effluent Data

A summary of the data collected for the undisinfected secondary-treated effluent discharged to the unlined percolation ponds at the Moorpark WRF, from 2011 to 2021, is summarized in the table below, showing that only the sulfate WQO was exceeded:

Table 6. Undisinfected Secondary-treated Effluent Data

Constituent	Units	Limit	Maximum	Minimum	Average
TDS	mg/L	1,500	823	356	508.5
Chloride	mg/L	250	248	84.4	123.3
Sulfate	mg/L	700	872	36.9	108.7
Boron	mg/L	1.0	0.797	0.28	0.39
Nitrate as nitrogen	mg/L	--	4.5	0.022	0.96
Nitrite as nitrogen	mg/L	--	0.21	0.01	0.09
Nitrate plus nitrite as nitrogen	mg/L	10	4.5	0.022	0.96
Ammonia as nitrogen	mg/L	--	2.8	0.01	0.3
Antimony	µg/L	--	3	1.3	2.15
Arsenic	µg/L	10	2.4	1.3	1.7
Beryllium	µg/L	--	<0.25	<0.25	<0.25
Cadmium	µg/L	5	<0.2	<0.02	ND
Chromium	µg/L	100	8	1.3	3.1
Copper (Action Level)*	µg/L	--	34	2	6.3
Lead (Action Level)*	µg/L	--	2.2	0.2	0.43
Mercury	µg/L	2	<0.02	<0.2	ND
Nickel	µg/L	100	3	1	2
Selenium	µg/L	50	2	2	<1
Silver	µg/L	--	0.3	<0.25	0.3
Thallium	µg/L	--	<0.25	<0.25	ND
Zinc	µg/L	--	120	50	69
Cyanide	µg/L	200	<50	<4	ND
2,3,7,8-TCDD	µg/L	--	<2	<0.737	ND
Acrolein	µg/L	--	<2	<2	ND
Acrylonitrile	µg/L	--	<2	<2	ND
Benzene	µg/L	1	<0.5	<0.5	ND
Bromoform	µg/L	--	<0.5	<0.5	ND
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	ND
Chlorobenzene	µg/L	70	<0.5	<0.5	ND
Chlorodibromomethane	µg/L	--	<0.5	<0.5	ND
Chloroethane	µg/L	--	<0.5	<0.5	ND
2-chloroethyl vinyl ether	µg/L	--	<1	<0.5	ND
Chloroform	µg/L	--	1.4	0.6	0.5
Dichlorobromomethane	µg/L	--	<0.5	<0.5	ND
1,1-dichloroethane	µg/L	5	<0.5	<0.5	ND
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	ND

Constituent	Units	Limit	Maximum	Minimum	Average
1,1-dichloroethylene	µg/L	6	<0.5	<0.5	ND
1,2-dichloropropane	µg/L	5	<0.5	<0.5	ND
Ethylbenzene	µg/L	300	<0.5	<0.5	ND
Methyl bromide	µg/L	--	<2	<0.5	ND
Methyl chloride	µg/L	--	<2	<0.5	ND
Methylene chloride	µg/L	5	<2	<0.5	ND
1,1,2,2-tetrachloroethane	µg/L	1	<0.5	<0.5	ND
Tetrachloroethylene	µg/L	5	<0.5	<0.5	ND
Toluene	µg/L	150	<0.5	<0.5	ND
Trans 1,2-Dichloroethylene	µg/L	10	<0.5	<0.5	ND
1,1,1-Trichloroethane	µg/L	200	<0.5	<0.5	ND
1,1,2-Trichloroethane	µg/L	5	<0.5	<0.5	ND
Trichloroethylene	µg/L	5	<0.5	<0.5	ND
Vinyl Chloride	µg/L	0.5	<0.5	<0.5	ND
2-chlorophenol	µg/L	--	<5	<2	ND
2,4-dichlorophenol	µg/L	--	<4	<2	ND
2,4-dimethylphenol	µg/L	--	<4	<2	ND
4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	µg/L	--	<20	<1	ND
2,4-dinitrophenol	µg/L	--	<20	<2	ND
2-nitrophenol	µg/L	--	<20	<2	ND
4-nitrophenol	µg/L	--	<0.5	<0.5	ND
3-Methyl-4-Chlorophenol (aka 4-chloro-m-cresol)	µg/L	--	<10	<1	ND
Pentachlorophenol	µg/L	1	<20	<1	ND
Phenol	µg/L	--	<10	<1	ND
2,4,6-trichlorophenol	µg/L	--	<10	<1	ND
Acenaphthene	µg/L	--	<4	<1	ND
Acenaphthylene	µg/L	--	<4	<1	ND
Anthracene	µg/L	--	<4	<1	ND
Benzidine	µg/L	--	<20	<2	ND
Benzo(a)Anthracene	µg/L	--	<4	<1	ND
Benzo(a)Pyrene	µg/L	--	<4	<1	ND
Benzo(b)Fluoranthene	µg/L	--	<4	<1	ND
Benzo(ghi)Perylene	µg/L	--	<4	<1	ND
Benzo(k)Fluoranthene	µg/L	--	<4	<1	ND
Bis(2-Chloroethoxy) methane	µg/L	--	<4	<1	ND
Bis(2-Chloroethyl)Ether	µg/L	--	<4	<1	ND

Constituent	Units	Limit	Maximum	Minimum	Average
Bis(2-Chloroisopropyl) Ether	µg/L	--	<4	<1	ND
Bis(2-Ethylhexyl) Phthalate	µg/L	4	2.8	<2	ND
4-Bromophenyl Phenyl Ether	µg/L	--	<4	<1	ND
Butylbenzyl Phthalate	µg/L	--	<4	<2	ND
2-Chloronaphthalene	µg/L	--	<4	<1	ND
4-Chlorophenyl Phenyl Ether	µg/L	--	<4	<1	ND
Chrysene	µg/L	--	<4	<1	ND
Dibenzo(a,h)Anthracene	µg/L	--	<4	<1	ND
1,2-Dichlorobenzene	µg/L	600	<10	<0.5	ND
1,3-Dichlorobenzene	µg/L	--	<10	<0.5	ND
1,4-Dichlorobenzene	µg/L	5	<10	<0.5	ND
3,3'-Dichlorobenzidine	µg/L	--	<4	<1	ND
Diethyl Phthalate	µg/L	--	<4	<1	ND
Dimethyl Phthalate	µg/L	--	<4	<1	ND
Di-n-Butyl Phthalate	µg/L	--	<4	<2	ND
2-4-Dinitrotoluene	µg/L	--	<10	<1	ND
2-6-Dinitrotoluene	µg/L	--	<10	<1	ND
Di-n-Octyl Phthalate	µg/L	--	<4	<1	ND
1,2-Diphenylhydrazine	µg/L	--	<2	<1	ND
Fluoranthene	µg/L	--	<4	<1	ND
Fluorene	µg/L	--	<4	<1	ND
Hexachlorobenzene	µg/L	1	<4	<1	ND
Hexachlorobutadiene	µg/L	--	<4	<1	ND
Hexachlorocyclopentadiene	µg/L	50	<4	<1	ND
Hexachloroethane	µg/L	--	<4	<1	ND
Indeno(1,2,3-cd)Pyrene	µg/L	--	<4	<1	ND
Isophorone	µg/L	--	<4	<1	ND
Naphthalene	µg/L	--	<4	<1	ND
Nitrobenzene	µg/L	--	<4	<1	ND
N-Nitrosodimethylamine	µg/L	--	<10	<1	ND
N-Nitrosodi-n-Propylamine	µg/L	--	<4	<1	ND
N-Nitrosodiphenylamine	µg/L	--	<4	<1	ND
Phenanthrene	µg/L	--	<4	<1	ND
Pyrene	µg/L	--	<4	<1	ND
1,2,4-Trichlorobenzene	µg/L	--	<4	<1	ND
Aldrin	µg/L	--	<0.01	<0.005	ND
Alpha-BHC	µg/L	--	<0.05	<0.01	ND

Constituent	Units	Limit	Maximum	Minimum	Average
Beta-BHC	µg/L	--	<0.05	<0.005	ND
Gamma-BHC (aka Lindane)	µg/L	0.2	<0.01	<0.05	ND
delta-BHC	µg/L	--	<0.05	<0.005	ND
Chlordane	µg/L	--	<1	<0.1	ND
4,4'-DDT	µg/L	--	<0.05	<0.01	ND
4,4'-DDE	µg/L	--	<0.05	<0.01	ND
4,4'-DDD	µg/L	--	<0.05	<0.01	ND
Dieldrin	µg/L	--	<0.05	<0.01	ND
Alpha-Endosulfan	µg/L	--	<0.05	<0.01	ND
Beta-Endosulfan	µg/L	--	<0.05	<0.01	ND
Gamma-BHC (lindane)	µg/L	--	<0.05	<0.01	ND
Delta-Endosulfan	µg/L	--	<0.05	<0.01	ND
Endosulfan Sulfate	µg/L	--	<0.05	<0.01	ND
Endrin	µg/L	2	<0.05	<0.01	ND
Endrin Aldehyde	µg/L	--	<0.05	<0.01	ND
Heptachlor	µg/L	0.01	<0.05	<0.01	ND
Heptachlor Epoxide	µg/L	0.01	<0.05	<0.01	ND
PCB 1016	µg/L	0.5	<1	<0.05	ND
PCB 1221	µg/L	0.5	<1	<0.05	ND
PCB 1232	µg/L	0.5	<1	<0.05	ND
PCB 1242	µg/L	0.5	<1	<0.05	ND
PCB 1248	µg/L	0.5	<1	<0.05	ND
PCB 1254	µg/L	0.5	<1	<0.05	ND
PCB 1260	µg/L	0.5	<1	<0.05	ND
Toxaphene	µg/L	3	<1	<0.05	ND
Xylene	µg/L	1,750	<1	<0.5	ND
Total trihalomethanes	µg/L	80	1.4	0.6	0.5

6.2. Compliance History Discussion for WDR Order No. 00-048

6.2.1. Sulfate

VCWD complied with the effluent limitations in Order No. 00-048, except for the following:

Table 7. Percolation Pond Effluent Exceedances

Constituent	Units	Limit	Reported value	Date
Sulfate	mg/L	700	872	04/04/2019

The Discharger was unable to find the cause of the sulfate exceedance. However, since this was a one-time occurrence, the discharge is expected to be able to meet the effluent limitation for sulfate moving forward.

6.2.2. Indicator Bacteria

The prior Order No. 00-048, governing the discharge of undisinfected secondary-treated effluent from the Moorpark WRF, did not include a final effluent limitation for total or fecal coliform. Instead, it had a 1.1 MPN groundwater limitation for total and fecal coliform based on the Basin Plan water quality objective for the groundwater basin. Total and fecal coliform were present in Monitoring Well No. MW-2 on one occasion, at levels greater than 23 MPN, which exceeds the groundwater limitation in Order No. 00-048. Since groundwater travels slowly and may not reach a monitoring well for weeks or months, it is difficult to assess exceedances of a groundwater limitation. To ensure proper assessment of exceedances of limitations, the compliance point for the total and fecal coliform limitations has been moved to the effluent compliance point in this Order. The effluent limitations for total and fecal coliform are included in this Order to protect human health associated with the designated municipal drinking water and agricultural supply beneficial uses in the groundwater. Since the compliance point has been moved to the effluent monitoring location and the Moorpark WRF is currently not designed to disinfect the secondary-treated effluent, a time schedule and interim compliance points (set at the downgradient groundwater monitoring wells No. 2 and 3) are included in section 16 of this Order. The groundwater monitoring wells have not exceeded the water quality objective since May 22, 2012, so it is expected that the groundwater will continue to meet the objective until construction of the disinfection system is complete. In addition, VCWD will be maximizing the use of the tertiary treatment system so the amount of undisinfected secondary effluent discharged to the percolation ponds is minimized.

6.2.3. Nickel

The prior Order No. 00-048, governing the discharge of undisinfected secondary-treated effluent from the Moorpark WRF, included a narrative effluent limitation for heavy metals, including nickel. The undisinfected secondary-treated effluent has reasonable potential to cause the groundwater basin to exceed the 100 µg/L nickel Maximum Contaminant Level (MCL) because it was exceeded in the groundwater basin. From 2011 through December 2021, the Moorpark WRF reported that the groundwater from Monitoring Well No. MW-2 exceeded the nickel concentrations in 2011 with a value of 164 µg/L and in 2012 with a value of 161 µg/L. Therefore, this Order includes an Average Monthly Effluent Limitation (AMEL) for nickel set at the MCL, to protect the designated municipal drinking water beneficial use in the groundwater. Since it has been over four years since the MCL for nickel was exceeded in the groundwater basin and there have been no effluent exceedances, the discharge from the Moorpark WRF is expected to meet the final effluent limitation moving forward.

6.2.4. Oil and Grease

Data from self-monitoring reports submitted by VCWD indicate that the undisinfected secondary-treated effluent has reasonable potential to cause the groundwater basin to exceed the 10 mg/L oil and grease water quality objective. From 2011 through December 2021, the Moorpark WRF reported that the groundwater from Monitoring Well

No. MW-3 exceeded the oil and grease concentration on August 1, 2018, with a value of 26 mg/L, but VCWD staff could not find the cause of the single exceedance. Since there is no effluent monitoring data for oil and grease to determine reasonable potential, this Order includes a 10 mg/L AMEL and a 15 mg/L Maximum Daily Effluent Limitation (MDEL) for oil and grease based on the groundwater monitoring data to protect the designated municipal drinking water beneficial use of the groundwater. Since it has been four and a half years since the water quality objective for oil and grease was exceeded in the groundwater and the effluent undergoes secondary treatment, the discharge from the Moorpark WRF is expected to meet the effluent limitation moving forward.

6.3. Disinfected Tertiary Recycled Water Data

The data for disinfected tertiary recycled water distributed to recycled water users from the Moorpark WRF, from 2011 to 2021, is summarized in the table below, showing that the Moorpark WRF complied with a majority of the recycled water requirements and therefore the application of the recycled water is not expected to cause degradation of the groundwater.

Table 8. Disinfected Tertiary Recycled Water Data

Constituent	Units	30 Day Average Limit	7 Day Average Limit	Maximum Daily Limit	Max. Reported Value	Min. Reported Value
BOD ₅ 20°C	mg/L	30	45	---	23	<2
Oil and grease	mg/L	10	---	15	6	<3
Suspended solids	mg/L	30	45	---	16	<1
pH	pH units	---	---	Between 6.5 & 8.5	8.6	6.7
Total coliform	MPN/100 mL	23 (not more than 1x/month)	2.2 (7-day median)	240	4.5	<1.1
Turbidity	NTU	---	2 (24-hour average)	10	2	0.1
TDS	mg/L	---	---	1,500	782	387
Chloride	mg/L	---	---	250	382	101
Sulfate	mg/L	---	---	700	220	66.4
Boron	mg/L	---	---	1	0.6	0.2
Nitrate as nitrogen	mg/L	10	---	---	6.3	<0.05
Nitrite as nitrogen	mg/L	1	---	---	0.2	<0.2
Nitrate plus nitrite as nitrogen	mg/L	10	---	---	6.3	0.1
Ammonia as nitrogen	mg/L	--	---	---	0.6	<0.1
Antimony	µg/L	6	---	---	2.9	<0.1

Constituent	Units	30 Day Average Limit	7 Day Average Limit	Maximum Daily Limit	Max. Reported Value	Min. Reported Value
Arsenic	µg/L	10	---	---	0.9	<0.1
Beryllium	µg/L	4	---	---	<0.2	<0.02
Cadmium	µg/L	5	---	---	0.5	<0.02
Chromium	µg/L	100	---	---	12	<0.02
Copper (Action Level)*	µg/L	NA	---	---	21	<0.02
Lead (Action Level)*	µg/L	NA	---	---	0.4	<0.02
Mercury	µg/L	2	---	---	<0.2	<0.02
Nickel	µg/L	100	---	---	5	<0.02
Selenium	µg/L	50	---	---	1	<0.1
Silver	µg/L	--	---	---	2.2	<0.02
Thallium	µg/L	2	---	---	0.3	<0.02
Zinc	µg/L	--	---	---	100	0.05
Cyanide	µg/L	200	---	---	<50	<4
2,3,7,8-TCDD	µg/L	3 x 10 ⁻⁸	---	---	<4.57	<0.517
Acrolein	µg/L	--	---	---	<50	<2
Acrylonitrile	µg/L	--	---	---	<50	<2
Benzene	µg/L	1	---	---	<2.5	<0.5
Bromoform	µg/L	--	---	---	5.5	<0.5
Carbon tetrachloride	µg/L	0.5	---	---	35.9	<0.5
Chlorobenzene	µg/L	70	---	---	<2.5	<0.5
Chlorodibromomethane	µg/L	--	---	---	26.7	<2.5
Chloroethane	µg/L	--	---	---	0.8	<0.5
2-chloroethyl vinyl ether	µg/L	--	---	---	<2.5	<0.5
Chloroform	µg/L	--	---	---	103	50
Dichlorobromomethane	µg/L	--	---	---	52	19.2
1,1-dichloroethane	µg/L	5	---	---	<2.5	<0.5
1,2-dichloroethane	µg/L	0.5	---	---	<2.5	<0.5
1,1-dichloroethylene	µg/L	6	---	---	1.1	<0.5
1,2-dichloropropane	µg/L	5	---	---	<2.5	<0.5
Ethylbenzene	µg/L	300	---	---	<2.5	<0.5
Methyl bromide	µg/L	--	---	---	<2.5	<0.5
Methyl chloride	µg/L	--	---	---	45.2	<0.5
Methylene chloride	µg/L	5	---	---	<2.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	1	---	---	<2.5	<0.5
Tetrachloroethylene	µg/L	5	---	---	0.9	<0.5
Toluene	µg/L	150	---	---	<2.5	<0.5

Constituent	Units	30 Day Average Limit	7 Day Average Limit	Maximum Daily Limit	Max. Reported Value	Min. Reported Value
Trans 1,2-Dichloroethylene	µg/L	10	---	---	<2.5	<0.5
1,1,1-Trichloroethane	µg/L	200	---	---	<2.5	<0.5
1,1,2-Trichloroethane	µg/L	5	---	---	<2.5	<0.5
Trichloroethylene	µg/L	5	---	---	1	<0.5
Vinyl Chloride	µg/L	0.5	---	---	<2.5	<0.5
2-chlorophenol	µg/L	--	---	---	<5	<2
2,4-dichlorophenol	µg/L	--	---	---	<2	<2
2,4-dimethylphenol	µg/L	--	---	---	<2	<2
4,6-dinitro-o-cresol (aka 2-methyl-4,6-Dinitrophenol)	µg/L	--	---	---	<10	<1
2,4-dinitrophenol	µg/L	--	---	---	<10	<5
2-nitrophenol	µg/L	--	---	---	<2	<2
4-nitrophenol	µg/L	--	---	---	<10	<2
3-Methyl-4-Chlorophenol (aka 4-chloro-m-cresol)	µg/L	--	---	---	<5	<1
Pentachlorophenol	µg/L	1	---	---	<10	<1
Phenol	µg/L	--	---	---	<5	<1
2,4,6-trichlorophenol	µg/L	--	---	---	<5	<1
Acenaphthene	µg/L	--	---	---	<2	<1
Acenaphthylene	µg/L	--	---	---	<2	<1
Anthracene	µg/L	--	---	---	<2	<1
Benzidine	µg/L	--	---	---	<10	<2
Benzo(a)Anthracene	µg/L	--	---	---	<2	<1
Benzo(a)Pyrene	µg/L	--	---	---	<2	<1
Benzo(b)Fluoranthene	µg/L	--	---	---	<2	<1
Benzo(ghi)Perylene	µg/L	--	---	---	<2	<1
Benzo(k)Fluoranthene	µg/L	--	---	---	<2	<1
Bis(2-Chloroethoxy) methane	µg/L	--	---	---	<2	<1
Bis(2-Chloroethyl)Ether	µg/L	--	---	---	<2	<1
Bis(2-Chloroisopropyl) Ether	µg/L	--	---	---	<2	<1
Bis(2-Ethylhexyl) Phthalate	µg/L	4	---	---	7	<2
4-Bromophenyl Phenyl Ether	µg/L	--	---	---	<2	<1

Constituent	Units	30 Day Average Limit	7 Day Average Limit	Maximum Daily Limit	Max. Reported Value	Min. Reported Value
Butylbenzyl Phthalate	µg/L	--	---	---	<2	<2
2-Chloronaphthalene	µg/L	--	---	---	<2	<1
4-Chlorophenyl Phenyl Ether	µg/L	--	---	---	<2	<1
Chrysene	µg/L	--	---	---	<2	<1
Dibenzo(a,h)Anthracene	µg/L	--	---	---	<2	<1
1,2-Dichlorobenzene	µg/L	600	---	---	<5	<1
1,3-Dichlorobenzene	µg/L	--	---	---	<5	<1
1,4-Dichlorobenzene	µg/L	5	---	---	<5	<1
3,3'-Dichlorobenzidine	µg/L	--	---	---	<2	<1
Diethyl Phthalate	µg/L	--	---	---	<2	<1
Dimethyl Phthalate	µg/L	--	---	---	<2	<1
Di-n-Butyl Phthalate	µg/L	--	---	---	2.5	<2
2-4-Dinitrotoluene	µg/L	--	---	---	<5	<1
2-6-Dinitrotoluene	µg/L	--	---	---	<5	<1
Di-n-Octyl Phthalate	µg/L	--	---	---	<2	<1
1,2-Diphenylhydrazine	µg/L	--	---	---	<1	<1
Fluoranthene	µg/L	--	---	---	<2	<1
Fluorene	µg/L	--	---	---	<2	<1
Hexachlorobenzene	µg/L	1	---	---	<2	<1
Hexachlorobutadiene	µg/L	--	---	---	<2	<1
Hexachlorocyclopentadiene	µg/L	50	---	---	<2	<1
Hexachloroethane	µg/L	--	---	---	<2	<1
Indeno(1,2,3-cd)Pyrene	µg/L	--	---	---	<2	<1
Isophorone	µg/L	--	---	---	<2	<1
Naphthalene	µg/L	--	---	---	<2	<1
Nitrobenzene	µg/L	--	---	---	<2	<1
N-Nitrosodimethylamine	µg/L	--	---	---	<2	<1
N-Nitrosodi-n-Propylamine	µg/L	--	---	---	<2	<1
N-Nitrosodiphenylamine	µg/L	--	---	---	<2	<1
Phenanthrene	µg/L	--	---	---	<2	<1
Pyrene	µg/L	--	---	---	<2	<1
1,2,4-Trichlorobenzene	µg/L	--	---	---	<2	<1
Aldrin	µg/L	--	---	---	<0.05	<0.005
Alpha-BHC	µg/L	--	---	---	<0.05	<0.01

Constituent	Units	30 Day Average Limit	7 Day Average Limit	Maximum Daily Limit	Max. Reported Value	Min. Reported Value
Beta-BHC	µg/L	--	---	---	<0.05	<0.005
Gamma-BHC (aka Lindane)	µg/L	0.2	---	---	<0.05	<0.01
delta-BHC	µg/L	--	---	---	<0.05	<0.005
Chlordane	µg/L	--	---	---	<0.5	<0.1
4,4'-DDT	µg/L	--	---	---	<0.05	<0.01
4,4'-DDE	µg/L	--	---	---	<0.05	<0.01
4,4'-DDD	µg/L	--	---	---	<0.05	<0.01
Dieldrin	µg/L	--	---	---	<0.05	<0.01
Alpha-Endosulfan	µg/L	--	---	---	<0.05	<0.01
Beta-Endosulfan	µg/L	--	---	---	<0.05	<0.01
Gamma-BHC (lindane)	µg/L	--	---	---	<0.05	<0.01
Endosulfan Sulfate	µg/L	--	---	---	0.06	<0.01
Endrin	µg/L	2	---	---	<0.05	<0.01
Endrin Aldehyde	µg/L	--	---	---	<0.05	<0.01
Heptachlor	µg/L	0.01	---	---	<0.05	<0.01
Heptachlor Epoxide	µg/L	0.01	---	---	<0.05	<0.01
PCB 1016	µg/L	0.5	---	---	<0.05	<0.05
PCB 1221	µg/L	0.5	---	---	<0.05	<0.05
PCB 1232	µg/L	0.5	---	---	<0.05	<0.05
PCB 1242	µg/L	0.5	---	---	<0.05	<0.05
PCB 1248	µg/L	0.5	---	---	<0.05	<0.05
PCB 1254	µg/L	0.5	---	---	<0.05	<0.05
PCB 1260	µg/L	0.5	---	---	<0.05	<0.05
Toxaphene	µg/L	3	---	---	<0.05	<0.05
Xylene	µg/L	1,750	---	---	<2.5	<0.5
Perchlorate	µg/L	6	---	---	NA	NA
Total trihalomethanes	µg/L	80	---	---	167.5	80.4

The WRRs also require that the chlorine disinfection process provide a concentration-time (CT) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow. The CT is the product of total chlorine residual and modal contact time measured at the same period. VCWD has complied with the CT requirement, except on four days in each quarter during 2018. In 2018, VCWD conducted a plant capacity study, including a tracer test on the chlorine contact basins (CCBs), to evaluate the capacity of the tertiary filter capacity. The study determined that for a 1.5 MGD flow, a 12 inch weir height, a modal contact time of 95 minutes, and a baffling factor of 0.3 to 0.8 was adequate to meet the 450 mg-min/L CT requirement. Results from the tracer study and filter capacity evaluation also confirmed that the Moorpark WRF has the capability to meet the tertiary

treatment capacity of 3 mgd with the existing CCBs and up-flow filtration system. Annual monitoring reports submitted by VCWD staff, from 2019 to the present, show that the Moorpark WRF has been able to comply with the CT requirement.

6.4. Compliance History Discussion for WRRs Order No. R4-2002-0028

Order No. R4-2002-0028, regulating the production of disinfected tertiary recycled water at the Moorpark WRF, contains a narrative recycled water limitation requiring that recycled water not contain trace, toxic and other constituents in concentrations exceeding the applicable maximum contaminant levels for drinking water. This Order continues to require the disinfected tertiary recycled water to meet the maximum contaminant levels. VCWD complied with the effluent limitations in Order No. R4-2002-0028, except for the following:

Table 9. Recycled Water Exceedances

Constituent	Units	Limit	Reported value	Date
Total trihalomethanes (TTHMs)	mg/L	80	167.5	8/3/2011
TTHMs	mg/L	80	91.6	8/7/2012
TTHMs	mg/L	80	90.6	2/19/2013
TTHMs	mg/L	80	148.2	8/14/2014
TTHMs	mg/L	80	80.4	8/11/2015
TTHMs	mg/L	80	158.7	8/2/2016
TTHMs	mg/L	80	131.9	8/9/2017
TTHMs	mg/L	80	117	8/1/2018
TTHMs	mg/L	80	107.8	8/14/2019
TTHMs	mg/L	80	92.9	8/5/2020
TTHMs	mg/L	80	82.6	8/17/2021
Total coliform	MPN/100 mL	2.2	3.6	12/24/2013
Total coliform	MPN/100 mL	2.2	4.5	01/29/2019
Chloride	mg/L	250	382	3/14/2017
Bis(2-ethylhexyl)phthalate	µg/L	4	4.1	8/2/2016
Bis(2-ethylhexyl)phthalate	µg/L	4	7	8/9/2017
Carbon tetrachloride	µg/L	0.5	35.9	8/3/2011

6.4.1. Total Trihalomethanes

From 2011 to 2021, the Moorpark WRF produced disinfected tertiary recycled water containing TTHMs concentrations ranging from 80.4 to 167.5 µg/L, exceeding the narrative recycled water limitation in the WRRs (Order No. R4-2002-0028). TTHMs are formed as a byproduct of the chlorine disinfection process. Because the concentrations of TTHMs in the disinfected tertiary recycled water exceed the 80 µg/L Maximum Contaminant Level (MCL) water quality objective, the discharge has reasonable potential to exceed the water quality objective. Therefore, this Order includes an AMEL for TTHMs set at the MCL, to protect human health associated with the designated municipal drinking water and agricultural supply beneficial uses of the groundwater. Since the Moorpark WRF disinfected tertiary recycled water is likely to continue exceeding the MCL for TTHMs, VCWD needs additional time to upgrade the Moorpark WRF and replace the chlorination system with ultraviolet (UV) light disinfection, as proposed, to comply with the final effluent limitation. Therefore, a time schedule and an interim effluent limitation set at the maximum effluent concentration observed from 2011 to 2021 are included in section 16 of this Order. The interim effluent limitation ensures the quality of the discharge will be maintained and because TTHMs have not been detected in the groundwater basin, the interim limit is not expected to cause any additional degradation to the groundwater basin.

6.4.2. Bis(2-ethylhexyl) phthalate

Data from self-monitoring reports submitted by VCWD indicate that from 2011 through December 2021, the Moorpark WRF produced disinfected tertiary recycled water containing bis(2-ethylhexyl)phthalate concentrations ranging from <2 to 7 µg/L. The disinfected tertiary recycled water therefore has reasonable potential to exceed the 4 µg/L MCL for bis(2-ethylhexyl)phthalate. Therefore, this Order includes an AMEL for bis(2-ethylhexyl)phthalate set at the MCL to protect the designated municipal drinking water beneficial use in the groundwater. Since it has been five years since the MCL for bis(2-ethylhexyl)phthalate was exceeded in the disinfected tertiary recycled water, the discharge from the Moorpark WRF is expected to be able to meet the effluent limitation moving forward.

6.4.3. Indicator Bacteria

WRRs Order No. R4-2002-0028 for the Moorpark WRF includes disinfected tertiary recycled water limitations for total coliform, based on the definition of disinfected tertiary recycled water in Title 22 of the California Code of Regulations (22 CCR) § 60301.230. Data from self-monitoring reports submitted by VCWD indicate that the disinfected tertiary recycled water met these limitations, and is in compliance with the requirements governing disinfected tertiary recycled water contained in Order No. R4-2002-0028, except on two occasions when the weekly median was exceeded. Although the cause of the two weekly median exceedances was undetermined, the disinfected tertiary recycled water met the daily maximum limitation on both occasions.

6.4.4. Carbon Tetrachloride

Data from self-monitoring reports submitted by VCWD indicate that the disinfected tertiary recycled water has reasonable potential to exceed the 0.5 µg/L carbon tetrachloride MCL. From 2011 through December 2021, the Moorpark WRF produced

disinfected tertiary recycled water containing carbon tetrachloride concentrations ranging from <0.5 to 35.9 µg/L. Therefore, this Order includes an AMEL for carbon tetrachloride set at the 0.5 µg/L MCL, to protect the designated municipal drinking water beneficial use in the groundwater. Since it has been eleven years since the MCL for carbon tetrachloride was exceeded in the disinfected tertiary recycled water, the discharge from the Moorpark WRF is expected to meet the effluent limitation moving forward.

7. TIME SCHEDULE APPLICABILITY

- 7.1. As part of the ROWD supplemental information submitted on January 31, 2022, VCWD indicated that they intend to investigate options for alternative disinfection treatment and plant operational modifications, to comply with the proposed bacteria effluent limitations in the 2023 Order. On August 19, 2022, Los Angeles Water Board and VCWD staff met to discuss the need for interim limits and VCWD's request for a time schedule. On September 8, 2022, VCWD submitted a letter requesting interim effluent limits and a compliance schedule for bacteria, bis(2-ethylhexyl)phthalate, TTHMs, carbon tetrachloride, nickel, and oil and grease. VCWD also proposed conducting an attenuation study to justify higher final effluent limits for bacteria and to prevent the need to disinfect the secondary-treated effluent prior to discharging it to the percolation ponds. Los Angeles Water Board staff considered this request, but determined the bacteria objective needs to be enforced to protect the farmers and the crops that are irrigated with the well water from the agricultural supply wells located in the vicinity of the Moorpark WRF and the municipal and domestic supply beneficial use. Therefore, the milestone to prepare a work plan for an attenuation study was not included in the compliance schedule section. On October 4, 2022, VCWD submitted a revised request for a compliance schedule in which they no longer propose to conduct an attenuation study. On December 20, 2022, Los Angeles Water Board and VCWD staff met to discuss VCWD's request for a time schedule and concluded that a time schedule was not needed for oil and grease, bis(2-ethylhexyl)phthalate, carbon tetrachloride, or nickel since the effluent has consistently met the limitations for years, even though there were a few exceedances in the past. On January 11, 2023, VCWD submitted a revised request for a time schedule for total and fecal coliform and TTHMs, but with modified milestones to achieve compliance in a shorter period of time. On January 19, 2023, Los Angeles Water Board and VCWD staff met to discuss the disinfection alternatives feasibility study and the time schedule associated with replacing the chlorination disinfection system with UV disinfection.
- 7.2. Although groundwater monitoring does not currently demonstrate detectable concentrations of TTHMs and although the last detection of coliform in groundwater was in 2012, VCWD's existing operations are not using the best practical treatment and control methodologies to remove coliform and dechlorinate effluent, and plant upgrades are necessary to ensure that effluent does not cause degradation and is protective of beneficial uses. Similarly, existing monitoring is inadequate and standard monitoring of discharges should be at the point of discharge and not in downgradient monitoring wells. VCWD needs time to design and install improvements to the Moorpark WRF to meet the final effluent limitations for total and fecal coliform and TTHMs. Similarly, additional time is needed to re-install downgradient well MW-2 to ensure groundwater is protected.

- 7.3. Pursuant to CWC section 13263(c), waste discharge requirements may contain a time schedule, subject to revision at the discretion of the board.
- 7.4. Section 13300 of the CWC states, “Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a permittee are approaching capacity, the board may require the permittee to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the permittee shall take in order to correct or prevent a violation of requirements.”
- 7.5. Title 23 of the California Code of Regulations, section 2231 governs time schedules and requires that time schedules shall not permit any unnecessary time lag and requires status reports. Time schedules should also include specific dates on which tasks are to be completed and the date on which full compliance will be achieved. This Order is consistent with the regulation.
- 7.6. Based on undisinfected secondary-treated effluent, groundwater, and disinfected tertiary recycled water data, the Permittee is not able to consistently comply with this Order’s effluent limitations for total and fecal coliform (in the secondary treated effluent), and TTHMs (in the tertiary treated effluent). Accordingly, pursuant to CWC section 13300, a discharge of waste is taking place and/or threatens to take place that violates requirements prescribed by the Los Angeles Water Board.
- 7.7. The time schedule may not be longer than that which is reasonably necessary to achieve implementation of the water quality objectives. As detailed below, the estimated time for development and construction of a modified disinfection treatment system is two years and four months, which is the allowable time for the discharge to meet the final effluent limitations.
- 7.8. In considering a time schedule, the Los Angeles Water Board considered the significant outlays for implementation. VCWD plans on using Proposition 84 funds to pay for the plant upgrade to replace the chlorine-based disinfection system with an ultraviolet light disinfection system, which will address the issues with total coliform, fecal coliform, and total trihalomethanes.

7.9. **Total and Fecal Coliform**

VCWD has been discharging undisinfected secondary treated effluent to unlined percolation ponds, relying on soil aquifer treatment and natural attenuation of bacteria in the groundwater, and monitoring coliform levels in groundwater wells to determine compliance with the 1.1 MPN Basin Plan WQO for bacteria in groundwater. However, a total coliform value of >23 MPN in Monitoring Well No. MW-2 raises concerns about the impact of the effluent discharged to the ponds has on the quality of the groundwater and the impact corrective actions would have after the groundwater has already been contaminated. To address this concern in this Order, at the conclusion of the time schedule, the compliance point for the bacteria limitations for discharge to the percolation ponds will be relocated from monitoring well No. MW-2 to the effluent monitoring location prior to entering the percolation ponds. On November 7, 2022, Kennedy Jenks prepared a technical memorandum regarding the Disinfection Alternatives Feasibility Study at the Moorpark WRF. The economic portion of the

evaluation indicates that Alternative 1a (open channel UV disinfection) would be the preferred option, followed by Alternative 3 (combination of chlorine contact basins and open-channel UV disinfection). After combining the non-cost factor and cost scores, the technical memorandum concluded that Alternative 1a (open channel UV disinfection) was the highest ranked and preferred option. On November 18, 2022, VCWD issued a request for proposals (RFP) to modernize the disinfection system at the Moorpark WRF. Proposals were due to VCWD by December 15, 2022. On December 20, 2022, VCWD emailed copies of the technical memo and the RFP to the Los Angeles Water Board for consideration of a time schedule in this Order. VCWD will review the proposals received and select a consultant to perform the UV upgrade at the Moorpark WRF. The proposed time schedule in section 16 of this Order includes seven months to design a new disinfection system, one year to pre-procure equipment, six months to bid and award the contract, and seven months to construct the disinfection system. This is an appropriate amount of time given the size and complexity of this project. Once the disinfection system is constructed, the Permittee has three months to start-up and operate the system, and three months to commission and optimize the disinfection system. This amount of time is appropriate because it allows VCWD to determine adjustments required based on variations in water quality and it ensures that the discharge to the percolation ponds will reliably meet the final effluent limitations. During the time schedule, an interim compliance point set at monitoring well No. MW-3 will be used to determine compliance with the effluent limitations for total and fecal coliform, until the replacement well for MW-2 is constructed. Once operational, the new monitoring well MW-2 will replace MW-3 as the new interim compliance point. The groundwater monitoring wells have not exceeded the water quality objective since May 22, 2012, so it is expected that the groundwater will continue to meet the objective until construction of the disinfection system is complete. In addition, VCWD will be maximizing the use of the tertiary treatment system so the amount of undisinfected secondary effluent discharged to the percolation ponds is minimized.

7.10. **Total Trihalomethanes**

TTHMs are formed as a byproduct of the chlorine disinfection process. VCWD has covered their chlorine contact basins to minimize chlorine loss, to more effectively disinfect the tertiary effluent, and to reduce TTHM formation. Following disinfection, VCWD stores the disinfected tertiary recycled water in two concrete-lined reservoirs at the Moorpark WRF. Prior to entering the reservoir, the recycled water passes through a pipe that has an air gap (as required by DDW). This air gap helps aerate the recycled water which further reduces the concentrations of TTHMs because of the volatility of TTHMs. These uncovered storage reservoirs allow for partial degradation of TTHMs. VCWD is also considering converting one of the unlined percolation ponds to a concrete-lined recycled water reservoir, to store additional recycled water, instead of discharging the excess recycled water to unlined percolation ponds, and prevent TTHMs from being discharged to the groundwater basin. The groundwater monitoring wells show that the groundwater basin meets the MCL for TTHMs. The proposed time schedule in section 16 of this Order includes seven months to design a new disinfection system, one year to pre-procure equipment, six months to bid and award the contract, and seven months to build the new disinfection system. Once the disinfection system is constructed, the Permittee has three months to start-up and operate the system, and

three months to commission and optimize the disinfection system. This is an appropriate amount of time given the size and complexity of this project and the fact that the feasibility study of converting to UV has already been completed. The 167 µg/L interim limit is based on the maximum concentration reported from 2011 to 2021. The interim effluent limitation ensures the quality of the discharge will be maintained and because TTHMs have not been detected in the groundwater basin, the interim limit is not expected to cause any additional degradation to the groundwater basin.

8. GLOBAL WARMING AND CLIMATE CHANGE

- 8.1. In Southern California, the predicted impacts of climate change are numerous. Annual average temperatures are expected to increase, coupled with a higher frequency of extreme heat days. A likely consequence of this warmer climate will be more severe drought periods, leading to an increase in the amount and intensity of fires and a longer fire season. In addition, precipitation patterns are likely to be modified. A decrease in snowfall, combined with warmer temperatures, will induce a decrease in the amount and duration of snowpack, an essential source of freshwater to the region. Although changes to mean precipitation are expected to be small, the increasing occurrence of extreme precipitation events will amplify the risk of flooding.
- 8.2. These impacts may affect water quality in multiple ways, including decreases in stream flow, reductions in, and changes to, aquatic habitats, increases in surface water temperature, increases in pollutant levels, sedimentation, algal growth, and changes in salinity levels and acidification in coastal areas. For permitted facilities such as Publicly Owned Treatment Works (POTWs), specific impacts could include, but are not limited to, an increase in the concentration of pollutants entering the facility, an increase in the temperature of effluents and receiving waters, an increase in storm water inflow and infiltration, increase in flooding inundation of facilities, sewer overflows, power outages, pump maintenance issues, and onsite or nearby hillside destabilization.
- 8.3. On March 7, 2017, the State Water Board adopted Resolution No. 2017-0012, Comprehensive Response to Climate Change, responding to the challenges posed by climate change and requiring a proactive approach to climate change in all State Water Board actions, including drinking water regulation, water quality protection, and financial assistance. On May 10, 2018, the Los Angeles Water Board adopted Resolution No. R18-004, *A Resolution to Prioritize Actions to Adapt to and Mitigate the Impacts of Climate Change on the Los Angeles Region's Water Resources and Associated Beneficial Uses*. The resolution summarizes the steps taken to date to address the impacts of climate change within the Los Angeles Water Board's programs, and lists a series of additional steps, including the identification of potential regulatory adaptation and mitigation measures that could be implemented on a short-term and long-term basis by each of the Los Angeles Water Board's programs to mitigate the effects of climate change on water resources and associated beneficial uses where possible.
- 8.4. Section 23.18.2 of this Order and Section 9.11.3 of the Monitoring and Reporting Program includes a requirement to prepare a Climate Change Plan outlining the planned provisions and actions VCWD will take to address climate-related impacts that can cause or contribute to violations of permit requirements and/or degradation of waters of the state.

9. REGULATION OF RECYCLED WATER

- 9.1. State authority to oversee recycled water use is shared with the State Water Board and the regional water boards. The State Water Board is the agency with the primary responsibility for establishing water recycling criteria under 22 CCR to protect the health of the public using the groundwater basins as a source of potable water. The State Water Board establishes general policies governing the permitting of recycled water projects, develops uniform water recycling criteria appropriate to particular uses of water, processes and approves wastewater change petitions filed by wastewater dischargers for recycled water projects that have the potential to decrease flow in any portion of a watercourse such as a river or stream, adopts statewide orders for the permitting of recycled water projects, reviews and approves Title 22 engineering reports for recycled water use, and allocates and disperses funding for recycled water projects consistent with its roles of protecting water quality, public health, and sustaining water supplies. The State Water Board also exercises general oversight of recycled water projects, including review of regional water boards permitting practices. The regional water boards issue permits that include requirements needed to protect water quality, human health, and the environment consistent with the State and Regional Water Quality Control Plans, policies, and applicable law. The regional water boards also exercise their authority to encourage the use of recycled water.
- 9.2. On January 6, 1977, the State Water Board adopted Resolution No. 77-1, Policy with Respect to Water Reclamation in California, which includes principles that encourage and recommend funding for water recycling and its use in water-short areas of the state. On September 26, 1988, the Los Angeles Water Board also adopted Resolution No. 88-012, which encourages the beneficial use of recycled wastewater and supports water recycling projects.
- 9.3. The State Water Board adopted the Recycled Water Policy (State Water Board Resolution No. 2009-0011) on February 3, 2009, and amended the Policy on January 22, 2013 (State Water Board Resolution No. 2013-0003). The Recycled Water Policy was further amended and adopted on December 11, 2018, (State Water Board Resolution No. 2018-0057) by the State Water Board and approved by the Office of Administrative Law (OAL) on April 08, 2019. In part, the purpose of the Recycled Water Policy is to protect groundwater resources and to increase the beneficial use of recycled water from municipal wastewater sources in a manner consistent with state and federal water quality laws and regulations. This Order includes requirements consistent with the Recycled Water Policy.
- 9.4. California Water Code (CWC) section 13523 provides that a regional water board, after consulting with and receiving recommendations from DDW or its delegated local health agency, and after any necessary hearing, shall, if it determines such action to be necessary to protect the health, safety, or welfare of the public, prescribe WRRs for water that is used or proposed to be used as recycled water. CWC section 13523 further provides that, at a minimum, the WRRs shall include, or be in conformance with, the statewide water recycling criteria established by DDW pursuant to CWC section 13521.
- 9.5. CWC section 13523.5, on WRRs, states that a regional water board may not deny issuance of WRRs to a project that violates only a salinity standard in a Basin Plan. This provision does not apply to WDRs. WDRs for projects that recycle water may contain

effluent and other limitations on discharges of salts, as necessary to meet water quality objectives, comply with Antidegradation Policy or otherwise protect beneficial uses, consistent with CWC section 13263 (“The regional board ... shall prescribe requirements as to the nature of any ... discharge... The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241”). This Order permits the discharge of disinfected tertiary recycled water for beneficial reuse, pursuant to 13523 of the CWC. This Order also permits the discharge of effluent into percolation ponds pursuant to Section 13263 of the CWC.

- 9.6. Pursuant to CWC section 13523, the Los Angeles Water Board has consulted with DDW regarding the proposed recycling project and has incorporated their recommendations from the approved Title 22 Engineering Report into this Order.
- 9.7. Section 7.4 of the Recycled Water Policy states that site-specific groundwater monitoring shall not be required for irrigation projects where recycled water is applied at rates that minimize percolation of recycled water below the plants’ root zone and account for the nutrient levels in the recycled water and nutrient demand by plants when applying fertilizers. The Recycled Water Policy also includes exceptions to this exemption from groundwater monitoring including when a regional water board determines there are unique site-specific conditions or such project-specific monitoring is required under the accepted salt and nutrient management plan, applicable basin plan, or other water board program such as the Irrigated Lands Program. This Order does not prescribe any site-specific groundwater monitoring requirements as a result of the application of disinfected tertiary recycled water for irrigation purposes because this Order includes a requirement to apply disinfected tertiary recycled water at agronomic rates.
- 9.8. These WDRs are being issued under CWC section 13263, with site-specific groundwater monitoring requirements due to the unlined percolation ponds since the Los Angeles Water Board has determined that the effluent discharged to the percolation ponds may impact the groundwater basin.
- 9.9. It is the intent of the recycled water policy for salts and nutrients be addressed regionally rather than imposing requirements solely on individual recycled water projects. Section 6.1.2 of the Recycled Water Policy states, “Salts and nutrients from all sources must be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The most effective way to address salt and nutrient loading is typically through the development of regional or subregional salt and nutrient management plans rather than imposing requirements solely on individual recycled water projects or other individual sources of salts and nutrients.” In the case of this facility, the effluent discharged to the percolation ponds and the disinfected tertiary recycled water contain salts in lower concentrations than the upgradient groundwater basin. Discharges in compliance with the effluent requirements in this Order will help improve the concentrations of salts in the basin downgradient of the discharge.

- 9.10. A goal of the Recycled Water Policy is to increase the beneficial use of recycled water from municipal wastewater sources in a manner consistent with state and federal water quality laws and regulations. The Recycled Water Policy directs the regional water boards to collaborate with all stakeholders in the development of SNMPs to manage loadings of salts and nutrients to groundwater basins in a manner that is protective of beneficial uses, thereby supporting the sustainable use of local waters.
- 9.11. The stakeholders within the Calleguas Creek Watershed have developed a draft SNMP dated May 31, 2018. However, since the contractor for the Calleguas Creek Watershed Steering Committee had not completed or submitted certain chapters of the draft SNMP, the incomplete draft SNMP was not approved by the Los Angeles Water Board. In April 2021, representatives from Larry Walker Associates (LWA), the consultant group for the Calleguas Creek Watershed Steering Committee, met with Basin Planning staff from the Los Angeles Water Board to share minor revisions that were made to the draft SNMP. On June 1, 2021, members from the Calleguas Creek Salt Subcommittee met with Los Angeles Water Board staff to share their plan to pursue a tiered approach for further SNMP development, which would assign different levels of further analysis to individual basins based on their basin condition “scores” consistent with the results of the LWA Basins Conditions Memo dated April 30, 2021. The Calleguas Creek Watershed Stakeholders have funded LWA to prepare an SNMP document that will be consistent with the approach presented in the June 1, 2021 meeting. LWA started working on the new SNMP in July 2021 and will leverage as much of the previous SNMP work done by LWA as possible. Salts including chloride have been historically high in the Las Posas Valley Groundwater Basin, so the draft SNMP includes measures to improve the groundwater quality. The 2018 draft SNMP includes plans to build several groundwater desalters throughout the Calleguas Creek watershed and to extend the Calleguas Municipal Water District’s Salinity Management Pipeline (SMP) (currently in operation) further up the watershed. Building desalters, treating local groundwater, conveying the brine in the SMP, and discharging the brine to the ocean will remove excess salts from the watershed. The 2018 Draft SNMP also proposes to expand the use of recycled water produced at the Moorpark WRF by 150 acre-feet a year (AFY) (0.13 MGD) to reduce the amount of potable water that is imported to the watershed. LWA calculated the median groundwater concentrations for well data from 2011 through 2015. There were no notable trends for TDS, sulfate, and boron in the Las Posas Valley Groundwater Basin. Nitrate concentrations tended to be decreasing. However, chloride concentrations showed an increasing trend in the groundwater upgradient of the Moorpark WRF and often exceed the water quality objectives. The chloride concentration of the disinfected tertiary recycled water is currently below the water quality objective of the groundwater basin and the chloride concentration in the disinfected tertiary recycled water is expected to decrease by 7 mg/L once VCWD completes their proposed UV disinfection upgrade. Since the chloride concentration in the disinfected tertiary recycled water is below the water quality objective and it is expected to decrease, application of the disinfected tertiary recycled water to use areas is expected to improve the chloride concentration in the groundwater basin. This Order includes final effluent limitations and monitoring requirements (of both effluent and groundwater) for salts and nitrogen compounds to ensure the groundwater basin is protected and to be able to conduct future trend analyses.

10. APPLICABLE PLANS, POLICIES AND REGULATIONS

- 10.1. California Water Code (CWC) section 13260 requires any person “proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than to a community sewer system,” to file a report of waste discharge. The term “waste” is defined in CWC section 13050(d) to include “sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, . . . prior to, and for purposes of, disposal.” The Discharger proposes to discharge undisinfected secondary-treated effluent and excess disinfected tertiary-treated recycled water that is not used for irrigation, i.e., “waste” to land where it could affect the quality of the waters of the state. Sewage contains various waste constituents, including total dissolved solids (TDS), sulfate, salts (e.g., chloride, boron), bacteria, nitrogen, priority pollutants, and constituents of emerging concern. In accordance with CWC section 13263(g), no discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.
- 10.2. CWC section 13263 authorizes the Los Angeles Water Board, after any necessary hearing, to prescribe requirements as to the nature of any proposed discharge with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements must implement any relevant water quality control plans that have been adopted and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of CWC section 13241.
- 10.3. CWC section 13267 authorizes the Los Angeles Water Board to require that any person who proposes to discharge waste to furnish, under penalty of perjury, technical or monitoring program reports which the Los Angeles Water Board requires. The burden, including costs, of these reports, bears a reasonable relationship to the need for the report and the benefits to be obtained from the reports. This Order incorporates Monitoring and Reporting Program (MRP) No. CI-6374 for VCWD (File No. 64-148), which is necessary to ensure that the discharge of treated wastewater complies with this Order and is protective of human health and the environment.
- 10.4. This Order is adopted pursuant to CWC sections 13263, 13267, and 13523. It sets forth requirements, prohibitions, and other conditions to implement the Basin Plan; prescribes requirements for pretreatment and the Discharger’s responsibilities to implement the approved pretreatment program; and includes an MRP. The Discharger is responsible for ensuring compliance with the WDRs contained in this Order.
- 10.5. This permit is consistent with and implements the Basin Plan, 22 CCR, and other essential plans, policies, and regulations to protect the receiving groundwater quality.
- 10.6. **Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan)** – The Basin Plan (i) designates beneficial uses for surface and groundwater, (ii) establishes narrative and numeric water quality objectives that must be attained or maintained to protect the designated beneficial uses, and (iii) sets forth implementation programs to protect the beneficial uses of the waters of the state. The Basin Plan also incorporates State Water Board Resolution 68-16 “Statement

of Policy with Respect to Maintaining High Quality of Waters in California” (also called the “Antidegradation Policy”). In addition, the Basin Plan incorporates by reference applicable State and Los Angeles Water Board plans and policies and other pertinent water quality policies and regulations. This Order implements the plans, policies and provisions of the Los Angeles Water Board’s Basin Plan.

10.7. The Basin Plan (Chapter 3) incorporates 22 CCR primary MCLs by reference as water quality objectives. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. 22 CCR contains primary and secondary MCLs for inorganic, organic, and radioactive contaminants in drinking water. These MCLs are applicable water quality objectives for receiving waters designated as municipal and domestic supply. Also, the Basin Plan specifies that “Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.” Therefore, the 22 CCR secondary MCLs, which are limits based on aesthetic, organoleptic standards, are applicable water quality objectives for receiving waters designated as municipal and domestic supply. MCLs are used as one of the primary bases for effluent limits for discharges of recycled water in WDRs and WRRs to protect the designated beneficial uses of municipal and domestic supply.

10.8. In addition, the Basin Plan incorporates State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the groundwater are shown in Table 10 as follows:

Table 10. Beneficial Uses of Groundwater

Receiving Water	Beneficial Uses
Las Posas Valley - South of Los Angeles Avenue between Somis Road and Hitch Blvd. (California Department of Water Resources (DWR) Basin No. 4-8)	Existing: Municipal and domestic water supply (MUN), industrial service supply (IND), industrial process supply (PROC), and agricultural supply (AGR).

10.9. The Basin Plan includes the following water quality objectives applicable to the Las Posas Valley Basin No. 4-8, South of Los Angeles Avenue between Somis Road and Hitch Blvd., are shown in Table 11:

Table 11. Water Quality Objectives for Las Posas Valley Basin

Pollutant	Units	Limit
Total dissolved solids (TDS)	mg/L	1500
Chloride	mg/L	250
Sulfate	mg/L	700
Boron	mg/L	1.0

10.10. **Publicly Owned Treatment Works (POTW)** – The term POTW means a treatment works as defined by section 212 of the federal Clean Water Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes

and other conveyances only if they convey wastewater to a POTW treatment facility. The term also means the municipality as defined in section 502(4) of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such treatment works. (40 Code of Federal Regulations [CFR] 403.3(q).) The Moorpark WRF meets all above criteria and therefore is considered a POTW.

10.11. Pursuant to CWC section 13263, the requirements of this Order take into consideration the provisions of CWC section 13241, including the following factors.

10.11.1. Past, present, and probable future beneficial uses of water:

The receiving water for discharges from the Moorpark WRF is the Las Posas Valley Groundwater Basin. According to VCWD's 2021 Drinking Water Annual Report, groundwater from four local groundwater wells comprises 22% of the potable water supply for the VCWD service area. The effluent limitations in this Order are specified to maintain the beneficial uses of this basin: municipal and domestic water supply (MUN), industrial service supply (IND), industrial process supply (PROC), and agricultural supply (AGR). This Order also specifies effluent limitations protective of the beneficial uses and includes effluent and receiving water monitoring and reporting requirements to verify that discharges will not adversely affect the beneficial uses of groundwater.

10.11.2. Environmental characteristics of the hydrographic unit under consideration, including the quality of the water available thereto:

This Order incorporates the site-specific water quality objectives for groundwater in the Basin Plan, considering geology, hydrogeology, and hydrology. Based on recent and historical data, the groundwater basin currently has high quality water, but is experiencing increases in salt and nitrogen loading from anthropogenic sources. The Moorpark WRF will produce effluent quality that is better than the upgradient groundwater quality and will comply with the state's Antidegradation Policy (Resolution No. 68-16). The project will therefore limit further groundwater degradation by salts.

10.11.3. Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area:

The Las Posas Valley Basin has been designated as a high priority under SGMA. The basin is unadjudicated and will require the formation of a Groundwater Sustainability Agency and the development of a Groundwater Sustainability Plan. As discussed in Finding 9.11, LWA, on behalf of the Calleguas Creek Watershed Steering Committee, will develop a Salt and Nutrient Management Plan for the Las Posas Valley groundwater basin and other groundwater basins in the Calleguas Creek Watershed.

10.11.4. Economic considerations:

The upgrade of the Moorpark WRF to treat nitrogen compounds was done to comply with the Nitrogen Compound Total Maximum Daily Load (TMDL) in the Calleguas Creek watershed. Installation of a reverse osmosis system at the Moorpark WRF is not currently economically feasible, since VCWD has plans to build a desalter in the region to treat local groundwater prior to serving it as

drinking water to its service area. A technical memorandum was prepared to evaluate the alternatives to upgrade the disinfection system from chlorination to UV light disinfection.

10.11.5. The need for developing housing within the region:

According to the Southern California Association of Governments, the City of Moorpark had a population of 37,044 in 2018. Only 10.6% of the housing stock was built before 1970, while 89.4% was built after 1970. The Hitch Ranch Specific Plan (SCH # 2019070253) proposes to build a total of 755 housing units, consisting of 427 detached single-family residences, 193 multi-family dwellings, and 135 affordable rental apartment homes.

10.11.6. The need to develop and use recycled water:

VCWD is authorized to distribute and beneficially reuse disinfected tertiary recycled water, under existing waste discharge requirements (Order No. R4-2002-0028) for crop and landscape irrigation. VCWD plans on expanding the amount of recycled water it distributes and is working with DDW staff to obtain approval of a revised Title 22 Engineering report to expand the use area and to include new uses. (See section 5.4 above).

10.12. **AB685 – CWC Section 106.3** – It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels developed to protect human health and ensure that water is safe for domestic use. The Moorpark WRF is located 3.71 miles upgradient of the nearest drinking water well (VCWD No. 19 Somis Drinking Water Well No. 03). VCWD's 2021 Consumer Confidence Report indicates that total coliform bacteria and *E. coli* were not detected in the groundwater used for potable drinking supply and the primary and secondary MCLs were met. Thus, allowing temporary continued discharges of total coliform and TTHMs at the current concentrations permitted herein (see section 16) are not expected to cause an exceedance in downgradient drinking water wells.

10.13. **Antidegradation Policy, State Water Board Resolution No. 68-16** – State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California" adopted by the State Water Board on October 28, 1968) requires that, whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality must be maintained. Resolution 68-16 only allows change in the existing high quality if it has been demonstrated to the Water Board that the change is 1) consistent with maximum benefit to the people of the State, 2) will not unreasonably affect present and anticipated beneficial uses of such water, and 3) will not result in water quality less than that prescribed in the policies. Resolution 68-16 further requires that discharges meet WDRs which will result in the best practicable treatment or control of the discharge necessary to assure that (a) pollution or nuisance will not occur and (b) the highest water quality consistent with the maximum benefit to the people of the State will be maintained. Allowing the continued percolation of treated effluent to percolation ponds is to the maximum benefit to the people of the State. The ponds are necessary infrastructure that make it possible to incidentally recharge the

groundwater basin, which reduces the region's dependence on imported potable water while also reducing the mass of salts and nutrients that would otherwise be discharged to Arroyo Las Posas. Further, this Order ensures that the discharge will not unreasonably affect present and anticipated beneficial uses of such water, will not result in water quality less than that prescribed in the policies, and will result in the best practicable treatment or control of the discharge necessary to assure that (a) pollution or nuisance will not occur and (b) the highest water quality consistent with the maximum benefit to the people of the State will be maintained. See detailed discussion in Section 11 of this Order.

10.14. The need for technical and monitoring reports required by this Order, including the MRP, are based on the Report of Waste Discharge (ROWD) and other information in the Los Angeles Water Board's files for the facility. The technical and monitoring reports are necessary to assure compliance with these WDRs. The burden, including costs, of providing the technical reports required by this Order bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. Specifically, the required monitoring will confirm that the operations of the Moorpark WRF meet the parameters of this Order and complies with the Basin Plan, thus protecting human health and the environment.

10.15. **Environmental Justice and Advancing Racial Equity.** When issuing or reissuing individual waste discharge requirements or waivers of waste discharge requirements that regulate an activity or a facility that may impact a disadvantaged or tribal community, and that includes a time schedule in accordance with subdivision (c) of Section 13263 for achieving an applicable water quality objective, an alternative compliance path that allows time to come into compliance with water quality objectives, or a water quality variance, the regional board shall make a finding on potential environmental justice, tribal impact, and racial equity considerations. (Water Code § 13149.2, effective Jan. 1, 2023) Water Code section 189.7 requires the Los Angeles Water Board to conduct outreach in affected disadvantaged and/or tribal communities. The Los Angeles Water Board is also committed to developing and implementing policies and programs to advance racial equity and environmental justice so that race can no longer be used to predict life outcomes, and outcomes for all groups are improved.

This Order regulates a facility that doesn't impact a disadvantaged community defined at Water Code section 189.7(d)(1) but may impact tribal communities. The Order also authorizes a time schedule for two years and four months for Moorpark WRF to comply with Maximum Contaminant Levels for TTHMs and to comply with the bacteria objective at a new compliance point. The area around the facility has a Cal Enviro score of 71 that may indicate that the surrounding community may be disproportionately burdened by pollution. In addition, the downgradient wells may be used to supply water to nearby farms. Therefore, the Los Angeles Water Board has conducted outreach per Water Code section 189.7 by reaching out to surrounding communities and tribal communities about this Order. Pursuant to Water Code section 13149.2, the Los Angeles Water Board reviewed readily available information and any information raised to the Board by interested persons concerning anticipated water quality impacts in disadvantaged or tribal communities resulting from adoption of this Order. The Board also considered any

environmental justice concerns within the Board's authority and raised by interested persons with regard to those impacts.

In accordance with the Water Boards' efforts to advance racial equity, the Order requires the Permittee to meet water quality standards to protect public health and the environment, thereby benefitting all persons and communities within the Region. The Los Angeles Water Board anticipates that the issuance of this Order will not result in water quality impacts to disadvantaged or tribal communities or raise environmental justice concerns. The time schedule in this Order permits temporary excursions above the water quality objectives for TTHMs and the compliance point for bacteria indicators is temporarily maintained at the downgradient monitoring well. However, for the duration of the time schedule, the Facility is expected to maintain current operations and based on current monitoring data no significant change to groundwater quality is expected. The City of Moorpark, in the vicinity of the Moorpark WRF, has a Cal Enviro Score of 63 out of 100, which is considered a low threat for groundwater threats. The continued operation of the Facility and use of the percolation ponds is not expected to exacerbate or impact the downgradient agricultural supply wells or the nearest drinking water well because it is over 3 miles downgradient. Under the prior permit, bacteria was only detected once in the downgradient monitoring well and has not been detected in the nearest downgradient potable supply well. Likewise, TTHMs have not been detected in the downgradient monitoring wells or the nearest potable supply well. Nevertheless, the Los Angeles Water Board has determined that the requirements of the Order for TTHMs and bacteria should be made more stringent to address any potential water quality impacts from this Facility. At the conclusion of the proposed time schedule, the WDRs will become more stringent because the compliance point for bacteria indicators will be at the entrance of the effluent pond, rather than at the downgradient monitoring well and the MCL for TTHMs will need to be met. The Moorpark WRF is installing a UV light disinfection facility to treat the effluent prior to discharging to the percolation ponds to meet the more stringent limits. Therefore, the Los Angeles Water Board expects that water quality in the Moorpark WRF's discharge will ultimately improve with respect to TTHMs and bacteria. (See also the anti-degradation analysis in section of 11 of this Order for additional discussion of projected impacts to groundwater from this Facility).

11. ANTIDegradation ANALYSIS

- 11.1. This Order allows percolation of both the secondary-treated effluent and the disinfected tertiary recycled water to groundwater from unlined storage ponds at the Facility. This Order also requires the secondary-treated effluent and the disinfected tertiary recycled water to meet MCLs for drinking water and groundwater quality objectives in the Basin Plan, including those for nitrogen compounds, TDS, sulfate, boron, and chloride. Since the secondary-treated effluent and the disinfected tertiary recycled water are required to meet the applicable MCLs and the Basin Plan water quality objectives, this Order is protective of the potential and existing beneficial uses, including MUN, and ensures any potential degradation of groundwater quality will be minimal as a result of the discharge.
- 11.2. There is no approved SNMP for the groundwater basin. However, a preliminary draft SNMP dated May 31, 2018, prepared by Larry Walker Associates estimated the assimilated capacity of salts and nutrients in various groundwater basins. A technical memorandum, dated March 8, 2021, submitted by Larry Walker Associates,

summarized their estimated assimilative capacity for five groundwater basins in the Calleguas Creek Watershed, based on data from 2011 to 2015. The memo also evaluated the percentage of the basin that was covered with irrigated agriculture. Using GIS data from the Ventura County Irrigated Agricultural Lands Group (VCAILG), Larry Walker Associates calculated that out of 44,622 acres in the basin, 25,255 acres, or 56.6% was covered by irrigated land. The estimated assimilative capacity for Las Posas Valley south of Los Angeles Avenue between Somis Road and Hitch Boulevard is as follows:

Table 12. LWA Estimated Assimilative Capacity for Salts and Nitrate

Pollutant	Water Quality Objective (mg/L)	Current Water Quality (mg/L)	Available Assimilative Capacity (mg/L)	Available Assimilative Capacity (%)
Total dissolved solids (TDS)	1500	1447	53	3.5%
Sulfate	700	568	132	18.9%
Chloride	250	187	63	25.2%
Boron	1	0.8	0.2	20%
Nitrate as N	10	4.8	5.2	52%

The application of effluent to the percolation ponds and the use of recycled water is not expected to negatively impact the salt and nutrient concentrations in the groundwater basin because the concentrations of salts and nutrients in the effluent are lower than the water quality objective and lower than the upgradient concentrations. The assimilative capacity of the groundwater basin would not be used up more than what is allowed by the Recycled Water Policy.

- 11.3. Effluent limitations included in this Order ensure that pollution or nuisance will be minimized and the highest water quality consistent with the maximum benefit to the people of the state will be maintained. In addition, this Order further minimizes pollution and nuisance by requiring disinfected tertiary recycled water to be used at agronomic rates to minimize percolation of recycled water below the plants root zone.
- 11.4. This Order will prevent unreasonable threats to present and anticipated beneficial uses and is not expected to result in receiving groundwater quality that exceeds water quality objectives set forth in the Basin Plan. Final effluent limitations for each waste constituent are based on the most stringent applicable water quality objective to protect the most sensitive beneficial use of the receiving waterbody; thus, all potential and existing beneficial uses are protected. A discussion of the basis for each effluent limitation is provided in section 12 below. A monitoring and reporting program is also included in this Order to ensure the effluent limitations continue to be met. Accordingly, the discharge is consistent with the antidegradation provisions of Resolution 68-16.
- 11.5. Since the undisinfected secondary-treated effluent exceeds the Basin Plan water quality objectives for total and fecal coliform, a time schedule with interim compliance points and a schedule of tasks the Discharger needs to complete to meet the final effluent limitations is included in this Order. The time schedule requires the Discharger to maximize use of tertiary treatment and percolation ponds connected to the tertiary treatment and allows the discharger to continue discharging any excess undisinfected

secondary effluent to the percolation ponds until a new treatment system is built. An interim compliance point for total and fecal coliform is set at the current compliance point at downgradient monitoring Well No. MW-2 and 3. Maintaining compliance at the groundwater monitoring locations is not expected to negatively impact the groundwater basin because the water quality objective has not been exceeded since May 22, 2012, and it is expected the water quality of the effluent will remain consistent for the duration of the time schedule. In addition, VCWD will maximize the use of the tertiary treatment system during construction to minimize the amount of undisinfected secondary effluent that is discharged to the percolation ponds, further reducing the amount of total and fecal coliform discharged to the percolation ponds. Allowance of a time schedule, and any minimal degradation that occurs due to percolation to the groundwater from the percolation ponds prior to the completion of the tasks in the time schedule, is also to the maximum benefit to the people of the State because the historic monitoring data has shown only one exceedance of the relevant total and fecal coliform limits (most recently in 2012) and the discharge will help recharge the groundwater basin, increase the local water supply, and decrease the dependence on imported water supply. This Order requires continued groundwater monitoring for total and fecal coliform and adds effluent monitoring to ensure the groundwater basin continues to meet the water quality objectives.

- 11.6. Since the disinfected tertiary recycled water currently exceeds the drinking water MCL for TTHMs, a time schedule with interim effluent limitations and a schedule of tasks the Discharger needs to complete to meet the final effluent limitations is included in this Order. The interim effluent limitations for TTHMs is equivalent to the maximum effluent concentration observed between 2011 and 2021. Although the interim effluent limitation allows a temporary excursion above the drinking water MCL, the interim limitation is not expected to negatively impact the groundwater basin because TTHMs has not been detected in the downgradient groundwater monitoring wells. The effluent is therefore not expected to impact the assimilative capacity of TTHMs in the Las Posas Valley Groundwater Basin. Allowance of a time schedule, and any minimal degradation that occurs due to percolation to the groundwater from the percolation ponds or irrigation prior to the completion of the tasks in the time schedule, is also to the maximum benefit to the people of the State because the discharge will help recharge the groundwater basin, increase the local water supply, and decrease the dependence on imported water supply. This Order requires continued groundwater monitoring for TTHMs, to ensure the groundwater basin continues to meet the water quality objectives. The time schedule will allow the discharger to continue treating wastewater and distributing recycled water for non-potable uses while conducting the tasks needed to comply with the final effluent limitation.

12. RATIONALE FOR LIMITATIONS

The numeric effluent limitations imposed by this Order are based on the following:

12.1. TDS, Chloride, Sulfate, and Boron

Human activities and land use practices can influence inorganic constituents in groundwater. Abnormally high levels of inorganic constituents (such as TDS, chloride, sulfate, and boron) can impair beneficial uses. The discharge limitations for TDS, chloride, sulfate, and boron are equivalent to the numeric mineral water quality

objectives for the Las Posas Valley Groundwater Basin in Table 3-13 of the Basin Plan. These effluent limitations are also within the secondary MCL “Consumer Acceptance Contaminant Level Ranges” in 22 CCR § 64449 (for TDS, chloride, and sulfate) and below the notification level for boron.

12.2. **Nitrogen Compounds**

High nitrate levels in drinking water can cause health problems in humans. Infants are particularly sensitive and can develop methemoglobinemia (blue-baby syndrome). Human activities and land use practices can also influence the nitrogen concentration in groundwater. The effluent limitations in this Order for nitrate, nitrite, and the sum of nitrate and nitrite are based on the regional objectives for groundwater in the Basin Plan and the MCLs for nitrate, nitrite, and the sum of nitrate and nitrite in 22 CCR § 64431.

12.3. **Bacteria Indicators**

Bacteria Indicators are used to indicate the likelihood of pathogenic bacteria in groundwater. The total coliform and fecal coliform bacteria indicator effluent limitations for the effluent discharged to the percolation ponds are based on the water quality objectives for the protection of the MUN beneficial use for groundwaters in Chapter 3 of the Basin. The total coliform effluent limitations for disinfected tertiary recycled water are based on the definition of disinfected tertiary recycled water in 22 CCR § 60301.230.

12.4. **Turbidity**

Turbidity is an expression of the optical property that causes light to be scattered in water due to particulate matter such as clay, silt, organic matter, and microscopic organisms. The turbidity effluent limitations are based on the definition of filtered wastewater in 22 CCR § 60301.320.

12.5. **Oil and Grease**

The oil and grease effluent limitations are based on the narrative taste and odor water quality objective for ground water in the Basin Plan. The narrative water quality objectives were translated into numeric limitations based on treatment levels that are achievable by similar wastewater treatment systems. The Moorpark WRF influent contains waste from commercial establishments and households that discharge oil and grease products to the sewer system, so oil and grease has the potential of being present in the effluent.

12.6. **Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), and Settleable Solids**

The biochemical oxygen demand, total suspended solids, and settleable solids effluent limitations are indicative of treatment levels that are achievable by similar wastewater treatment systems.

12.7. **Methylene Blue Activated Substances (MBAS)**

The methylene blue activated substances effluent limitations are based on the secondary drinking water standard in 22 CCR § 64449 and consistent with the water quality objective in the Basin Plan for waters designated with a municipal and domestic supply beneficial use designation.

12.8. Total Trihalomethanes (TTHMs)

The TTHMs effluent limitations are based on the primary drinking water standard in 22 CCR § 64533, consistent with the water quality objective in the Basin Plan for waters designated with a municipal and domestic supply beneficial use designation.

12.9. Nickel

The nickel effluent limitations are based on the primary drinking water standard in 22 CCR § 64431, consistent with the water quality objective in the Basin Plan for waters designated with a municipal and domestic supply beneficial use designation.

12.10. Bis(2-ethylhexyl) phthalate

The bis(2-ethylhexyl)phthalate effluent limitations are based on the primary drinking water standard in 22 CCR § 64444, consistent with the water quality objective in the Basin Plan for waters designated with a municipal and domestic supply beneficial use designation.

12.11. Carbon Tetrachloride

The carbon tetrachloride effluent limitations are based on the primary drinking water standard in 22 CCR § 64444, consistent with the water quality objective in the Basin Plan for waters designated with a municipal and domestic supply beneficial use designation.

13. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) AND NOTIFICATION

- 13.1. VCWD is the lead agency for purposes of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq). VCSD released a Notice of Preparation (NOP) on November 21, 2000. The NOP provided notice to the public and public agencies that an Environmental Impact Report (EIR) would be prepared for the expansion of the Moorpark WRF to provide secondary treatment capacity of 5 MGD and tertiary treatment of 3 MGD. Such expansion was envisioned in the 1996 Master Plan and the 1998 Preliminary Design Report for the Moorpark WRF Phase I Upgrade. The Draft EIR was released for public comment on April 18, 2001, with notices mailed to the State Clearinghouse for circulation to responsible agencies (SCH No. 2000111127). The comments were due on June 4, 2001. On September 25, 2001, the County of Ventura Board of Supervisors certified the Final Focused Environmental Impact Report (FEIR).
- 13.2. Mitigation measures were made a condition of the approval of the project. A Statement of Overriding Considerations was also adopted for this project on September 25, 2001. Findings were made pursuant to the provisions of CEQA.
- 13.3. In March 2009, VCWD prepared an Addendum to the FEIR because changes to the relevant project had occurred since the FEIR had been certified. The addition of UV disinfection, construction of an additional six sludge drying beds, and the addition of 1,000 square feet of space to the operations building are no longer being proposed as part of the FEIR. On March 31, 2010, VCWD found that new significant environmental effects or a substantial increase in the severity of previously identified significant effects were not expected to occur because of changes to the project. No substantial changes in circumstances have occurred and no new information of substantial importance has

arisen which would require a subsequent or supplemental EIR or a subsequent Notice of Determination.

The Los Angeles Water Board, as a responsible agency under CEQA, finds that all environmental effects have been identified for project activities that it is required to approve, and that the Project will not have significant adverse impacts on the environment provided that the mitigation presented in the final EIR/EIS and any subsequent documents, is carried out as conditioned by this Order. In adopting this Order, the Los Angeles Water Board has eliminated or substantially lessened the less-than-significant effects on water quality, and therefore approves the project.

- 13.4. This Order includes a monitoring and reporting program to determine compliance with the terms of the Order and to ensure protection of water quality.
- 13.5. **Petition** - Any person aggrieved by this action of the Los Angeles Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and CCR Title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or a state holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. Copies of the law and regulations applicable to filing [Water Quality Petitions | California State Water Resources Control Board](#) (http://waterboards.ca.gov/public_notices/petitions/water_quality) may be found on the State Water Boards' website.
- 13.6. **Public Notice** – The Los Angeles Water Board notified VCWD and interested agencies and persons of its intent to issue this Order to consolidate the two separate WRRs and WDRs into one Order; to revise and replace WDRs in Order No. 00-048 with updated treatment processes, pretreatment requirements, and effluent and groundwater limitations for the distribution and use of secondary-treated effluent, to provide time schedules for total trihalomethanes, total coliform, and fecal coliform, and to incorporate tertiary-treatment requirements to allow VCWD to continue distributing recycled water to users. The Los Angeles Water Board has provided VCWD and interested agencies and persons with an opportunity to submit written comments.

THEREFORE, IT IS HEREBY ORDERED that Order No. 00-048 and R4-2002-0028 are rescinded upon the effective date of this Order except for enforcement purposes, and in order to meet the provisions contained in division 7 of the CWC (commencing with section 13000) and regulations and guidelines adopted thereunder, and CCR, title 22, division 4, chapter 3, VCWD shall comply with the following requirements in this Order:

14. INFLUENT SPECIFICATIONS

- 14.1. Influent waste shall be limited to domestic, commercial, and industrial municipal wastewater, and stormwater from the Moorpark WRF.

15. FINAL EFFLUENT AND DISINFECTED TERTIARY RECYCLED WATER LIMITATIONS

15.1. FINAL EFFLUENT LIMITATIONS FOR DISCHARGES TO THE PERCOLATION PONDS

15.1.1. Secondary-treated effluent produced at the Moorpark WRF shall not exceed the design capacity of 5 MGD.

15.1.2. The effluent shall not contain pollutants in excess of the following limits listed in Table 13.

Table 13. Effluent Limitations for Discharge to Percolation Ponds

Parameters	Units	Average Monthly	Average Weekly	Maximum Daily	Notes
Biochemical Oxygen Demand (BOD ₅ 20°C)	mg/L	30	45	--	--
BOD ₅ 20°C	lbs/day	1,250	1,880	--	a
Total Suspended Solids (TSS)	mg/L	30	45	--	--
TSS	lbs/day	1,250	1,880	--	a
Removal Efficiency for BOD ₅ 20°C and TSS	%	≥85	--	--	--
Settleable Solids	mL/L	0.1	--	0.3	--
Total coliform	MPN/100 mL	--	1.1	--	b
Fecal coliform	MPN/100 mL	--	1.1	--	b
Oil and Grease	mg/L	10	--	15	--
Oil and Grease	lbs/day	417	--	625	a
Total Dissolved Solids	mg/L	1,500	--	--	--
Total Dissolved Solids	lbs/day	62,550	--	--	a
Chloride	mg/L	250	--	--	--
Chloride	lbs/day	10,425	--	--	a
Sulfate	mg/L	700	--	--	--
Sulfate	lbs/day	29,190	--	--	a
Boron	mg/L	1	--	--	--
Boron	lbs/day	42	--	--	a
Nitrate + Nitrite (as Nitrogen)	mg/L	10	--	--	--
Nitrate + Nitrite (as Nitrogen)	lbs/day	417	--	--	a
Nitrate (as Nitrogen)	mg/L	10	--	--	--
Nitrate (as Nitrogen)	lbs/day	417	--	--	a
Nitrite (as Nitrogen)	mg/L	1	--	--	--
Nitrite (as Nitrogen)	lbs/day	42	--	--	a
Methylene blue activated substances (MBAS)	mg/L	0.5	--	--	--
MBAS	lbs/day	21	--	--	a
Nickel	µg/L	100	--	--	--
Nickel	lbs/day	4.2	--	--	a
Total Trihalomethanes (TTHMs)	µg/L	80	--	--	---

Parameters	Units	Average Monthly	Average Weekly	Maximum Daily	Notes
TTHMs	lbs/day	3.3	--	--	a
Bis(2-ethylhexyl)phthalate	µg/L	4	--	--	--
Bis(2-ethylhexyl)phthalate	lbs/day	0.2	--	--	a
Carbon tetrachloride	µg/L	0.5	--	--	--
Carbon tetrachloride	lbs/day	0.02	--	--	a

Footnotes for Table 13

- a. The mass-based limit is based on the secondary treatment design flow rate of 5.0 MGD.
- b. The concentration of coliform organisms over any seven-day period shall be less than 1.1 Most Probable Number (MPN) or Colony Forming Units (CFU) per 100 milliliters.

End of Footnotes for Table 13

- 15.1.3. The effluent values for pH shall be maintained within the limits of 6.5 standard units and 8.5 standard units.
 - 15.1.4. The effluent shall not contain trace, toxic and other constituents in concentrations exceeding the applicable maximum contaminant levels for drinking water established by the DDW in sections 64431, 64442, 64443, 64444, and 64533, Article 5, Chapter 15, Title 22 of the CCR, or subsequent revisions, or at levels that adversely affect the beneficial uses of receiving groundwater. Concentrations of contaminants in the effluent shall, at all times, not exceed MCLs.
 - 15.1.5. The effluent shall not contain constituents in concentrations exceeding the applicable maximum contaminant levels for drinking water established by the DDW in section 64449 Article 5, Chapter 15, Title 22 of the CCR, or subsequent revisions, or at levels that contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect the beneficial uses of the receiving groundwater.
 - 15.1.6. The effluent shall not contain ammonia in concentrations that, when oxidized to nitrate, will impact groundwater quality.
 - 15.1.7. The effluent shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect the beneficial uses of the receiving groundwater.
 - 15.1.8. The effluent that could affect the receiving groundwater shall not contain any substances in concentrations toxic to human, animal, or plant life.
- 15.2. DISINFECTED TERTIARY RECYCLED WATER LIMITATIONS**
- 15.2.1. Treatment of disinfected tertiary recycled water shall be as described in the findings of this Order and as described in DDW’s conditional approval letter issued on October 18, 2021.
 - 15.2.2. The disinfected tertiary recycled water produced at the Facility shall not exceed the design capacity of 3.0 MGD.

15.2.3. The disinfected tertiary recycled water produced at the Moorpark WRF downstream of the chlorination basin shall not contain pollutants in excess of the following limits listed in Table 14.

Table 14. Disinfected Tertiary Recycled Water Limitations

Parameters	Units	Average Monthly	Average Weekly	Maximum Daily	Notes
Biochemical Oxygen Demand (BOD ₅ 20°C)	mg/L	30	45	--	--
Total Suspended Solids (TSS)	mg/L	30	45	--	--
Settleable Solids	mL/L	0.1	--	0.3	--
Total coliform	MPN/100 mL	23	2.2	240	a
Turbidity	NTU	--	2	5	b
Oil and Grease	mg/L	10	--	15	--
Total Dissolved Solids	mg/L	1,500	--	--	--
Chloride	mg/L	250	--	--	--
Sulfate	mg/L	700	--	--	--
Boron	mg/L	1	--	--	--
Nitrate + Nitrite (as Nitrogen)	mg/L	10	--	--	--
Nitrate (as Nitrogen)	mg/L	10	--	--	--
Nitrite (as Nitrogen)	mg/L	1	--	--	--
Methylene blue activated substances (MBAS)	mg/L	0.5	--	--	--
Nickel	µg/L	100	--	--	--
Total Trihalomethanes (TTHMs)	µg/L	80	--	--	---
Bis(2-ethylhexyl)phthalate	µg/L	4	--	--	--
Carbon tetrachloride	µg/L	0.5	--	--	--

Footnotes for Table 14

- a. The median concentration of total coliform bacteria measured in the disinfected effluent shall not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does 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 per 100 milliliters (22 CCR § 60301.230).
- b. The turbidity levels for filtered wastewater shall not exceed any of the following: 1) An average of 2 NTU within a 24-hour period, 2) 5 NTU more than 5% of the time within a 24-hour period, and 3) 10 NTU at any time (22 CCR § 60301.320).

End of Footnotes for Table 14

15.2.4. The pH shall be maintained within the 6.5 standard units and the 8.5 standard units.

- 15.2.5. Disinfected tertiary recycled water shall not contain trace constituents or other substances in concentrations exceeding the limits contained in the current edition of DDW's Drinking Water Standards.
- 15.2.6. Disinfected tertiary recycled water that could affect the receiving groundwater shall not contain any substances in concentrations toxic to human, animal, or plant life.
- 15.2.7. Disinfected tertiary recycled water shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect the beneficial uses of the receiving groundwater.
- 15.2.8. The use of disinfected tertiary recycled water shall not impact tastes, odors, color, foaming, or other objectionable characteristics to the receiving water.
- 15.2.9. **Maximum Contaminant Level (MCL) Trigger Mechanism**
 - a. The final effluent produced at the Moorpark WRF will be monitored annually for all pollutants with MCLs for drinking water established by DDW and included in Attachment F. If the annual sampling result of these pollutants (target chemicals) exceeds the corresponding MCL, using the criteria established in the Monitoring and Reporting Program (MRP) CI No.6374, then VCWD will perform monthly effluent monitoring for these target chemicals until the MCL is met in two consecutive months, at which point VCWD may resume the regular frequency of testing. If the final effluent continues to exceed a pollutant's MCL six months after the initial exceedance, VCWD shall initiate an investigation into the cause of the exceedance and determine an appropriate remedy to bring the final effluent back into compliance. VCWD shall submit a final report to the Los Angeles Water Board describing the issue and the actions VCWD performed to alleviate the problem.
 - b. **Exceedances of Monitored Pollutants** – This Order may be reopened to include limitations or increased monitoring frequencies for constituents that exceed the applicable Basin Plan water quality objective or drinking water MCL.
 - c. **Attenuation Study** – An attenuation study may be conducted for the target chemicals where MCLs are exceeded, as described in the MRP. VCWD shall submit a work plan, acceptable to the Executive Officer, detailing the proposed attenuation study within 120 days after an average annual result exceeds the pollutant's MCL.

16. TIME SCHEDULE WITH INTERIM LIMITATIONS AND COMPLIANCE POINTS

16.1. **Indicator Bacteria**

- 16.1.1. The Moorpark WRF's discharge of secondary-treated effluent to percolation ponds does not meet the fecal and total coliform effluent limitations in section 15.1.2 in Table 13 of this Order; therefore, VCWD shall implement the following time schedule and complete each milestone by the date indicated:

Table 15. Time Schedule Tasks and Deadlines for Indicator Bacteria

Activity	Start Date	Completion Date	Duration
50% Design of a new disinfection system	04/27/2023	08/27/2023	4 months
UV Equipment Pre-procurement	08/27/2023	08/27/2024	1 year
Complete Design of a new disinfection system	08/27/2023	11/27/2023	3 months
Prepare a revised-Title 22 Engineering Report for new disinfection system and submit it to DDW and Los Angeles Water Board for review	11/27/2023	01/27/2024	2 months
Bid and award construction contract	01/27/2024	07/27/2024	6 months
Construct new disinfection system	07/27/2024	02/27/2025	7 months
Start-up and optimize disinfection system	02/27/2025	05/27/2025	3 months
Commission disinfection system & seek DDW approval of revised-Title 22 Engineering Report for new disinfection system	05/27/2025	08/27/2025	3 months

16.1.2. **Interim Compliance Points.** From April 27, 2023 through August 27, 2025, compliance with the 1.1 MPN effluent limitation for discharges to the percolation ponds will continue to be assessed at the down-gradient monitoring wells. After October 27, 2024, compliance with the 1.1 MPN effluent limitation for discharges to the percolation ponds shall be assessed at MW-3 until replacement well MW-2 becomes operational, at which point MW-2 will be the new interim compliance point.

16.2. Total Trihalomethanes

16.2.1. The Moorpark WRF’s discharge of disinfected tertiary recycled water to percolation ponds will not meet the TTHMs effluent limitation in Table 14; therefore, VCWD shall implement the following time schedule and complete each milestone by the date indicated:

Table 16. Time Schedule Tasks and Deadlines for TTHMs

Activity	Start Date	Completion Date	Duration
50% Design of a new disinfection system	04/27/2023	08/27/2023	4 months
UV Equipment Pre-procurement	08/27/2023	08/27/2024	1 year
Complete Design of a new disinfection system	08/27/2023	11/27/2023	3 months
Prepare a revised-Title 22 Engineering Report for new disinfection system and submit it to DDW and Los Angeles Water Board for review	11/27/2023	01/27/2024	2 months
Bid and award construction contract	01/27/2024	07/27/2024	6 months
Construct new disinfection system	07/27/2024	02/27/2025	7 months
Start-up and optimize new disinfection system	02/27/2025	05/27/2025	3 months

Activity	Start Date	Completion Date	Duration
Commission disinfection system & seek DDW approval of revised-Title 22 Engineering Report for new disinfection system	05/27/2025	08/27/2025	3 months

16.2.2. The Total trihalomethanes (TTHMs) interim disinfected tertiary recycled water limitations are set at the maximum reported concentration from 2011 to 2021, beginning on April 27, 2023 through August 27, 2025, as follows:

Table 17. Interim Disinfected Tertiary Recycled Water Limitations for TTHMs

Parameters	Units	Average Monthly
Total trihalomethanes	µg/L	167 µg/L

- 16.3. During the timeframe prior to completion of construction of the new disinfection system, the Permittee shall maximize use of the tertiary treatment and lined ponds, in order to minimize the risk of discharging secondary undisinfectated effluent with coliform above the WQO.
- 16.4. The Permittee shall submit progress reports no later than 14 days following the completion date of each milestone including a description of efforts taken by the Discharger toward achieving compliance with the final effluent and disinfected tertiary recycled water limitations. The reports shall summarize the progress to date, activities conducted since the last progress report, and future activities planned. The reports shall also state whether the Discharger was in compliance with the interim limitations during the reporting period.
- 16.5. The Permittee shall achieve full compliance with the final effluent and disinfected tertiary recycled water limitations for total coliform, fecal coliform, and TTHMs in this Order as soon as possible, but no later than the dates specified in sections 16.1 and 16.2 above.
- 16.6. The Permittee shall submit a request to the Los Angeles Water Board for any modifications to the time schedule if the Permittee is unable to meet any of the deadlines in the time schedule above or if the Permittee determines the final effluent or disinfected tertiary recycled water limitation will not be achieved by the deadline.

17. GENERAL REQUIREMENTS

- 17.1. VCWD shall, at all times, properly operate and maintain all treatment facilities and control systems (and related appurtenances), which are installed or used by VCWD to achieve compliance with the conditions of this Order. Proper operation and maintenance include: effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls (including appropriate quality assurance procedures).
- 17.2. Dischargers shall operate and maintain facilities, treatment operations, associated collection systems and outfalls in ways to preclude adverse impacts to surface water or groundwater from impacts predicted to occur due to climate change.

- 17.3. The Moorpark WRF and areas where any potential pollutants are stored shall be adequately protected from inundation and damage by storm flows and run-off.
- 17.4. Standby or emergency power facilities and/or sufficient capacity shall be provided for treated wastewater storage during rainfall or in the event of plant upsets or outages.
- 17.5. Adequate facilities shall be provided to protect the Moorpark WRF, treatment system devices, and sewer collection system from damage by storm flows and runoff or runoff generated by a storm with a 1-percent chance of occurring in a 24-hour period in any given year.
- 17.6. The treatment system, including the collection system that is a part of the treatment system and the disposal system, shall be maintained in such a manner that prevents sewage from surfacing or overflowing at any location.
- 17.7. A minimum of two feet of freeboard shall be maintained in the evaporation/ percolation ponds to ensure that direct rainfall will not cause overtopping.
- 17.8. Adequate freeboard and/or protection shall be maintained in process tanks to ensure that direct rainfall will not cause overtopping.
- 17.9. The Moorpark WRF shall not be the source of pollution or nuisance at any time outside the boundary of the facility, including odors that unreasonably affect beneficial uses, odors injurious to health, or odors offensive to the senses of members of the community.

18. SPECIFICATIONS FOR DISINFECTED TERTIARY RECYCLED WATER

- 18.1. Disinfected tertiary recycled water shall be managed in conformance with the applicable regulations contained in 22 CCR.
- 18.2. The Recycled Water Producer or Distributor shall collectively provide all users disinfected tertiary recycled water, as proposed, that meets the standards for recycled water, as described in CCR, title 22, sections 60301.230 and 60301.320.
- 18.3. Disinfected tertiary recycled water shall be retained in the areas of use and shall not be allowed to escape as surface flow except as provided for in an NPDES permit.
- 18.4. Disinfected tertiary recycled water use and monitoring shall be consistent with the *Total Maximum Daily Load for Boron, Chloride, Sulfate and TDS (Salts) in the Calleguas Creek Watershed* and any applicable Salt and Nutrient Management Plan for the basin/sub-basin.
- 18.5. Disinfected tertiary recycled water shall not be applied to uses other than those enumerated below unless a revised engineering report has been submitted to DDW and the Los Angeles Water Board. Upon approval of the uses by DDW, the Discharger may request an amendment to this Order to include the proposed use in addition to any requirements for the proposed use, in accordance with CWC section 13523.
- 18.6. All disinfected tertiary recycled water pipelines and valves shall be installed with purple identification tape or purple polyethylene vinyl wraps according to the American Water Works Association (AWWA) California-Nevada Section guidelines.
- 18.7. VCWD is permitted to use disinfected tertiary recycled water produced at the Moorpark WRF for the following approved uses:

- 18.7.1. Surface irrigation in the following areas:
 - a. Food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop;
 - b. Parks and playgrounds;
 - c. School yards; and,
 - d. unrestricted access golf courses.
- 18.7.2. Construction water for backfill consolidation, soil compaction, mixing concrete, and dust control at construction sites;
- 18.7.3. Impoundment; and
- 18.7.4. In-plant cleaning water
- 18.8. Disinfected tertiary recycled water shall not be used for direct human consumption or for the processing of food or drink intended for human consumption.
- 18.9. VCWD shall furnish each user of disinfected tertiary recycled water a copy of these requirements.
- 18.10. For any extension or expansion of the disinfected tertiary recycled water system or use areas not covered by the 2019 Engineering Report, VCWD shall submit a report detailing the extension or expansion plan for review by DDW and the Los Angeles Water Board and for approval by DDW or its delegated local health agency. Following construction, as-built drawings shall be submitted to DDW or its delegated local health agency for approval prior to delivery of recycled water. VCWD shall submit to the Los Angeles Water Board a copy of the approved expansion plan and DDW approval within 30 days of approval.

19. SPECIFICATIONS AND REQUIREMENTS FOR DUAL PLUMBED SYSTEMS

- 19.1. "Dual plumbed" means a system that utilizes separated piping systems for recycled water and potable water within a facility and where the recycled water is used for either of the following purposes:
 - 19.1.1. To serve plumbing outlets (excluding fire suppression systems) within a building, or
 - 19.1.2. Outdoor landscape irrigation at individual residences.
- 19.2. The public water supply shall not be used as a backup or supplemental source of water for a dual-plumbed recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of CCR title 17, sections 7602 (a) and 7603 (a), and that such connection has been approved by DDW and/or its delegated local agency.
- 19.3. VCWD shall not deliver recycled water to a facility using a dual-plumbed system unless the report of recycled water use, required pursuant to CWC section 13522.5, and which meets the requirements set forth in this Order, has been submitted and approved by DDW and/or its delegated local agency. The Los Angeles Water Board shall be furnished with a copy of DDW approval together with the aforementioned report within 30 days following the approval.

- 19.4. The report of recycled water use, submitted pursuant to CWC section 13522.5, shall contain the following information for dual-plumbed systems, in addition to the information required by CCR, title 22, section 60323 (Engineering Report):
- 19.4.1. A detailed description of the intended use site identifying the following:
- a. The number, location, and type of facilities within the use area proposing to use dual-plumbed systems;
 - b. The average daily number of persons estimated to be served by each facility;
 - c. The specific boundaries of the proposed use site including a map showing the location of each facility to be served;
 - d. The person or persons responsible for operation of the dual-plumbed system at each facility; and,
 - e. The specific use to be made of the recycled water at each facility.
- 19.4.2. Plans and specifications describing the following:
- a. Proposed piping system to be used;
 - b. Pipe locations of both the recycled and potable systems;
 - c. Type and location of the outlets and plumbing fixtures that will be accessible to the public; and,
 - d. The methods and devices to be used to prevent backflow of recycled water into the public water system.
- 19.4.3. The methods to be used by VCWD to assure that the installation and operation of the dual-plumbed system will not result in cross connections between the recycled water piping system and the potable water piping system. These shall include a description of pressure, dye or other test methods to be used to test the system every four years.
- 19.5. Prior to the initial operation of the dual-plumbed recycled water system and annually thereafter, the dual-plumbed system within each facility and use site shall be inspected for possible cross connections with the potable water system. The recycled water system shall also be tested for possible cross connections at least once every four years. The testing shall be conducted in accordance with the method described in the report submitted pursuant to 22 CCR, title 22, section 60314. The inspections and the testing shall be performed by a cross connection control specialist certified by the California-Nevada Section of the AWWA or an organization with equivalent certification requirements. A written report documenting the result of the inspection and testing for the prior year shall be submitted to DDW within 30 days following completion of the inspection or test.
- 19.6. VCWD shall notify DDW of any incidence of backflow from the dual-plumbed recycled water system into the potable water system within 24 hours of discovery of the incident.
- 19.7. Any backflow prevention device installed to protect the public water system serving the dual-plumbed recycled water system shall be inspected and maintained in accordance with CCR, title 17, section 7605.

20. DDW SPECIFICATIONS FOR TREATMENT

- 20.1. The disinfected tertiary recycled water shall be disinfected by one of the following:
 - 20.1.1. A chlorine disinfection process following filtration that provides a chlorine contact time (CT); the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or
 - 20.1.2. A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as the polio virus may be used for purposes of the demonstration.
- 20.2. VCWD shall update and maintain an operations plan for the Moorpark WRF that addresses issues such as the operation, maintenance, and optimization of unit processes; sludge wasting; alarms; etc.
- 20.3. VCWD shall notify DDW in instances of treatment process failures and/or non-compliance with the above requirements by the same means and under the same conditions as VCWD would notify the Los Angeles Water Board. Any discharge of untreated or partially treated wastewater to the use area, or the cessation of same, shall be reported immediately by telephone to the Los Angeles Water Board, DDW, and the local County health officer.
- 20.4. Operating records and reports shall be maintained at the Moorpark WRF for all analyses specified in the reclamation criteria; records of operational problems; plant and equipment breakdowns; diversions to emergency storage or disposal; corrective or preventative action taken; and, process or equipment failures, time and cause of those failures, and corrective actions taken.
- 20.5. The Moorpark WRF shall be operated with a built-in automatic reliability feature that shall be triggered when the free chlorine residual contact time or the minimum free chlorine residual is below the target.
- 20.6. Ammonia analyzers, free chlorine analyzers, and flow meters shall be installed and properly calibrated to ensure proper disinfection.
- 20.7. Ammonia and free chlorine analyzers shall be routinely inspected and checked against a reference benchtop unit to determine accuracy. If an online analyzer reading varies from the benchtop reading, the online analyzer shall be recalibrated by a procedure recommended by the manufacturer.
- 20.8. Flow meters shall be routinely inspected and checked against other flow determination methods to determine accuracy.
- 20.9. A copy of the approved operations plan shall be maintained at the Moorpark WRF and be readily available to operations personnel and regulatory agencies. A quick reference plant operations data sheet shall be posted at the Moorpark WRF and include the following information:

- 20.9.1. The alarm set points for tertiary turbidity, high flow, low free chlorine residual, low contact time, and low free chlorine residual contact time.
- 20.9.2. The values of high tertiary turbidity, high flow, low free chlorine residual, and low free chlorine residual contact time when recycled water flow shall be diverted.
- 20.9.3. The required frequency of calibration for critical online instruments such as turbidity meters, ammonia analyzers, and chlorine analyzers.
- 20.9.4. VCWD shall ensure the recycled water delivered to end users has a minimum chlorine contact time and chlorine modal contact time required by DDW.

21. USE AREA REQUIREMENTS FOR DISINFECTED TERTIARY RECYCLED WATER

- 21.1. Disinfected tertiary recycled water from the Moorpark WRP shall be conveyed directly to the end users when there is immediate demand.
- 21.2. Application of disinfected tertiary recycled water to the use area shall be at reasonable agronomic rates and shall consider soil, climate, and nutrient demand. Application rates shall ensure that a nuisance is not created.
- 21.3. For each new/proposed disinfected tertiary recycled water use area, a use site report that addresses compliance with the following use area requirements and includes results of a completed shut-down test shall be submitted to the Los Angeles Water Board and to DDW for approval.
- 21.4. For existing disinfected tertiary recycled water use areas, use site reports and use site agreements shall be submitted to the Los Angeles Water Board and to DDW within six months of the effective date of this Order.
- 21.5. The use and distribution of disinfected tertiary recycled water shall comply with DDW's CCR, title 22, Division 4, Chapter 3 - Water Recycling Criteria; and the CCR, title 17, Division 1, Chapter 5, Subchapter 1, Group 4, Cross-Connection Control Requirements.
- 21.6. No physical connection shall be made or allowed to exist between any disinfected tertiary recycled water system and any separate system conveying potable water. All back-up/ auxiliary potable supplies shall discharge through approved air-gaps or swivel-ell connections with approved backflow prevention on the potable supply line. Back-up/auxiliary supply piping plans shall be submitted and reviewed by DDW. A certified tester shall test all backflow devices annually. Air gaps shall be at least twice the pipe diameter and be located above ground. Swivel-ell connections shall be controlled by the domestic water supplier. The use site agreements shall include conditions that clarify the control and operation of swivel-ell connections.
- 21.7. The American Water Works Association's (AWWA) Guidelines for the Distribution of Non-Potable Water needs to be followed, including purple pipe, adequate signs, etc. Adequate separation of at least 4-foot horizontal and 1-foot vertical separation shall be provided between recycled water lines and domestic potable water lines.
- 21.8. Plans and maps showing domestic water lines and disinfected tertiary recycled water lines at each use site shall be maintained. The lines shall be marked clearly and labeled as domestic water lines and recycled water lines. Shut-down tests may be needed to demonstrate that cross-connections do not exist.

- 21.9. Supervisors shall be appointed for the disinfected tertiary recycled water use areas and their staff shall be trained on the hazards of working with recycled water and periodically retrained.
- 21.10. Disinfected tertiary recycled water use areas shall be inspected by the reclaimed water provider.
- 21.11. No impoundment of disinfected tertiary recycled water shall occur within 100 feet of any domestic water supply well.
- 21.12. No irrigation with disinfected tertiary recycled water shall take place within 50 feet of any domestic water supply well unless all the following conditions have been met:
 - 21.12.1. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface;
 - 21.12.2. The well contains an annular seal that extends from the surface into the aquitard;
 - 21.12.3. The well is housed to prevent any disinfected tertiary recycled water spray from coming into contact with the-"wellhead facilities;
 - 21.12.4. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well; and,
 - 21.12.5. The owner of the well approves of the elimination of the buffer zone requirement.
- 21.12. Any irrigation runoff shall be confined to the disinfected tertiary recycled water use area, unless the runoff does not pose a public health threat and is authorized by the Los Angeles Water Board. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities. Drinking water fountains shall be protected against contact with disinfected tertiary recycled water spray, mist, or runoff.
- 21.13. Disinfected tertiary recycled water use for landscape or crop irrigation should be limited to hours when public is not present.
- 21.14. No disinfected tertiary recycled water shall be applied to irrigation areas during periods when soils are saturated.
- 21.15. Incidental runoff from landscape irrigation shall be controlled through the following practices:
 - 21.15.1. Implementation of an operations and management plan that may apply to multiple sites and provides for detection of leaks, (for example, from broken sprinkler heads), and correction either within 72 hours of learning of the runoff, or prior to the release of 1,000 gallons, whichever occurs first,
 - 21.15.2. Proper design and aim of sprinkler heads,
 - 21.15.3. Refraining from application during precipitation events, and
 - 21.15.4. Management of any ponds containing recycled water such that no discharge occurs unless the discharge is otherwise regulated pursuant to an NPDES permit.
- 21.16. All use areas that are accessible to the public (including truck fill stations) shall be posted with signs that are visible to the public. The size shall be no less than 4 inches high by 8 inches wide and shall include the following wording: "RECYCLED WATER – DO NOT DRINK". Each sign shall display an international symbol similar to that shown

in CCR, title 22, section 60310-A, (See Attachment C5). Alternative signage and wording, or an educational program, may be acceptable on a case-by-case basis, provided the use site demonstrates to the Los Angeles Water Board and to DDW that the alternative approach will assure an equivalent degree of public notification.

21.17. There shall be no public contact with disinfected tertiary recycled water. No hose bibs shall be present on portions of the disinfected tertiary recycled water piping system that are subject to access by the general public. Only quick couplers that differ from those used on the potable water system shall be used in such areas. Hose bibs at existing use sites shall be retrofitted immediately.

21.18. Disinfected tertiary recycled water pipelines located along the property lines of homeowners can pose a potential for cross-connections. DDW recommends a buffer zone between the disinfected tertiary recycled water lines and the property lines, if such situations are present. If adequate buffer cannot be maintained, mitigation measures including relocation of pipelines, physical barrier, and homeowner education are recommended.

21.19. Disinfected tertiary recycled water use shall not result in earth movement in geologically unstable areas.

22. PROHIBITIONS

22.1. The direct or indirect discharge of any waste and/or wastewater to surface waters or surface water drainage courses is prohibited.

22.2. There shall be no waste and/or sanitary sewer overflows or discharge of partially-treated wastes from the Moorpark WRF's treatment, storage or disposal facilities to adjacent drainage ways, adjacent properties or waters of the State (including storm drains) at any time.

22.3. Bypass, discharge, or overflow of untreated wastes, except as allowed by Sections 5.4 of this Order, is prohibited.

22.4. Bypass (the intentional diversion of waste stream from any portion of a treatment facility) is prohibited. The Los Angeles Water Board may take enforcement action against VCWD for bypass unless:

22.4.1. 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 cause them to become inoperable, or substantial and permanent loss in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.);

22.4.2. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment shall have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and,

22.4.3. VCWD must submit written notice at least 48 hours in advance of the need for a bypass to the Los Angeles Water Board Executive Officer.

- 22.5. Discharge of waste classified as 'hazardous', as defined 'in Section 2521(a) of Title 23, California Code of Regulations, Section 2510 et seq., is prohibited. Discharge of waste classified as 'designated,' as defined in California Water Code Section 13173, in a manner that causes violation of groundwater limitations, is prohibited.
- 22.6. Wastes shall not be disposed of in geologically unstable areas or so as to cause earth movement.
- 22.7. There shall be no permanent on-site disposal of sludge. Sludge-drying activities are allowed, but only as an intermediate treatment prior to off-site disposal. Any off-site disposal of sewage or sludge shall be made only to a legal point of disposal. For purposes of this Order, a legal disposal site is one for which requirements have been established by a regional water board or comparable regulatory entity, and which is in full compliance therewith. Any sewage or sludge handling shall be in such a manner as to prevent its reaching surface waters or watercourses.
- 22.8. Odors of sewage origin shall not be perceivable any time outside the boundary of the treatment facility.
- 22.9. Wastes discharged from the Water Reclamation Facility shall at no time contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- 22.10. The discharge of waste shall not create a condition of pollution, contamination, or nuisance.
- 22.11. Nutrient materials in the waste discharged to the percolation ponds shall not cause objectionable aquatic growth or degrade indigenous biota.
- 22.12. The evaporation/percolation ponds shall not contain floating materials, including solids, foams or scum in concentrations that cause nuisance, adversely affect beneficial uses, or serve as a substrate for undesirable bacterial or algae growth or insect vectors.
- 22.13. The percolation/evaporation ponds, drying beds and the berms surrounding the ponds shall not contain plants, shrubs, or bushes that may damage the berms and the ponds.
- 22.15. Any discharge of wastewater from the treatment system (including the wastewater collection system) at any point other than specifically described in this Order is prohibited and constitutes a violation of this Order, except as provided for in section 5.4 of this Order.
- 22.16. The wastewater treatment and discharge shall not result in nuisance conditions caused by breeding mosquitos, gnats, midges, or other pests.
- 22.17. The discharge of substances in concentrations toxic to human, animal, plant, or aquatic life is prohibited.
- 22.18. The discharge of any radiological chemical or biological warfare agent or high-level radiological waste is prohibited.
- 22.19. The discharge of secondary-treated effluent is limited to the percolation ponds and discharge of secondary-treated effluent to any other location is prohibited.

23. PROVISIONS

- 23.1. A copy of this Order shall be maintained at the wastewater treatment plant and always be available to operating personnel.
- 23.2. The Discharger shall file with the Los Angeles Water Board technical reports on self-monitoring work performed according to the detailed specifications contained in the attached Monitoring and Reporting Program CI No. 6374 and incorporated herein by reference, as directed by the Executive Officer. The results of any monitoring done more frequently than required at the location and/or times specified in the Monitoring and Reporting Program shall be reported to the Los Angeles Water Board. The Discharger shall comply with all the provisions and requirements of the Monitoring and Reporting Program.
- 23.3. The Discharger shall comply with all applicable requirements of chapter 4.5 (commencing with section 13290) of division 7 of the California Water Code.
- 23.4. Monitoring and Reporting Program CI No. 6374 contains groundwater monitoring requirements for the Moorpark WRF so the groundwater downgradient and upgradient of the evaporation/percolation ponds and discharge/disposal area is measured, sampled, and analyzed to determine if discharges from the percolation pond/disposal system are impacting water quality.
- 23.5. The Discharger shall monitor the groundwater quality upstream and downstream of the ponds to determine how the effluent stored in the ponds may be impacting the groundwater quality. If the concentrations of any pollutant in the downgradient monitoring wells exceed the respective water quality objectives in the Basin Plan, and the exceedance can be attributed to the Discharger's effluent disposal practices at the Moorpark WRF, the Discharger must develop a source control plan including a detailed source identification and pollution minimization plan, together with the time schedule of implementation, and must be submitted within 120 days of recording the exceedance.
- 23.6. The Discharger shall participate in the implementation of a watershed-wide monitoring program for the Arroyo Las Posas (located in close proximity to the evaporation/percolation ponds) if the Executive Officer determines that a surface water monitoring program is needed to fully evaluate the impact from Discharger's effluent discharge on groundwater. The Los Angeles Water Board may require the Discharger to coordinate with the Los Angeles Water Board, Calleguas Creek Steering Committee, and other stakeholders, to develop and implement a watershed-wide monitoring program.
- 23.7. In accordance with CWC section 13260(c), the Discharger shall file a report of any material change or proposed change in the character, location, or volume of the discharge.
- 23.8. The Discharger shall operate and maintain its wastewater collection, treatment and disposal facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's responsibilities. Anyone employed in the operation of the wastewater treatment plant must be certified pursuant to CWC sections 13625-13633.

- 23.9. The Discharger shall submit to the Los Angeles Water Board an Operations and Maintenance Manual (O&M Manual) for the Moorpark WRF. The Discharger shall maintain the O&M Manual in useable condition, and be available for reference and use by all applicable personnel. The Discharger shall regularly review, and revise or update as necessary, the O&M Manual(s) so the document(s) remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary and submitted to the Los Angeles Water Board.
- 23.10. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
- 23.11. This Order does not relieve the Discharger from the responsibility of obtaining other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.
- 23.12. After notice and opportunity for a hearing, this Order may be modified, revoked, or reissued for causes including, but not limited, to:
- 23.12.1. Failure to comply with any term or condition contained in this Order;
 - 23.12.2. Endangerment of human health or environment resulting from the permitted activities in this Order,
 - 23.12.3. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - 23.12.4. Acquisition of new information which could have justified the application of different conditions if known at the time of Order adoption; or
 - 23.12.5. A change in any condition, or the discovery of any information, that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 23.13. The Discharger shall furnish, within a reasonable time, any information the Los Angeles Water Board requests to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Los Angeles Water, upon request, copies of records required to be kept by this Order.
- 23.14. This Order includes *Standard Provisions Applicable to Waste Discharge Requirements* (Attachment D) which are incorporated herein by reference. If there is any conflict between provisions stated herein and the *Standard Provisions Applicable to Waste Discharge Requirements*, the provisions stated herein will prevail.
- 23.15. The Discharger shall allow the Los Angeles Water Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
- 23.15.1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
 - 23.15.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

- 23.15.3. Inspect at reasonable times any facilities', equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- 23.15.4. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the CWC, any substances or parameters at any locations.
- 23.16. VCWD shall provide an Annual Report described in the MRP to the Los Angeles Water Board.
- 23.17. **Spill Clean-Up Contingency Plan (SCCP) Requirements** – Within 120 days following adoption of this Order, VCWD is required to submit an SCCP, which describes the activities and protocols to address clean-up of spills, overflows, and bypasses of untreated or partially treated wastewater from VCWD's collection system or treatment facilities. At a minimum, this SCCP shall include sections on spill clean-up and containment measures, public notification, and monitoring. VCWD shall review and amend this SCCP as appropriate after each spill from the Moorpark WRF or in the service area of the WRF. VCWD shall include a discussion in the annual summary report of any modifications to the SCCP and the application of the SCCP to all spills during the year.
- 23.18. **Construction, Operation, and Maintenance Requirements:**
- 23.18.1. **Certified Wastewater Treatment Plant Operator.** The Moorpark WRF is subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to CCR, Title 23, division 3, chapter 26 (sections 13625 – 13633).
- 23.18.2. **Climate Change Effects Vulnerability Assessment and Mitigation Plan.** The Discharger shall consider the impacts of climate change as they affect the operation of the treatment facility due to flooding, wildfire, or other climate-related changes. The Discharger shall develop a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan) to assess and manage climate change-related effects that may impact the wastewater treatment facility's operation, water supplies, its collection system, and water quality, including any projected changes to the influent water temperature and pollutant concentrations, and beneficial uses. The permittee shall also identify new or increased threats to the sewer system resulting from climate change that may impact desired levels of service in the next 50 years. The permittee shall project upgrades to existing assets or new infrastructure projects, and associated costs, necessary to meet desired levels of service. Climate change research also indicates the overarching driver of climate change is increased atmospheric carbon dioxide from human activity. The increased carbon dioxide emissions trigger changes to climatic patterns, which increase the intensity of sea level rise and coastal storm surges, lead to more erratic rainfall and local weather patterns, trigger a gradual warming of freshwater and ocean temperatures, and trigger changes to ocean water chemistry. As such, the Climate Change Plan shall also identify steps being taken or planned to address greenhouse gas emissions attributable to wastewater treatment plants, solids handling, and effluent discharge processes. The Climate Change Plan is due 12 months after effective date of this Order.

23.18.3. **Alternate Power Source.** VCWD shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, wildfires, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, VCWD shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power. VCWD shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur.

23.18.4. **Routine Maintenance and Operational Testing for Emergency Infrastructure/Equipment.** The Permittee shall perform monthly maintenance and operational testing for all emergency infrastructure and equipment at the facility, including but not limited to any bypass gate/weir in the headworks, alarm systems, backup pumps, standby power generators, and other critical emergency pump station components. The Permittee shall update the Operation and Maintenance Plan to include monthly maintenance and operational testing of emergency infrastructure and equipment, and shall keep the records of all operational testing for emergency systems, repairs, and modifications.

23.19. Collection System Requirements

The State Water Board adopted *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* (Order No. 2006-0003-DWQ, General WDRs) on May 2, 2006 and amended the General WDRs with Order No. WQ 2008-0002-EXEC and Order No. WQ 2013-0058-EXEC, to provide a consistent, statewide regulatory approach to address sanitary sewer collection systems. The General WDRs require public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all sanitary sewer overflows (SSOs) to the State Water Board's online SSO database. VCWD's collection system is required to be part of the system that is subject to Order No. 2006-0003-DWQ, as amended. On October 11, 2006, VCWD enrolled for coverage under the General WDRs and was assigned WDID No. 4SSO10471 for the Moorpark collection system. As such, VCWD must properly operate and maintain its collection system. VCWD must report any non-compliance and mitigate any discharge from the collection system in violation of this Order. On December 6, 2022, the State Water Board adopted Order WQ 2022-0103-DWQ (the reissued General WDRs), which will go into effect on June 5, 2023. According to section 2.1 of the reissued General WDRs, if an existing enrollee of the General WDRs wishes to continue coverage from the previous Order 2006-0003-DWQ, the Legally Responsible Official of an existing enrollee shall electronically certify the Continuation of Existing Regulatory Coverage form in the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database. The Legally Responsible Official will receive an automated CIWQS-issued Notice of Applicability email, confirming continuation of regulatory coverage with the General WDRs Order. All regulatory coverage under previous Order 2006-0003-DWQ will cease on the Effective Date of the reissued General WDRs Order. An Enrollee continuing existing regulatory coverage is not required to submit a new application package or pay an application fee for

enrollment under this General Order. The annual fee due date for continued regulatory coverage from previous Order 2006-0003-DWQ to the reissued General Order remains unchanged.

23.20. Spill Reporting Requirements

23.20.1. Initial Notification – Although State and Los Angeles Water Board staff do not have duties as first responders, this requirement is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. For certain spills, overflows and bypasses, VCWD shall make notifications as required below:

- a. In accordance with the requirements of Health and Safety Code section 5411.5, VCWD shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the state or odors, vectors, and other nuisances of sewage sludge origin beyond the limits of the treatment plant site or the sewage collection system as soon as possible, but no later than two (2) hours after becoming aware of the release.
- b. In accordance with the requirements of CWC section 13271, VCWD shall provide notification to the California Office of Emergency Services (Cal OES) of the release of reportable quantities of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but not later than two (2) hours after becoming aware of the release. CCR, Title 23, section 2250, established 1,000 gallons or more as a reportable quantity of sewage. The phone number for reporting these releases to the Cal OES is (800) 852-7550. In addition, the Discharger shall notify other interested persons of any such sewage spill by maintaining an email list of those interested persons that have requested such notification.
- c. VCWD shall notify the Los Angeles Water Board of any unauthorized release of sewage from the Moorpark WRF that causes, or probably will cause, a discharge to a water of the state or odors, vectors, and other nuisances of sewage sludge origin beyond the limits of the treatment plant site or the sewage collection system as soon as possible, but not later than two (2) hours after becoming aware of the release. This initial notification does not need to be made if VCWD has notified Cal OES and the local health officer or the director of environmental health with jurisdiction over the affected waterbody. The phone number for reporting these releases of sewage to the Los Angeles Water Board is (213) 576-6657. The phone numbers for after hours and weekend reporting of releases of sewage to the Los Angeles Water Board are (213) 305-2284 and (213) 305-2253. At a minimum, the following information shall be provided to the Los Angeles Water Board:
 - i. The location, date, and time of the release;
 - ii. The water body that may be impacted by the discharge;
 - iii. An estimate of the amount of sewage or other waste released and the amount that reached the receiving water at the time of notification;

- iv. If ongoing, the estimated flow rate of the release at the time of the notification;
- v. The name, organization, phone number and email address of the reporting representative; and
- vi. A certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the possibly affected water bodies have been notified of the discharge.

23.20.2. **Monitoring** – For spills, overflows and bypasses reported under Initial Notification section 23.20.1, VCWD shall monitor as required below:

To define the geographical extent of a spill's impact, VCWD shall obtain grab samples (if feasible, accessible, and safe) for all spills, overflows or bypasses of any volume that reach any waters of the State (including surface and ground waters). If a grab sample cannot be obtained due to accessibility or safety concerns that cannot be addressed with the appropriate personal protective equipment or following proper sampling procedures, the sample shall be obtained as soon as it becomes safe to do so. VCWD shall analyze the samples for total and fecal coliform, *Escherichia coli* (*E. coli*), if a fecal coliform test shows positive), *Enterococcus* (if spill reaches the marine waters, where the salinity is greater than 1 part per thousand more than 5 percent of time), and relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible and safe). Daily monitoring shall be conducted from time the spill is known until the results of two (2) consecutive sets of bacteriological monitoring indicate the return to the background level or the County Department of Public Health authorizes cessation of monitoring.

23.20.3. **Reporting** – The initial notification required under section 23.20.1 shall be as follows:

- a. As soon as possible, but not later than twenty-four (24) hours after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, VCWD shall submit a statement to Los Angeles Water Board staff via email at augustine.anijelo@waterboards.ca.gov. If the discharge is 1,000 gallons or more, this statement shall certify that Cal OES has been notified of the discharge in accordance with CWC section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:
 - i. Agency, Order No., and MRP No.;
 - ii. The location, date, and time of the discharge;
 - iii. The water body that received the discharge;
 - iv. A description of the level of treatment of the sewage or other waste discharged;
 - v. An initial estimate of the amount of sewage or other waste released and the amount that reached the impacted water body;
 - vi. The Cal OES control number and the date and time that notification of the incident was provided to Cal OES; and

- vii. The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).
 - b. A written preliminary report shall be submitted to the Los Angeles Water Board within five (5) working days after disclosure of the incident via the State Water Board GeoTracker database under Global ID WDR100040106. The final written report shall be included in the next quarterly monitoring report submitted to the GeoTracker database above. (A copy of the final written report, for a given incident, already submitted pursuant to a statewide *State-wide General Waste Discharge Requirements for Sanitary Sewer Systems* (General WDRs), may be submitted to the Los Angeles Water Board to satisfy this requirement). The written report shall document the information required in the Records section 23.20.4 below, monitoring results and any other information required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.
 - c. VCWD shall include a certification in the annual summary report (due according to the schedule in the accompanying MRP) that states that the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components were maintained and tested in accordance with the City's preventive maintenance plan. Any deviations from or modifications to the Plan shall be discussed.
- 23.20.4. **Records** – VCWD shall prepare and maintain a record of all spills, overflows or bypasses of raw or partially treated sewage from its collection system or Moorpark WRF. This record shall be made available to the Los Angeles Water Board upon request and a spill summary shall be included in the annual report, as required in the MRP No. CI-6374. The record shall contain:
- a. The date and time of each spill, overflow, or bypass;
 - b. The location of each spill, overflow, or bypass;
 - c. The estimated volume of each spill, overflow, or bypass including gross volume, amount recovered and amount not recovered, monitoring results as required by Spill Monitoring section 23.20.2;
 - d. The cause of each spill, overflow, or bypass;
 - e. Whether each spill, overflow, or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances;
 - f. Any corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences; and
 - g. The mandatory information included in Sanitary Sewer Overflows (SSO) online reporting for finalizing and certifying the SSO report for each spill, overflow, or bypass under the General WDRs.
- 23.20.5. **Activities Coordination** – The Los Angeles Water Board expects that VCWD will coordinate their compliance activities for consistency and efficiency with other

entities that have responsibilities to implement: (i) this WDRs/WRRs permit, , (ii) a Municipal Separate Storm Sewer Systems (MS4) NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements, and (iii) the General WDRs or subsequent updates. The Los Angeles Water Board also expects the POTW's owners/operators to consider coordination with other agencies regarding the potential for the permissive integration of the MS4 with the wastewater collection system.

23.20.6. **Consistency with General WDRs** - The requirements contained in this Order in sections 23.17 (SCP Requirements), 23.18 (Construction, Operation, and Maintenance Requirements), and 23.20 (Spill Reporting Requirements) are intended to be consistent with the requirements of the General WDRs. The Los Angeles Water Board recognizes that there may be some overlap between this Order's provisions and the General WDRs requirements. The requirements of the General WDRs are considered the minimum thresholds (see Finding 11 of WQ Order No. 2006-0003-DWQ). To encourage efficiency, the Los Angeles Water Board will accept the documentation prepared by VCWD under the General WDRs for compliance purposes, as satisfying the requirements in sections 23.17 (Spill Clean-up Contingency Plan Requirements), 23.18 (Construction, Operation, and Maintenance Requirements), and 23.20 (Spill Reporting Requirements) provided the more stringent provisions enumerated in this Order, have also been addressed.

23.21. All discharges of waste into the waters of the State are privileges, not rights. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification.

24. PRETREATMENT REQUIREMENTS

24.1. Title 23 of the California Code of Regulations, section 2233, requires that WDRs for POTWs treating or designed to treat an average dry weather flow of 5 MGD or more of community wastewater require the operating entity to have and enforce an adequate pretreatment program approved by the appropriate regional board. A condition requiring a local pretreatment program may be included for a POTW treating or designed to treat an average dry weather flow of less than 5 MGD of community wastewater where deemed appropriate by the state board or regional board. The Los Angeles Water Board determined it was necessary for the Ventura Waterworks District to develop and implement a pretreatment program since the Moorpark WRF has a 5 MGD design capacity for its secondary treatment system, an industrial user discharges to the Moorpark WRF sewershed, and because the treated wastewater discharged to percolation ponds may impact the quality of the groundwater that is designated for domestic and municipal uses in the Basin Plan.

24.2. The Pretreatment Program regulates industries to protect the Permittee's wastewater collection and treatment system, to ensure effluent water quality and the quality of biosolids, and to protect health and safety of the treatment plant workers. VCWD has developed and implemented a Pretreatment Program in accordance with 40 CFR 403 which was approved by the Los Angeles Water Board on February 6, 2021. This Order requires implementation of the approved Pretreatment Program.

- 24.3. Any change to the program shall be reported to the Los Angeles Water Board in writing and shall not become effective until approved by the Executive Officer in accordance with procedures established in 40 CFR part 403.18.
- 24.4. Applications for renewal or modification of this Order must contain information about industrial discharges to the POTW pursuant to 40 CFR part 122.21(j)(6). Pursuant to 40 CFR part 122.42(b) and provision 5 of Attachment D, Standard Provisions, of this Order, the Permittee shall provide adequate notice of any new introduction of pollutants or substantial change in the volume or character of pollutants from industrial discharges which were not included in the permit application. Pursuant to 40 CFR part 122.44(j)(1), the Permittee shall annually identify and report, in terms of character and volume of pollutants, any Significant Industrial Users discharging to the POTW subject to Pretreatment Standards under section 307(b) of the CWA and 40 CFR part 403.
- 24.5. VCWD shall evaluate whether its pretreatment local limits are adequate to meet the requirements of this Order and shall submit a written technical report within 180 days following the effective date of the Moorpark WRF WDRs Order, as required under section 2.1 of Attachment G. The Permittee shall submit to the Los Angeles Water Board revised local limits, as necessary, for Los Angeles Water Board approval. In addition, the Permittee shall consider collection system overflow protection from such constituents as oil and grease, etc.
- 24.6. The Permittee shall comply with requirements contained in Attachment G– Pretreatment Reporting Requirements. Any violation of the Pretreatment Program will be considered a violation of this Order.

25. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section 2 of this Order will be determined as specified below:

25.1. General

Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e.g., monthly or weekly average), that sample shall serve to characterize the discharge for the entire interval. If quarterly sample results show noncompliance with the average monthly limit and that sample result is used or compliance determinations for each month of the quarter, then three separate violations of the average monthly limit shall be deemed to have occurred.

25.2. Multiple Sample Data

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of Detected but Not Quantified (DNQ) or Not detected (ND). In those cases, the Permittee shall compute the median in place of the arithmetic mean in accordance with the following procedure:

- 25.2.1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

25.2.2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

25.3. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by section 19.2 above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation for the purpose of calculating mandatory minimum penalties, though the Permittee may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month) in cases where discretionary administrative civil liabilities are appropriate. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Permittee may be considered out of compliance for that calendar month. The Permittee will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to the AMEL.

If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for a given parameter, the Permittee will have demonstrated compliance with the AMEL for each day of that month for that parameter.

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Permittee may collect up to four additional samples within the same calendar month. All analytical results shall be reported in the monitoring report for that month. The concentration of pollutant (an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data Reduction" section above, will be used for compliance determination.

In the event of noncompliance with an AMEL, the sampling frequency for that parameter shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

25.4. Average Weekly Effluent Limitation (AWEL)

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Permittee will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Permittee will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week with respect to the AWEL.

A calendar week will begin on Sunday and end on Saturday. Partial calendar weeks at the end of calendar month will be carried forward to the next month in order to calculate and report a consecutive seven-day average value on Saturday.

25.5. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge on a calendar day exceeds the MDEL for a given parameter, an alleged violation will be flagged, and the Permittee will be considered out of compliance for that day for that parameter. If no sample (daily discharge) is taken over a calendar day, no compliance determination can be made for that day with respect to effluent violation determination, but compliance determination can be made for that day with respect to reporting violation determination.

25.6. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a potential violation will be flagged, and the Permittee will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

25.7. Six-month Median Effluent Limitation

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, a potential violation will be flagged, and the Permittee will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the six-month median, the Permittee will be considered out of compliance for the 180-day period. For any 180-period during which no sample is taken, no compliance determination can be made for the six-month median effluent limitation.

25.8. Percent Removal

The average monthly percent removal is the removal efficiency expressed in percentage across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of pollutant concentrations (C in mg/L) of influent and effluent samples collected at about the same time using the following equation:

$$\text{Percent Removal (\%)} = [1 - (C_{\text{Effluent}}/C_{\text{Influent}})] \times 100\%$$

When preferred, the Permittee may substitute mass loadings and mass emissions for the concentrations.

25.9. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or DNQ, the

corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

25.10. Compliance with Single Constituent Effluent Limitations

Permittees may be considered out of compliance with the effluent limitation if the concentration of the pollutant (see section 19.2 “Multiple Sample Data Reduction” above) in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

25.11. Compliance with Effluent Limitations Expressed as a Sum of Several Constituents

Permittees are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCBs) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

25.12. Compliance with 2,3,7,8-TCDD and its Equivalents

Compliance with the dioxin effluent limitation shall be determined based on 2,3,7,8-TCDD alone. However, TCDD equivalents shall be monitored and calculated using the following formula, where the MLs, and toxicity equivalency factors (TEFs) are as provided in the table below. The Permittee shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Permittee shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

$$Dioxin\ Concentration = \sum_{i=1}^{17} (TEQi) = \sum_{i=1}^{17} (Ci)(TEFi)$$

where:

Ci = individual concentration of a dioxin or furan congener

TEFi = individual TEF for a congener

Congeners	MLs (pg/L)	TEFs
2,3,7,8-TetraCDD	10	1.0
1,2,3,7,8-PentaCDD	50	1.0
1,2,3,4,7,8-HexaCDD	50	0.1
1,2,3,6,7,8-HexaCDD	50	0.1
1,2,3,7,8,9-HexaCDD	50	0.1
1,2,3,4,6,7,8-HeptaCDD	50	0.01
OctaCDD	100	0.0001
2,3,7,8-TetraCDF	10	0.1
1,2,3,7,8-PentaCDF	50	0.05
2,3,4,7,8-PentaCDF	50	0.5
1,2,3,4,7,8-HexaCDF	50	0.1

Congeners	MLs (pg/L)	TEFs
1,2,3,6,7,8-HexaCDF	50	0.1
1,2,3,7,8,9-HexaCDF	50	0.1
2,3,4,6,7,8-HexaCDF	50	0.1
1,2,3,4,6,7,8-HeptaCDFs	50	0.01
1,2,3,4,7,8,9-HeptaCDFs	50	0.01
OctaCDF	100	0.0001

25.13. Mass Emission Rate

The mass emission rate shall be obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.34}{N} \sum_{i=1}^N Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.79}{N} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples, which may be taken in any calendar day. If a composite sample is taken, 'C_i' is the concentration measured in the composite sample and 'Q_i' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$\text{Daily concentration} = \frac{1}{Q_t} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of component waste streams. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Q_t' is the total flow rate of the combined waste streams.

25.14. Bacterial Standards and Analysis

25.14.1. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n}$$

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling.

- 25.14.2. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for *Enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.
- 25.14.3. Detection methods used for total coliform shall be those presented in Table 1A of 40 CFR part 136, unless alternate methods have been approved by USEPA pursuant to 40 CFR part 136, or improved methods have been determined by the Executive Officer and/or USEPA.
- 25.14.4. Detection methods used for *E. coli* and *Enterococcus* shall be those presented in Table 1A of 40 CFR part 136 or in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure* or any improved method determined by the Executive Officer and/or USEPA to be appropriate.

26. REOPENER

- 26.1. The Los Angeles Water Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.
- 26.2. This Order may be reopened at any time to include additional or modified requirements to address the Discharger's expansion, upgrade or mitigation plans; TMDL or Basin Plan mandates; or salt and nutrient plan requirements.

ATTACHMENT A. DEFINITIONS

Arithmetic Mean (μ)

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \mu = (\sum x)/n$$

Where: $\sum x$ is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Biosolids

Biosolids refer to sewage sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agricultural, silvicultural, horticultural, and land reclamation activities as specified under 40 CFR part 503.

Carcinogenic

Carcinogenic pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Estimated Chemical Concentration

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Maximum Daily Flow

The maximum daily flow means the maximum instantaneous flow of the day.

Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)

MDL is defined as the minimum measured concentration of a substance that can be reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

PCBs (polychlorinated biphenyls) as Aroclors

The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

PCBs as Congeners

The sum of the following 41 individually quantified PCB congeners or mixtures of isomers of a single congeners in a co-elution: PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

Persistent Pollutants

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Los Angeles Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Resources Control Board (State Water Board) or Los Angeles Water Board.

Reporting Level (RL)

The RL is the ML (and its associated analytical method) chosen by the Permittee for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Los Angeles Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in a Los Angeles Water Board Basin Plan.

Standard Deviation (σ)

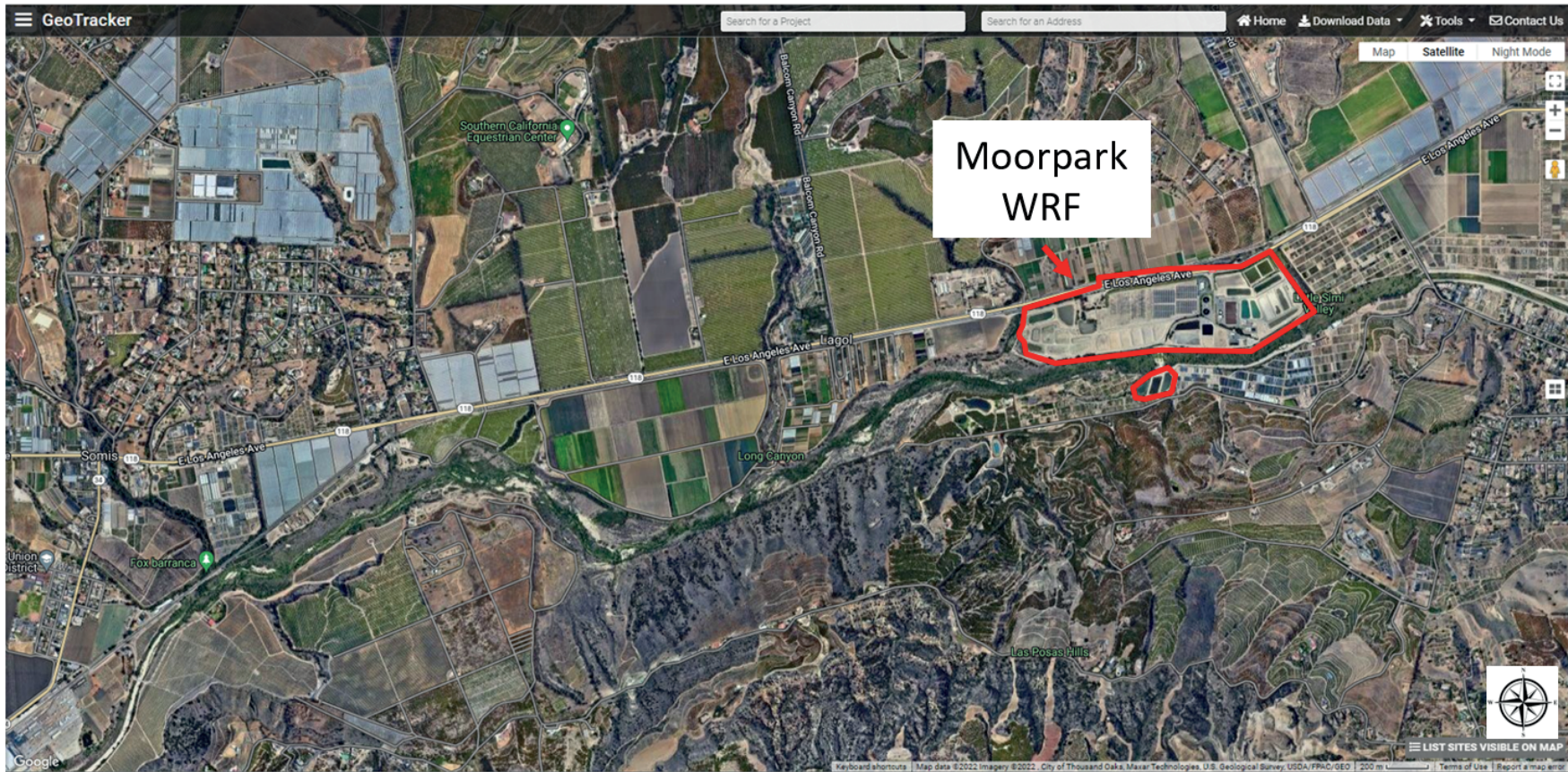
Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = \sqrt{\frac{\sum(x - \mu)^2}{n - 1}}$$

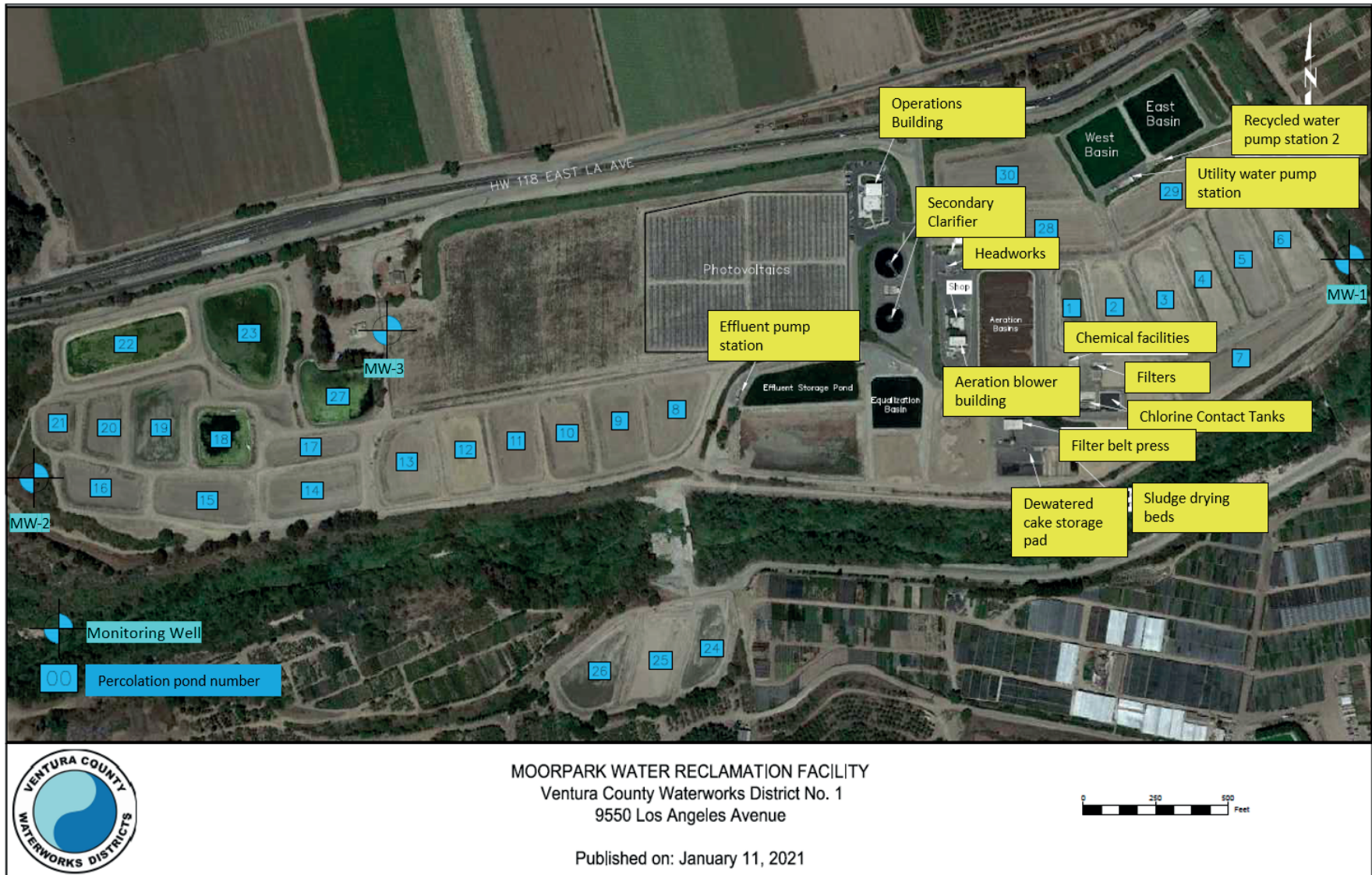
where:

- x is the observed value;
- μ is the arithmetic mean of the observed values; and
- n is the number of samples.

ATTACHMENT B. 1-FACILITY LOCATION



ATTACHMENT B.2 – FACILITY AERIAL VIEW



ATTACHMENT B.3 – GROUNDWATER BASINS

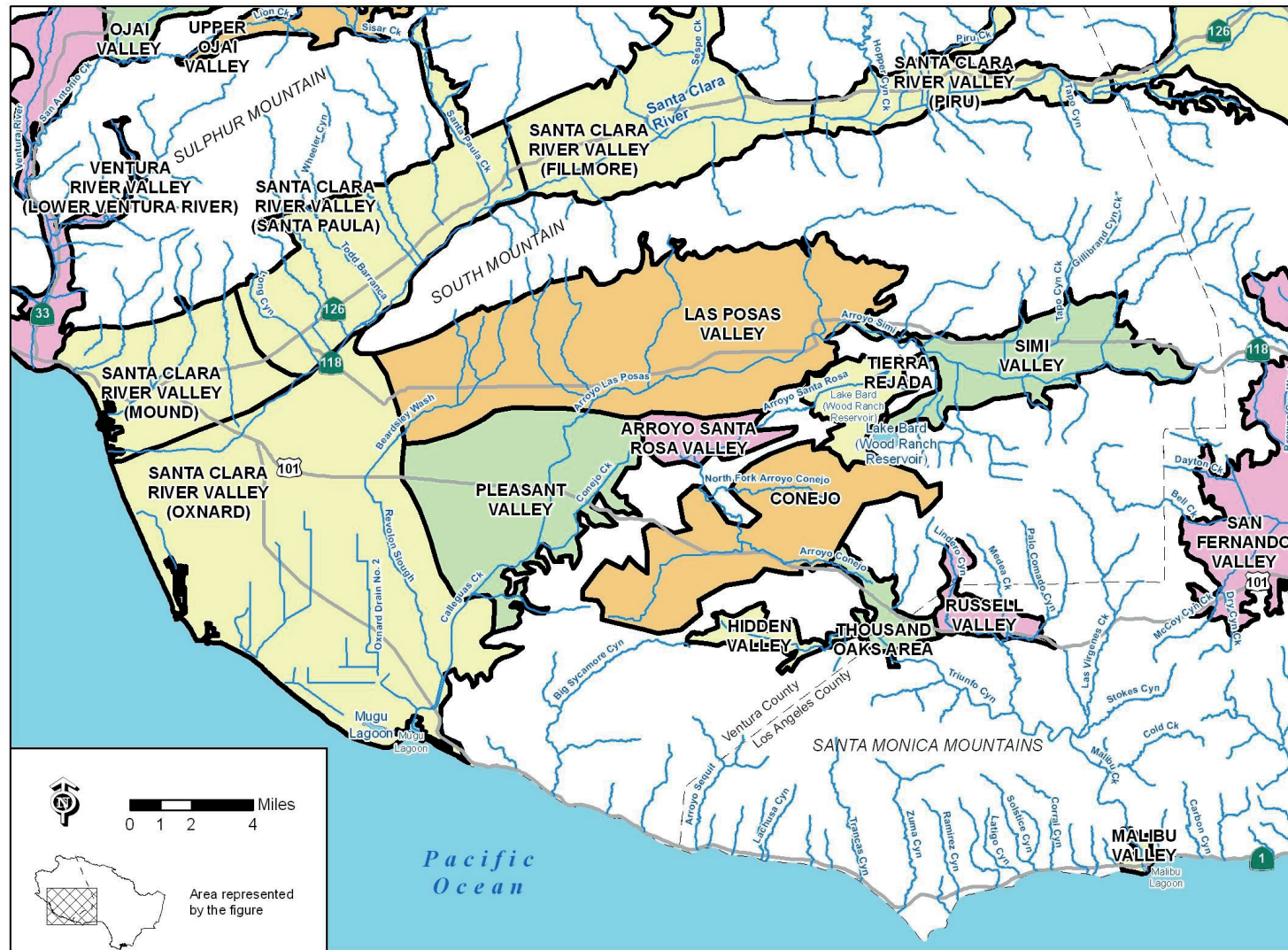
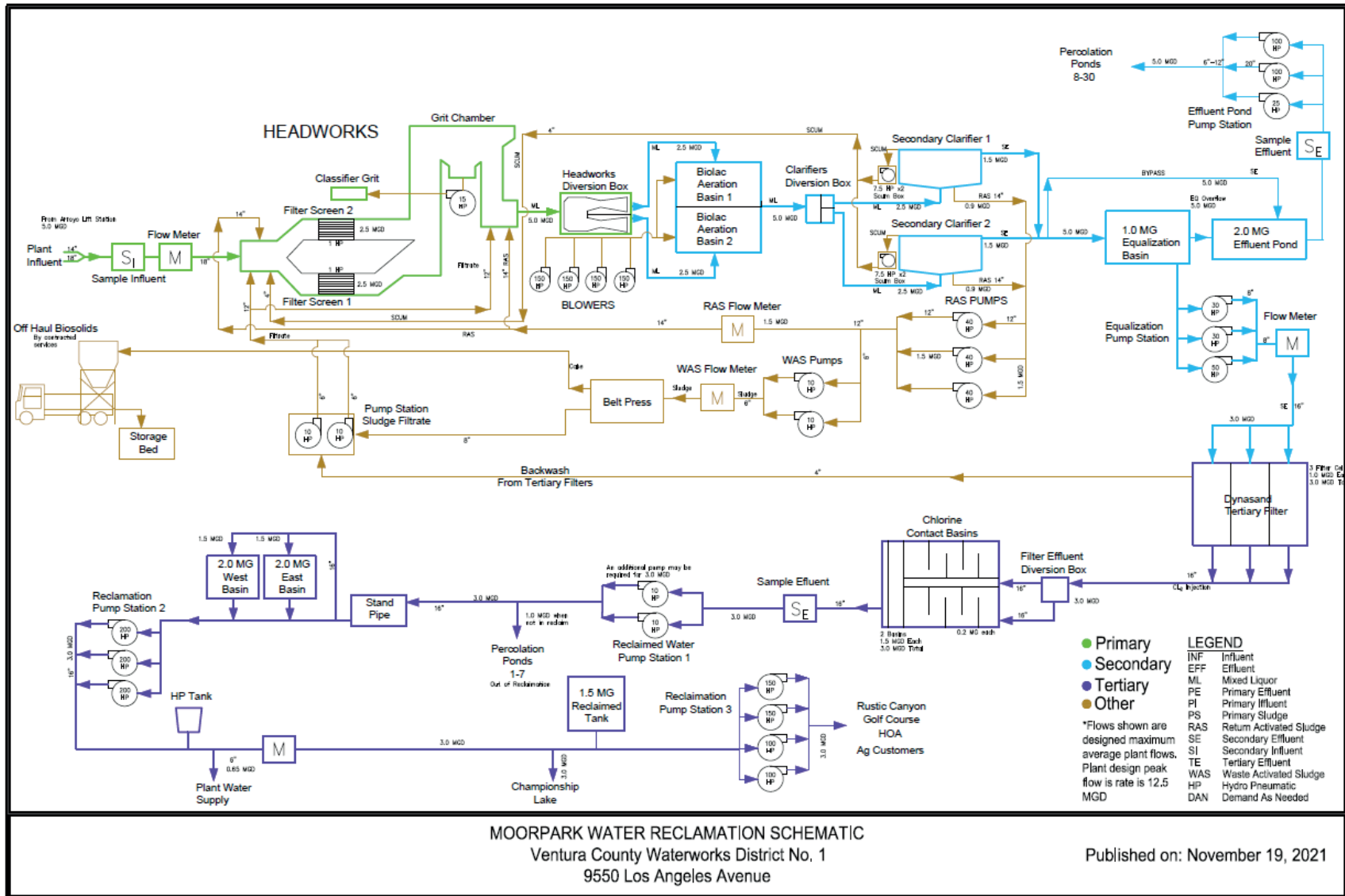
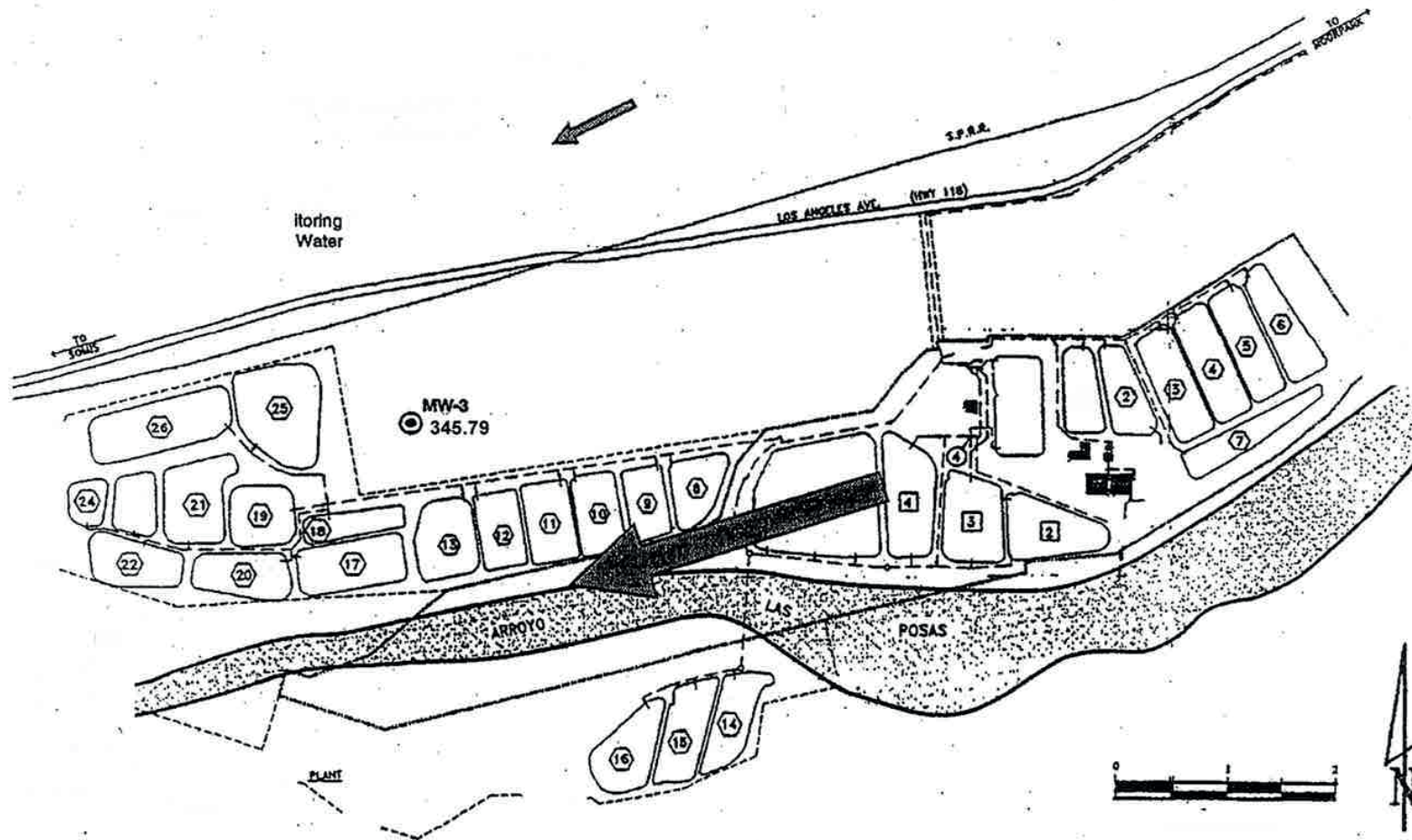


Figure 2-12. Ventura Central Groundwater Basins.

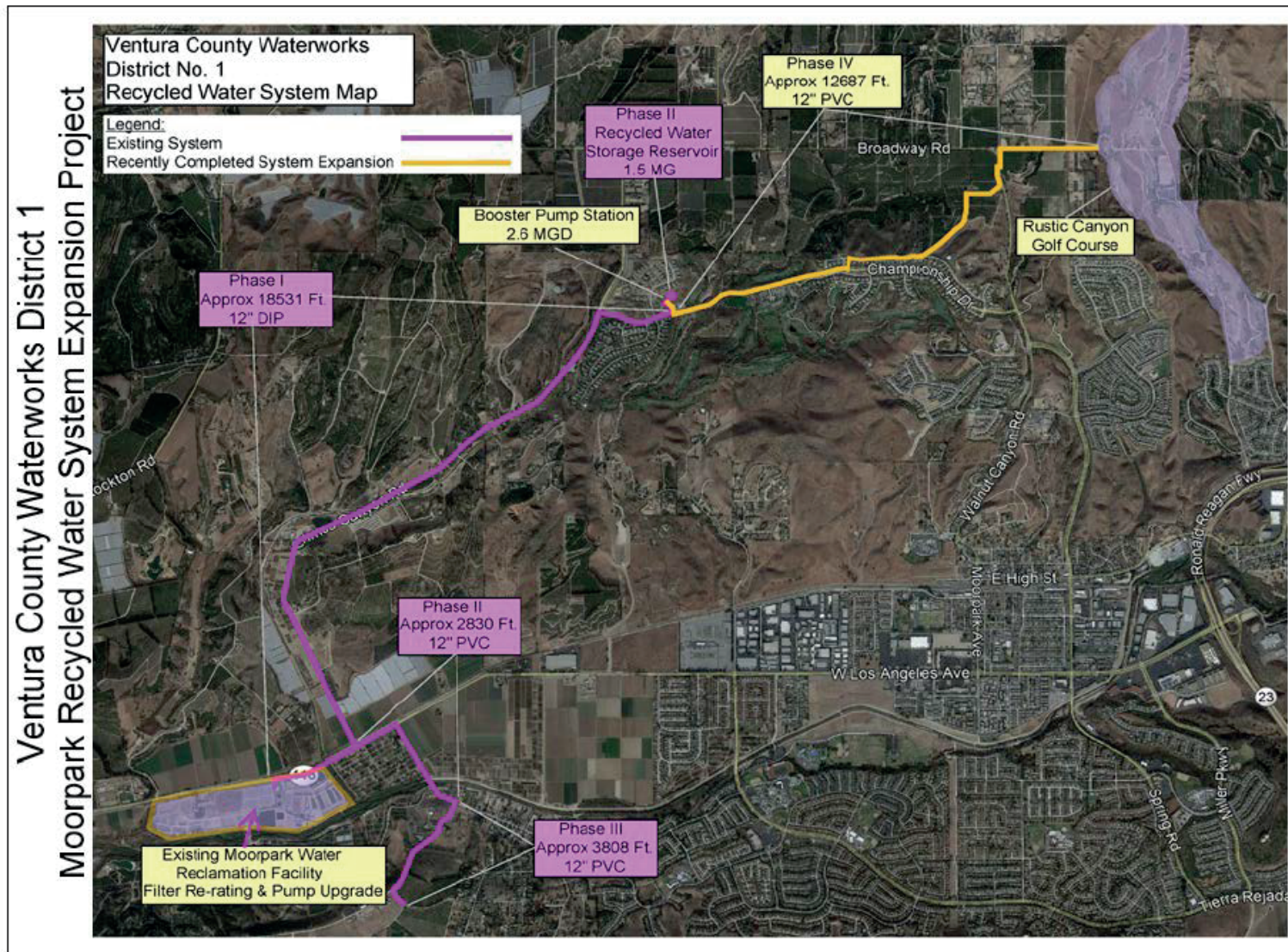
ATTACHMENT C. 1 - FLOW SCHEMATIC



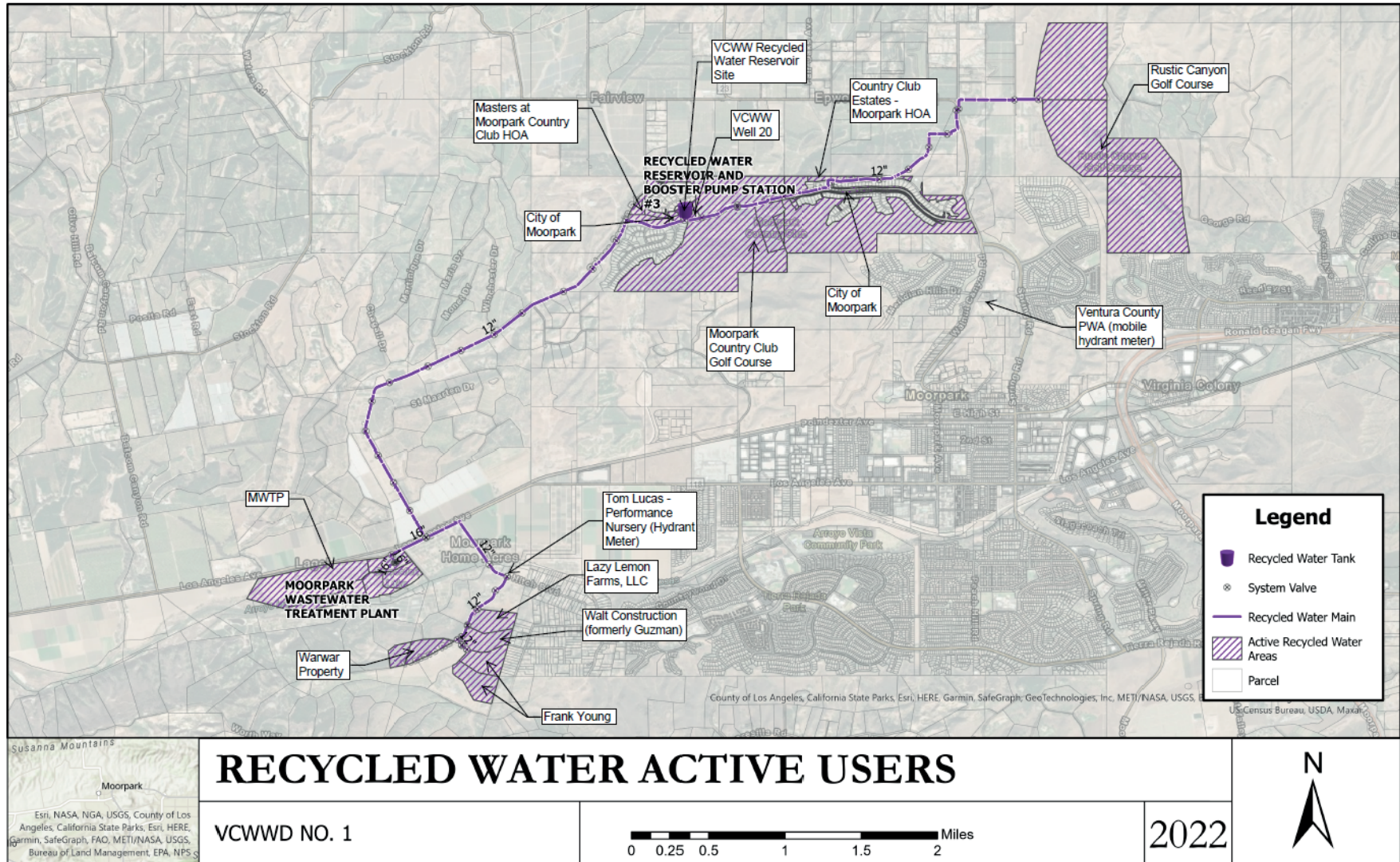
ATTACHMENT C.2 – DIRECTION OF GROUNDWATER GRADIENT



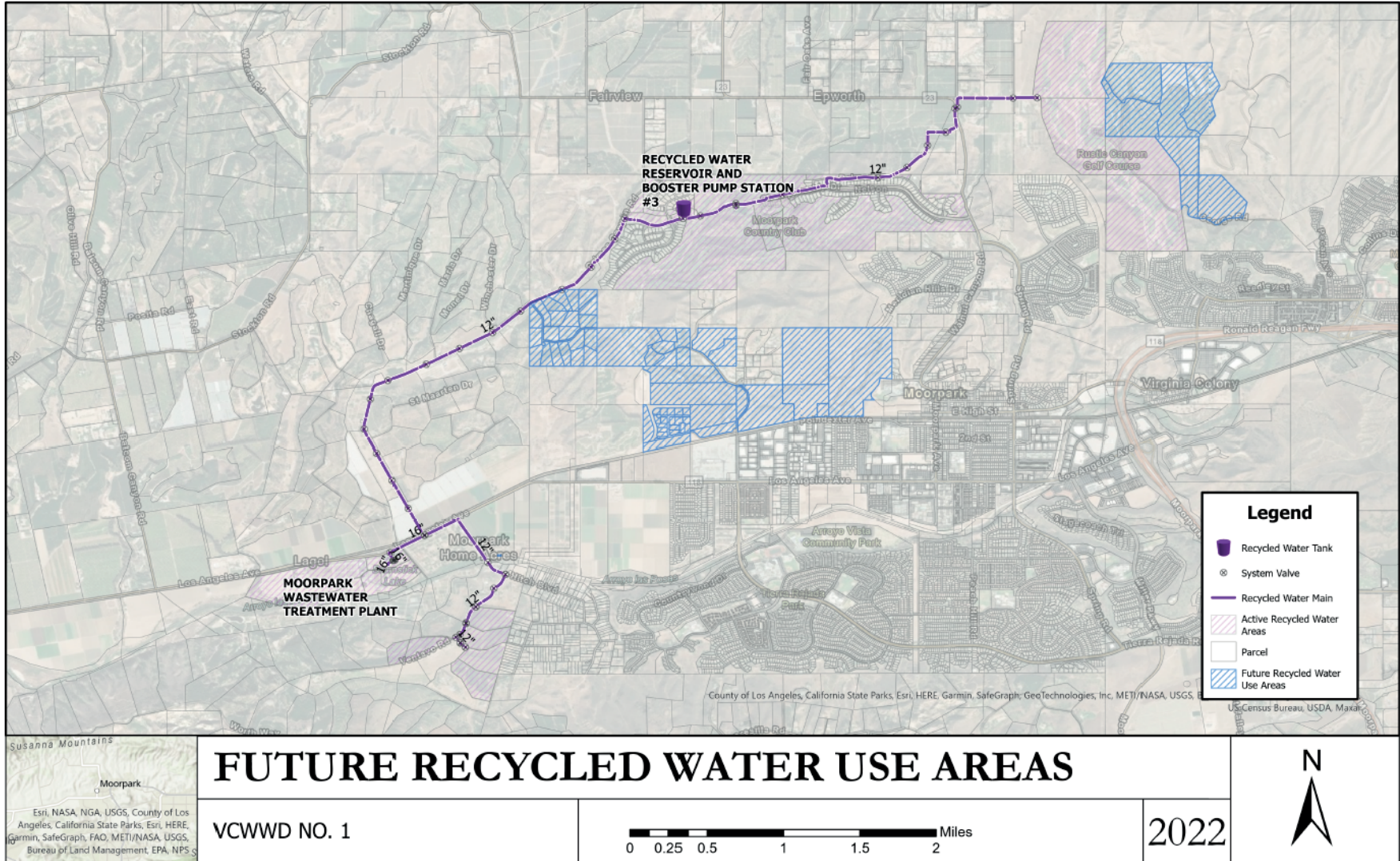
ATTACHMENT C.4 – 2019 RECYCLED WATER EXPANSION



ATTACHMENT C. 5 – EXISTING RECYCLED WATER USERS



ATTACHMENT C. 6 – FUTURE RECYCLED WATER USE AREAS



ATTACHMENT C. 7 – WATER RECYCLING CRITERIA SIGN



Water Recycling Criteria
FIGURE 60310-A

ATTACHMENT D. STANDARD PROVISIONS

1. DUTY TO COMPLY

The discharger must comply with all conditions of these waste discharge requirements. A responsible party has been designated in the Order for this project, and is legally bound to maintain the monitoring program and permit. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board. (California Water Code, Sections 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, and 13350). Failure to comply with any waste discharge requirement, monitoring and reporting requirement, or other order or prohibition issued, reissued or amended by the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) or State Water Resources Control Board is a violation of these waste discharge requirements and the Water Code, which can result in the imposition of civil liability. (California Water Code, Section 13350, subdivision (a).)

2. GENERAL PROHIBITION

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by California Water Code section 13050. In addition, the discharge of waste classified as hazardous, as defined in California Code of Regulations, Title 23, Section 2521, subdivision (a) is also prohibited.

3. AVAILABILITY

A copy of these waste discharge requirements shall be maintained at the discharge facility and be available at all times to operating personnel. (California Water Code, Section 13263)

4. CHANGE IN OWNERSHIP

The discharger must notify the Executive Officer of the Los Angeles Water Board, in writing at least 30 days in advance of any ownership change and provide a date on which the transfer of this Order's responsibility and coverage will go from the current discharger to the new discharger. The notification shall include an agreement between the parties to transfer responsibility for compliance with the Order. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date forward. The succeeding owner or operator shall submit a Report of Waste Discharge that requests an amendment to formally amend the Order to acknowledge the transfer (California Water Code, Sections 13267 and 13263).

5. CHANGE IN DISCHARGE

In the event of a material change in the character, location, or volume of a discharge, the discharger shall file with the Los Angeles Water Board a new Report of Waste Discharge (California Water Code, Section 13260, subdivision (c)). A material change includes, but is not limited to, the following:

- 5.1 Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.

- 5.2 Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
- 5.3 Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
- 5.4 Increase in flow beyond that specified in the waste discharge requirements.
- 5.5 Increase in the area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. (California Code of Regulations, Title 23, Section 2210)

6. REVISION

These waste discharge requirements are subject to review and revision by the Los Angeles Water Board. (California Water Code, Sections 13263)

7. NOTIFICATION

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Los Angeles Water Board, it shall promptly submit such facts or information. (California Water Code, Sections 13260 and 13267)

8. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the discharger from his liability under Federal, State or local laws, nor do they create a vested right for the discharger to continue the waste discharge. (California Water Code, Section 13263, subdivision (g).)

9. SEVERABILITY

Provisions of these waste discharge requirements are severable. If any provisions of these requirements are found invalid, the remainder of the requirements shall not be affected.

10. OPERATION AND MAINTENANCE

The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order. (California Water Code, Section 13263, subdivision (f).)

11. HAZARDOUS SUBSTANCES AND SEWAGE RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall,

as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the discharger is in violation of a prohibition in the applicable Water Quality Control plan. (California Water Code, Section 13271, subdivision (a).)

12. OIL OR PETROLEUM RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This provision does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan. (California Water Code, Section 13272)

13. ENTRY AND INSPECTION

The discharger shall allow the Los Angeles Water Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

- 13.1. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
- 13.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
- 13.3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- 13.4. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the California Water Code, any substances or parameters at any location. (California Water Code, Section 13267)
- 13.5. Except for material determined to be confidential in accordance with applicable law, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the office of the Los Angeles Water Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.

14. MONITORING PROGRAM AND DEVICES

The discharger shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted. (California Water Code, Section 13267)

- 14.1. 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. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Executive Office a written statement, signed by a registered professional engineer, certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.
- 14.2. The analysis of any material required pursuant to Division 7 of the Water Code shall be performed by a laboratory that has accreditation or certification pursuant to Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code.
- 14.4. Unless otherwise permitted by the Los Angeles Water Board Executive officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board's Division of Drinking Water. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR Part 136) promulgated by the United States Environmental Protection Agency (USEPA). (California Code of Regulations, Title 23, Section 2230)
- 14.5. The Quality Assurance-Quality Control Program must conform to the USEPA Guidelines "Laboratory Documentation Requirements for Data Validation" (January 1990, USEPA Region 9) or procedures approved by the Los Angeles Regional Water Quality Control Board.
- 14.6. All quality assurance and quality control (QA/QC) analyses must be run on the same dates the samples were analyzed. All QA/QC data shall be reported, along with the sample results to which they apply, including the method, equipment, analytical detection and quantitation limits, the percent recovery, and explanation for any recovery that falls outside the QC limits, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recoveries. In cases where contaminants are detected in QA/QC samples (e.g., field, trip, or lab blanks); the accompanying sample results shall be appropriately flagged.
- 14.5. The Discharger shall make all QA/QC data available for inspection by Regional Board staff and submit the QA/QC documentation with its respective quarterly report. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the quarterly monitoring report.

15. TREATMENT FAILURE

In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost. (California Water Code, Section 13263, subdivision (f).)

16. DISCHARGE TO NAVIGABLE WATERS

A person who discharges pollutants or proposes to discharge pollutants or proposes to discharge pollutants to the navigable waters of the United States within the jurisdiction of this state or a person who discharges dredged or fill material or proposes to discharge dredged or fill material into the navigable waters of the United States within the jurisdiction of this state shall file a report of waste discharge in compliance with the procedures set forth in Water Code section 13260. (California Water Code, Section 13376)

17. ENDANGERMENT TO HEALTH AND THE ENVIRONMENT

The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Los Angeles Water Board staff and DDW staff specified in Section 9.1 of the Monitoring and Reporting Program within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Office within 24 hours:

- 17.1. Any bypass from any portion of the treatment facility.
- 17.2. Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.
- 17.3. Any treatment plan upset which causes the effluent limitation of this Order to be exceeded. (California Water Code, Sections 13263 and 13267)

18. MAINTENANCE OF RECORDS

The discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and record of all data used to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when

requested by the Los Angeles Water Board Executive Officer. Records of monitoring information shall include:

- 18.1. The date, exact place, and time of sampling or measurement;
- 18.2. The individual(s) who performed the sampling or measurement;
- 18.3. The date(s) analyses were performed;
- 18.4. The individual(s) who performed the analyses;
- 18.5. The analytical techniques or method used; and
- 18.6. The results of such analyses.

19. SIGNATORY REQUIREMENTS

- 19.1. All application reports or information to be submitted to the Executive Officer shall be signed and certified as follows:
 - 19.1.1 For a corporation – by a principal executive officer or at least the level of vice president.
 - 19.1.2 For a partnership or sole proprietorship – by a general partner or the proprietor, respectively.
 - 19.1.3 For a municipality, state, federal, or other public agency – by either a principal executive officer or ranking elected official.
- 19.2. A duly authorized representative of a person designated in paragraph 19 above may sign documents if:
 - 19.2.1 The authorization is made in writing by a person described in paragraph (a) of this provision.
 - 19.2.2 The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
 - 19.2.3 The written authorization is submitted to the Executive Officer.

20. CERTIFICATION STATEMENT

Any person signing a document under this Section shall make the following certification:

“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. [California Water Code Sections 13263, 13267, and 13268]”

21. OPERATOR CERTIFICATION REQUIREMENT

Supervisors and operators of municipal wastewater treatment plants and water recycling treatment plants shall possess a certificate of appropriate grade in accordance with California Code of Regulations, Title 23, section 3680. State Boards may accept experience in lieu of qualification training. (California Code of Regulations, Title, 23, Sections 3680 and 3680.2.) In lieu of a properly certified wastewater treatment plant operator, the State Board may approve use of a water treatment plant operator of

appropriate grade certified by the State Department of Public Health where reclamation is involved. (California Code of Regulations, Title, 23, Section 3670.1, subdivision (b).)

22. PUBLICLY OWNED TREATMENT WORKS' ADEQUATE CAPACITY

The Discharger shall submit a written report to the Executive Officer of the Los Angeles Water Board within 120 days after the "30-day (monthly) average" daily dry weather flow equals or exceeds 75 percent of the design capacity of the waste treatment and/or disposal facilities. The Discharger's senior administrative officer shall sign a letter, which transmits that report and certify that the Discharger's policy-making body is adequately informed of the report's contents. The report shall include the following:

- i. The average daily flow for the month, the date on which the peak flow occurred, the rate of that peak flow, and the total flow for the day.
- ii. The best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the facilities.
- iii. A schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

This requirement is applicable in the case where the facility has not reached 75 percent of capacity as of the effective date of this Order. If the facility has reached 75 percent of capacity by that date but has not previously submitted such report, such a report shall be filed within 120 days of the issuance of this Order.

(California Code of Regulations, Title, 23, Section 2232.)

ATTACHMENT E. MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP), (CI-6374)

This Monitoring and Reporting Program is issued by the California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) pursuant to California Water Code (CWC) section 13267(b)(1), which authorizes the Los Angeles Water Board to require the submittal of technical and monitoring reports. The reports required by this MRP are necessary to ensure compliance with Waste Discharge Requirements (WDRs) and Water Recycling Requirements (WRRs) Order No. R4-2023-0089 for the Moorpark Water Reclamation Facility (WRF). The Ventura County Waterworks District No. 1 (VCWD or Permittee) owns and operates the Moorpark WRF, and is therefore responsible for compliance with this Order. VCWD shall implement this MRP on the effective date of this Order. Failure to comply with this MRP could result in the imposition of monetary civil liability pursuant to Division 7 of the California Water Code and other applicable laws.

1. GENERAL MONITORING REQUIREMENTS

- 1.1. All samples shall be representative of the waste discharge under conditions of peak load. Results of monthly, quarterly, semiannual, and annual analyses shall be reported by the due date specified in Table E-8.
- 1.2. The samples shall be analyzed using analytical methods described in 40 CFR Part 136; or where no methods are specified for a given pollutant, by methods approved by the State Water Resources Control Board, Division of Drinking Water (DDW), the Los Angeles Water Board and/or the State Water Resources Control Board (State Water Board). The Permittee shall select the analytical methods that provide minimum level (MLs) lower than the limits prescribed in this Order and lower than each pollutant's respective Maximum Contaminant Level (MCL). For those constituents that have drinking water notification levels (NLs) and/or public health goals (PHGs), the MLs shall be equal to or lower than either the NLs or the PHGs whenever feasible. Every effort should be made to analyze pollutants using the lowest ML possible.
- 1.3. The Permittee shall instruct its laboratories to establish calibration standards so that the MLs (or equivalent if there is a different treatment of samples relative to calibration standards) are the lowest calibration standard. At no time shall the analytical data be derived from extrapolation beyond the lowest point of the calibration curve.
- 1.4. VCWD shall have written sampling protocols in place. For groundwater monitoring, the sampling protocols shall outline the methods and procedures used for measuring water levels, purging wells, collecting samples, decontaminating equipment, continuing, preserving, and shipping samples, and maintaining appropriate documentation. The sampling protocols shall also include the procedures for handling, storing, testing, and disposing of purge and decontamination waters generated from the sampling events.
- 1.5. Upon request by the Permittee, the Los Angeles Water Board, in consultation with DDW and the State Water Board Quality Assurance Program, may establish MLs, in any of the following situations:
 - 1.5.1. When the pollutant has no established method under 40 CFR 136;
 - 1.5.2. When the method under 40 CFR 136 for the pollutant has an ML higher than the limit specified in this Order; or

- 1.5.3. When the Permittee agrees to use a test method that is more sensitive than those specified in 40 CFR Part 136.
- 1.6. The laboratory conducting the analyses shall be certified by ELAP or approved by DDW, the Los Angeles Water Board, or the State Water Board for each pollutant or parameter.
- 1.7. Samples shall be analyzed within allowable holding time limits specified in 40 CFR Part 136.3. All quality assurance / quality control (QA/QC) analyses shall be run on the same dates the samples are analyzed. The Permittee shall make available for inspection and/or submit the QA/QC documentation upon request by Los Angeles Water Board or DDW staff. Proper chain of custody procedures shall be followed, and a copy of that documentation shall be submitted with the quarterly report.
- 1.8. For all bacterial analyses, sample dilutions shall be performed so the range of values extends from 1 to 800. The detection methods used for each analysis shall be reported with the results of the analyses.
- 1.9. Detection methods used for total coliform shall be those presented in Table 1A of 40 CFR part 136, unless alternate methods have been approved in advance by the USEPA pursuant to 40 CFR part 136.
- 1.10. Detection methods used for *E.coli* shall be those presented in Table 1A of 40 CFR part 136 or in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure*, or any improved method determined by the Los Angeles Water Board to be appropriate.
- 1.11. The Permittee shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

2. MONITORING LOCATIONS

The Permittee shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order. Any changes to the monitoring locations described below shall be approved by the Executive Officer of the Los Angeles Water Board prior to use.

Table E-1. Monitoring Station Locations

Monitoring Location Name	Monitoring Location Description
Influent Monitoring Station INF-001	The influent sampling station shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. Latitude: 34.2704379° Longitude: -118.9357674°

Monitoring Location Name	Monitoring Location Description
Effluent Monitoring Station EFF-001A	The secondary-treated effluent sampling station shall be located downstream of any in-plant return flows before secondary-treated water is discharged to the percolation ponds, where representative samples of the effluent can be obtained. Latitude: 34.269616° Longitude: -118.936339°
Effluent Monitoring Station EFF-001B	The disinfected tertiary recycled water sampling station shall be located downstream of the disinfection process, collected at this point. Latitude: 34.2691693° Longitude: -118.9337378°
Upgradient Groundwater Monitoring Station RGW-001	Monitoring Well No. MW-1 Latitude: 34.270497° Longitude: -118.931238°
Downgradient Groundwater Monitoring Station RGW-002	Monitoring Well No. MW-2 Latitude: 34.2683254° Longitude: -118.9463705°
Downgradient Groundwater Monitoring Station RGW-003	Monitoring Well No. MW-3 Latitude: 34.269710° Longitude: -118.942219°

3. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to:

- Determine compliance with water quality conditions and standards.
- Assess treatment plant performance.
- Assess effectiveness of the Pretreatment Program.

3.1. Monitoring Location INF-001

The Permittee shall monitor influent to the facility at INF-001 as follows:

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Note
Flow	MGD	recorder	continuous	a
pH	pH unit	grab	monthly	b
Total suspended solids	mg/L	24-hour composite	monthly	b

Parameter	Units	Sample Type	Minimum Sampling Frequency	Note
Biochemical oxygen demand (BOD ₅ 20°C)	mg/L	24-hour composite	monthly	b
Nitrate as nitrogen	mg/L	24-hour composite	monthly	--
Nitrite as nitrogen	mg/L	24-hour composite	monthly	--
Nitrate + nitrite as nitrogen	mg/L	24-hour composite	monthly	--
Nickel	µg/L	24-hour composite	quarterly	b
Bis(2-ethylhexyl) phthalate	µg/L	24-hour composite or grab	quarterly	--
Carbon tetrachloride	µg/L	24-hour composite	quarterly	b
Total trihalomethanes (TTHMs)	µg/L	24-hour composite	quarterly	b
Remaining Attachment F pollutants excluding asbestos	µg/L	24-hour composite; grab for VOCs	annually	b

Footnotes for Table E-2

- a. Total daily flow and instantaneous peak daily flow (24-hr basis) shall be reported. Actual monitored flow shall also be reported (not the maximum flow, i.e., design capacity).
- b. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, those methods shall be approved by this Los Angeles Water Board or State Water Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Appendix 4 of the SIP, the analytical method with the lowest ML must be selected.

End of Footnotes for Table E-2

4. SECONDARY-TREATED EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

- Determine compliance with permit conditions and water quality standards for discharges to the percolation ponds.
- Assess plant performance and identify operational problems.
- Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.
- Conduct reasonable potential analysis for toxic pollutants.

Monitoring frequency is determined based on historic monitoring frequency, best professional judgement, and the following criteria:

Criterion 1: Monitoring frequency is monthly for those pollutants in the final effluent that have exceeded their corresponding MCL or Basin Plan water quality objective;

Criterion 2: Monitoring frequency is quarterly for those pollutants in which some or all historic effluent monitoring data detected the pollutants in the final effluent, but without exceeding its corresponding MCL or Basin Plan water quality objective;

Criterion 3: Monitoring frequency is annually for those pollutants in which all historic monitoring data are not detected and have not exceeded the corresponding MCL or Basin Plan water quality objective.

4.1. Monitoring Location EFF-001A

The Permittee shall monitor the discharge of secondary-treated effluent at EFF-001A. If more than one analytical test method is listed for a given parameter, the Permittee must select from the listed methods and corresponding ML:

Table E-3. Secondary-Treated Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Total flow	MGD	recorder	continuous	a
Turbidity	NTU	recorder	continuous	a & b
Total residual chlorine	mg/L	recorder	continuous	a & c
Total residual chlorine	mg/L	grab	monthly	b & c
Total coliform	MPN/100mL or CFU/100ml	grab	monthly	b & d
Fecal coliform	MPN/100mL or CFU/100ml	grab	monthly	b & d
<i>E. coli</i>	MPN/100mL or CFU/100ml	grab	monthly	b & d
Temperature	°F	grab	monthly	b
pH	pH units	grab	monthly	b
Settleable solids	mL/L	grab	monthly	b
Total suspended solids (TSS)	mg/L	24-hour composite	monthly	b
BOD ₅ 20°C	mg/L	24-hour composite	monthly	b
Oil and grease	mg/L	grab	monthly	b
Dissolved oxygen	mg/L	grab	monthly	b
Total dissolved solids	mg/L	24-hour composite	monthly	b
Sulfate	mg/L	24-hour composite	monthly	b
Chloride	mg/L	24-hour composite	monthly	b
Boron	mg/L	24-hour composite	monthly	b
Ammonia nitrogen	mg/L	24-hour composite	monthly	b
Nitrite as nitrogen	mg/L	24-hour composite	monthly	b
Nitrate as nitrogen	mg/L	24-hour composite	monthly	b
Nitrate + nitrite as nitrogen	mg/L	calculated	monthly	b
Organic nitrogen	mg/L	calculated	monthly	b

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Total nitrogen	mg/L	calculated	monthly	b
Total hardness (CaCO ₃)	mg/L	24-hour composite	monthly	b
Nickel	µg/L	24-hour composite	monthly	b
Total trihalomethanes (TTHMs)	µg/L	24-hour composite	monthly	b
Carbon tetrachloride	µg/L	24-hour composite	monthly	b
Bis(2-ethylhexyl)phthalate	µg/L	24-hour composite or grab	monthly	b
Surfactants (MBAS)	mg/L	24-hour composite	monthly	b
Surfactants (CTAS)	mg/L	24-hour composite	quarterly	b
Mercury	µg/L	24-hour composite	semiannually	e
PCBs as aroclors	pg/L	24-hour composite	annually	b & f
Remaining Attachment F pollutants excluding asbestos and PCBs	µg/L	24-hour composite; grab for VOCs	annually	b
Perchlorate	µg/L	grab	quarterly	b

Footnotes for Table E-3

- a. For constituents that are continuously monitored, the monthly minimum and maximum, and daily average and maximum values shall be reported. In addition to reporting the total flow discharged per month, the flow discharged to each of the individual percolation ponds shall also be recorded and reported.
- b. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, those methods shall be approved by this Los Angeles Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Appendix 4 of the SIP, the analytical method with the lowest ML must be selected.
- c. Total residual chlorine shall be recorded continuously when chlorination is used for disinfection.
- d. Fecal coliform and *E. coli* testing shall be conducted only if the results of total coliform testing is positive. If the total coliform analysis results in no detection, a result of less than (<) the reporting limit for total coliform will be reported for fecal coliform and *E. coli*.
- e. The mercury effluent samples shall be analyzed using USEPA method 1631E, per 40 CFR part 136, with a quantification level lower than 0.5 ng/L, shall be used to analyze total mercury. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR part 136, the Discharger may use that method in lieu of USEPA Method 1631E.
- f. PCBs as aroclors shall be analyzed using USEPA method 608.

End of Footnotes for Table E-3

5. DISINFECTED TERTIARY RECYCLED WATER MONITORING REQUIREMENTS

Disinfected tertiary recycled water monitoring is required to determine compliance with the permit conditions: (1) identify operational problems and aid in improving facility performance, and (2) provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.

Monitoring frequency is determined based on historic monitoring frequency, best professional judgement, and the following criteria:

Criterion 1: Monitoring frequency is monthly for those pollutants in the final effluent that have exceeded their corresponding MCL or Basin Plan water quality objective;

Criterion 2: Monitoring frequency is quarterly for those pollutants in which some or all historic effluent monitoring data detected the pollutants in the final effluent, but without exceeding its corresponding MCL or Basin Plan water quality objective;

Criterion 3: Monitoring frequency is annually for those pollutants in which all historic monitoring data are not detected and have not exceeded the corresponding MCL or Basin Plan water quality objective.

The following shall constitute the recycled water monitoring program:

5.1. Monitoring Location EFF-001B

The Permittee shall monitor the discharge of disinfected tertiary recycled water at EFF-001B. If more than one analytical test method is listed for a given parameter, the Permittee must select from the listed methods and corresponding ML:

Table E-4. Disinfected Tertiary Recycled Water Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Recycled water produced at Moorpark WRF	MGD Million gallons	recorder calculated	continuous monthly	a
Recycled water distributed to end users	MGD Million gallons	recorder calculated	continuous monthly	a
Recycled water discharged to percolation ponds	MGD Million gallons	recorder calculated	continuous monthly	a
Turbidity	NTU	recorder	continuous	a & b
Total residual chlorine	mg/L	recorder	continuous	a & c
Total residual chlorine	mg/L	grab	monthly	b & c
Chlorine contact time	mg-min/L	calculated	continuous	a
Total coliform	MPN/100mL or CFU/100ml	grab	monthly	b & d
Fecal coliform	MPN/100mL or CFU/100ml	grab	monthly	b & d
<i>E. coli</i>	MPN/100mL or CFU/100ml	grab	monthly	b & d

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Temperature	°F	grab	monthly	b
pH	pH units	grab	monthly	b
Settleable solids	mL/L	grab	monthly	b
Total suspended solids (TSS)	mg/L	24-hour composite	monthly	b
BOD ₅ 20°C	mg/L	24-hour composite	monthly	b
Oil and grease	mg/L	grab	monthly	b
Dissolved oxygen	mg/L	grab	monthly	b
Total dissolved solids	mg/L	24-hour composite	monthly	b
Sulfate	mg/L	24-hour composite	monthly	b
Chloride	mg/L	24-hour composite	monthly	b
Boron	mg/L	24-hour composite	monthly	b
Ammonia nitrogen	mg/L	24-hour composite	monthly	b
Nitrite as nitrogen	mg/L	24-hour composite	monthly	b
Nitrate as nitrogen	mg/L	24-hour composite	monthly	b
Nitrate + nitrite as nitrogen	mg/L	calculated	monthly	b
Total nitrogen	mg/L	calculated	monthly	b
Total hardness (CaCO ₃)	mg/L	24-hour composite	monthly	b
Nickel	µg/L	24-hour composite	monthly	b
Total trihalomethanes (TTHMs)	µg/L	24-hour composite	monthly	b
Carbon tetrachloride	µg/L	24-hour composite	monthly	b
Bis(2-ethylhexyl)phthalate	µg/L	24-hour composite or grab	monthly	b
Surfactants (MBAS)	mg/L	24-hour composite	monthly	b
Surfactants (CTAS)	mg/L	24-hour composite	quarterly	b
Total organic carbon	mg/L	grab	quarterly	b
PCBs as aroclors	pg/L	24-hour composite	annually	b & e
Remaining Attachment F pollutants	µg/L	24-hour composite; grab for VOCs	annually	b

Footnotes for Table E-4

- a. For constituents that are continuously monitored, the monthly minimum and maximum, and daily average and maximum values shall be reported.
- b. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, those methods shall be approved by this Los Angeles Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Appendix 4 of the SIP, the analytical method with the lowest ML must be selected.

- c. Total residual chlorine shall be recorded continuously when chlorination is used for disinfection.
- d. Fecal coliform and *E. coli* testing shall be conducted only if the results of total coliform testing is positive. If the total coliform analysis results in no detection, a result of less than (<) the reporting limit for total coliform will be reported for fecal coliform and *E. coli*.
- e. PCBs as aroclors shall be analyzed using USEPA method 608.

6. GROUNDWATER MONITORING REQUIREMENTS

6.1. Monitoring Location RGW-001, RGW-002, and RGW-003

The Permittee shall monitor the groundwater at Well Nos. MW-1, MW-2, and MW-3 as follows:

Table E-5. Receiving Groundwater Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Water Level Elevations	feet	--	semiannually	--
pH	pH units	grab	quarterly	a, b & c
Temperature	°F	grab	quarterly	a, b & c
Dissolved oxygen	mg/L	grab	quarterly	a, b & c
Total coliform	MPN/100ml or CFU/100ml	grab	monthly	a, b & c
Fecal coliform	MPN/100ml or CFU/100ml	grab	monthly	a, b & c
<i>E. coli</i>	MPN/100ml or CFU/100ml	grab	monthly	a, b & c
Total suspended solids	mg/L	grab	quarterly	a, b & c
BOD ₅ 20°C	mg/L	grab	quarterly	a, b & c
Settleable solids	mL/L	grab	quarterly	a, b & c
Total organic carbon	mg/L	grab	quarterly	a, b & c
Ammonia nitrogen	mg/L	grab	quarterly	a, b & c
Nitrate nitrogen	mg/L	grab	quarterly	a, b & c
Nitrite nitrogen	mg/L	grab	quarterly	a, b & c
Nitrate + nitrite as nitrogen	mg/L	calculated	quarterly	a, b & c
Organic nitrogen	mg/L	calculated	quarterly	a, b & c
Conductivity	µmho/cm	grab	quarterly	a, b & c
Total dissolved solids	mg/L	grab	quarterly	a, b & c
Chloride	mg/L	grab	quarterly	a, b & c
Sulfate	mg/L	grab	quarterly	a, b & c
Boron	mg/L	grab	quarterly	a, b & c
Surfactants (MBAS)	mg/L	grab	quarterly	a, b & c
Surfactants (CTAS)	mg/L	grab	quarterly	a, b & c

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Total hardness (CaCO ₃)	mg/L	grab	quarterly	a, b & c
Mercury	µg/L	grab	quarterly	a, b, c & d
Nickel	µg/L	grab	quarterly	a, b & c
Bis(2-ethylhexyl) phthalate	µg/L	grab	quarterly	a, b & c
Total trihalomethanes (TTHMs)	µg/L	grab	quarterly	a, b & c
Carbon tetrachloride	µg/L	grab	quarterly	a, b & c
PCBs as aroclors	pg/L	grab	annually	a, b & e
Remaining Attachment F Pollutants	µg/L	grab	annually	f
Perchlorate	µg/L	grab	quarterly	b

Footnotes for Table E-5

- a. Water level elevations shall be reported to the nearest 0.1 ft and referenced to mean sea level.
- b. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, those methods shall be approved by this Los Angeles Water Board or State Water Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.
- c. After two years the Permittee may propose a reduced groundwater monitoring schedule, or elimination of the groundwater monitoring program completely, based on data collected during that period. The rationale for a modified groundwater monitoring program shall be stated and is subject to approval by the Executive Officer of the Los Angeles Water Board.
- d. The mercury samples shall be analyzed using EPA method 1631E, per 40 CFR part 136, with a quantification level lower than 0.5 ng/L to analyze total mercury. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR part 136, the Discharger may use that method in lieu of USEPA Method 1631E.
- e. PCBs as aroclors shall be analyzed using USEPA method 608.
- f. Priority pollutants are those constituents referred to in 40 CFR section 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.

End of Footnotes for Table E-5

7. POND SYSTEM MONITORING

7.1. This Order permits effluent to be stored in storage ponds and percolation ponds when recycled water is not immediately required. Storage ponds and percolation ponds shall be monitored for the following:

Table E-6. Pond System Monitoring

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency	Note
Freeboard	0.1 feet	Measurement	Quarterly	Annually	a
Odors	---	Observation	Quarterly	Annually	---
Berm conditions	---	Observation	Quarterly	Annually	---

Footnotes for Table E-6

a. The freeboard shall be reported for each storage pond and each percolation pond.

End of Footnotes for Table E-6

8. USE AREA MONITORING

8.1. VCWD is responsible for ensuring use area data is collected and submitted in the annual report. The following shall be recorded for each user with additional reporting for use areas as appropriate. The frequency of use area inspections shall be based on the complexity and risk of each use area. Use areas may be aggregated to combine acreage for calculation or observation purposes. Use area monitoring shall include:

Table E-7. Use Area Monitoring

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency	Note
Recycled Water User	---	---	---	Annually	---
Average Monthly Recycled Water Flow	Gallons per day (gpd)	Meter	Monthly	Annually	---
Acreage Applied	Acres	Calculated	---	Annually	---
Application Rate	Inches/acre/year	Calculated	---	Annually	---
Soil Saturation and Ponding	---	Observation	Quarterly	Annually	---
Nuisance Odors/Vectors	---	Observation	Quarterly	Annually	---
Discharge Off-Site	---	Observation	Quarterly	Annually	---
Notification Signs	---	Observation	Quarterly	Annually	a

Footnotes for Table E-7

a. Notification signs shall be consistent with the requirements of CCR, title 22, section 60310 (g).

End of Footnotes for Table E-7

9. GENERAL REPORTING REQUIREMENTS

9.1. VCWD shall notify the Los Angeles Water Board and DDW by telephone (Jim Kang (213) 576-6683 and Jeff Densmore (805) 566-1326) or by electronic means (Jim.kang@waterboards.ca.gov and DDWRegion4@waterboards.ca.gov) within 24

hours of knowledge of any violations of this Order that may endanger human health or the environment. Written confirmation shall be submitted within 5 days from date of notification. The report shall include, but shall not be limited to the following information:

- 9.1.1. The nature and extent of the violation;
 - 9.1.2. The date and time when the violation started; when compliance was achieved; and, when injection was suspended and restored, as applicable;
 - 9.1.3. The duration of the violation;
 - 9.1.4. The cause(s) of the violation;
 - 9.1.5. Any corrective and/or remedial actions that have been taken and/or will be taken with a time schedule for implementation to prevent future violations; and,
 - 9.1.6. Any impact of the violation.
- 9.2. Each monitoring report shall include a separate section titled "Summary of Non-compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements as well as all excursions of the final effluent limitations.
- 9.3. The Permittee shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the WDR section of this Order. This record shall be made available to the Los Angeles Water Board upon request and a spill summary shall be included in the annual summary report.
- 9.3.1. For spills/bypass of 500 gallons or more that flowed to receiving waters or entered a shallow groundwater aquifer or has public exposure, the Discharger shall report such spills to the Los Angeles Water Board and the local health agency by telephone or electronically as soon as possible but not later than 24 hours of knowledge of the incident. The following information shall be included in the report: location; date and time of spill; volume and nature of the spill; cause(s) of the spill; mitigation measures implemented; and corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.
 - 9.3.2. For spills that reach receiving waters, the Discharger shall obtain and analyze grab samples for total and fecal coliforms, and enterococcus, upstream and downstream of the point of entry of the spill. This monitoring shall be on a daily basis from time the spill is known until the results of two consecutive sets of bacteriological monitoring indicate the return to the normal level or cessation of monitoring is authorized by Ventura County Department of Public Health.
 - 9.3.3. The verbal/electronic notification to the Los Angeles Water Board shall be followed by a written report within five days.
- 9.4. If there is no discharge during any reporting period, the report shall so state.
- 9.5. The Permittee shall inform the Los Angeles Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
- 9.6. The groundwater monitoring reports shall include the following information:

- 9.6.1. The groundwater well identification number, date and time of sample collection, and name of the individual collecting the sample;
- 9.6.2. Depth to ground water measured to the nearest 0.01 foot, and groundwater elevation to the nearest 0.01 foot mean sea level;
- 9.6.3. Groundwater contour map depicting the hydraulic gradient and direction of groundwater flow across the plant;
- 9.6.4. Laboratory identification, date(s) of analysis, and analytical method used; and,
- 9.6.5. An evaluation of all groundwater monitoring data, together with recommendations for additional work, as needed.

9.7. WASTE HAULING REPORT

In the event that wastes or sludge are hauled to a legal disposal site, the name and address of the hauler of the wastes shall be reported, the quantity hauled during the reporting period, and the location of the final point of disposal. For purposes of this requirement, a legal disposal site is one for which requirements have been established by a California Regional Water Quality Control Board and which is in full compliance therewith. If no wastes or sludge are hauled during the reporting period, a statement to that effect shall be submitted.

9.8. Self-Monitoring Reports (SMRs)

- 9.8.1. The Permittee shall electronically submit all reports and monitoring data required under these WDRs to the State Water Resource Control Board's GeoTracker database. All reports shall reference Compliance File No. CI-6374 and shall be uploaded under Global ID WDR100040106. Compliance monitoring shall be submitted separately from other technical reports. All submittals shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the Order in searchable Portable Document Format (PDF) and all water quality data in Electronic Deliverable Format (EDF). If any files exceed 10 megabytes, the report shall be uploaded in multiple parts and upon request, the data shall be provided in excel format. Information regarding the [GeoTracker database](http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml) (http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml) is provided on the State Water Boards' website.
- 9.8.2. The Permittee shall report in the SMR the results for all monitoring specified in this MRP sections 3 through 8. The Permittee shall submit monthly, quarterly, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Permittee samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this MRP using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with limitations set forth in this Order.
- 9.8.3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-8. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	Order effective date	All	Submit with quarterly SMR
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 st day of calendar month thru last day of calendar month	Submit with quarterly SMR
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 thru March 31 April 1 through June 30 July 1 thru September 30 October 1 thru December 31	May 15 August 15 November 15 February 15
Semiannually	Closest of January 1 or July 1 following (or on) permit effective date	January 1 thru June 30 July 1 thru December 31	August 15 February 15
Annually	January 1 following (or on) permit effective date	January 1 thru December 31	March 1

9.8.4. **Reporting Protocols.** The Permittee shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR part 136. The Permittee shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory’s MDL, shall be reported as “Detected, but Not Quantified,” or DNQ. The estimated chemical concentration of the sample shall also be reported.
- c. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- d. Sample results less than the laboratory’s MDL shall be reported as “Not Detected,” or “ND.”

- e. Permittees are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

9.8.5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and section 7 of this Order. For purposes of reporting and administrative enforcement by the Los Angeles Water Board and State Water Board, the Permittee shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

9.8.6. The Permittee shall submit SMRs in accordance with the following requirements:

- a. The Permittee shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations.
- b. The Permittee shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

9.9. Quarterly Monitoring Reports

9.9.1. Quarterly monitoring reports shall include, at a minimum, the following information:

- a. The volume of all recycled water used for the reporting period. If no recycled water is used during the quarter, the report shall so state.
- b. A table listing the users serviced during the quarter, the amount of recycled water delivered to each user (reported in both gallons and in acre-feet), and the use of the recycled water.
- c. The date and time of sampling and analyses.
- d. All analytical results of samples collected during the monitoring period of the recycled water and groundwater.
- e. The USEPA analytical method used, the method detection limit (MDL), and the ML for each constituent analyzed.
- f. The applicable MCL, DDW condition, or permit limitation.
- g. Quality assurance and quality control (QA/QC) documents shall be submitted with each quarterly report. This documentation includes lab reports, results for duplicate samples, results for blank samples, and chain of custody forms.
- h. The name(s) of the laboratory that conducted the analyses and a copy of laboratory certifications from DDW's Environmental Laboratory Accreditation Program (ELAP).

- i. Records of any operational problems, plant upset(s), equipment breakdowns or malfunctions, and any diversion(s) of off-specification recycled water and the location(s) of final disposal.
 - j. Discussion of compliance, noncompliance, or violation of requirements.
 - k. All corrective or preventive action(s) taken or planned with a schedule of implementation, if any.
- 9.9.2. For the purpose of reporting compliance with numeric limitations, analytical data shall be reported using the following reporting protocols:
- a. Sample results greater than or equal to the ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample);
 - b. Sample results less than the ML but greater than or equal to the laboratory's method detection limit shall be reported as "Detected but Not Quantified," or DNQ. The laboratory shall write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."); or
 - c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
- 9.9.3. If the Permittee samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) more frequently than required in this MRP using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.
- 9.9.4. The Regional Water Board may request supporting documentation, such as daily logs of operations.

9.10. Annual Summary Report

- 9.10.1 By March 1 of each year, the Permittee shall submit an annual report containing a discussion of the previous year's influent/effluent analytical results and receiving water monitoring data. The annual report shall contain an overview of any plans for upgrades to the treatment plant's collection system, the treatment processes, or the outfall system. The Permittee shall submit annual report to the Los Angeles Water Board in accordance with the requirements described in subsection 9.8.3 above.

9.11. Other Reports

- 9.11.1 The Permittee shall submit to the Los Angeles Water Board, together with the monitoring report required by this Order, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.
- 9.11.2 The Los Angeles Water Board requires the Permittee to file with the Los Angeles Water Board, within 90 days after the effective date of this Order, a technical report on preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:

- a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks, and pipes should be considered.
- b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.
- c. Describe facilities and procedures needed for effective preventive and contingency plans.
- d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

9.11.3 Climate Change Effects Vulnerability Assessment and Mitigation Plan:

The Permittee shall consider the impacts of climate change as they affect the operation of the treatment facility due to flooding, wildfires, or other climate-related changes. The Permittee shall develop a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan) to assess and manage climate change-related effects that may impact the wastewater treatment facility's operation, water supplies, its collection system, and water quality, including any projected changes to the influent water temperature and pollutant concentrations, and beneficial uses. The permittee shall also identify new or increased threats to the sewer system resulting from climate change that may impact desired levels of service in the next 50 years. The permittee shall project upgrades to existing assets or new infrastructure projects, and associated costs, necessary to meet desired levels of service. Climate change research also indicates the overarching driver of climate change is increased atmospheric carbon dioxide from human activity. The increased carbon dioxide emissions trigger changes to climatic patterns, which increase the intensity of sea level rise and coastal storm surges, lead to more erratic rainfall and local weather patterns, trigger a gradual warming of freshwater and ocean temperatures, and trigger changes to ocean water chemistry. As such, the Climate Change Plan shall also identify steps being taken or planned to address greenhouse gas emissions attributable to wastewater treatment plants, solids handling, and effluent discharge processes. For facilities that discharge to the ocean including desalination plants, the Climate Change Plan shall also include the impacts from sea level rise. The Climate Change Plan is due 12 months after the effective date of this Order.

9.11.4. Annual Volumetric Reporting

All volumetric data measured monthly shall be reported annually as acre-feet (af) to the GeoTracker database under the "Other Tools: submit Annual Volumetric Water Data." Monthly volume of influent, recycled water produced, and distributed for beneficial use in compliance with Title 22 in each of the use categories below:

- Agricultural irrigation: pasture or crop irrigation
- Landscape irrigation: irrigation of parks, greenbelts, playgrounds, school yards, athletic fields, cemeteries, residential landscaping, freeway landscaping, highway landscaping, and street landscaping.

- Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.
- Commercial application: commercial facilities, business use (such as laundries or office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.
- Industrial Application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered. • Geothermal energy production: augmentation of geothermal fields.
- Other non-potable uses including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and dual-plumbed systems.
- Groundwater recharge: surface or subsurface application, except for seawater intrusion barrier use.

ATTACHMENT F. POLLUTANT LIST

The following pollutants shall be analyzed at least annually, or more frequently if specified in the Monitoring and Reporting Program of Order No. R4-2023-0089. If the annual test result exceeds the corresponding MCL for the pollutant listed below, the Ventura County Waterworks District (VCWD) shall perform accelerated monthly effluent monitoring for the target chemicals until the MCL is no longer exceeded, at which point VCWD may resume the regular frequency of testing. If the final effluent continues to exceed a pollutant’s MCL six months after the initial exceedance, VCWD shall initiate an investigation into the cause of the exceedance and determine an appropriate remedy to bring the final effluent back into compliance. VCWD shall submit a final report to the Los Angeles Water Board describing the issue and the actions VCWD performed to alleviate the problem. The MCLs in Table F1 through F4 list serve as triggers for accelerated monitoring, not as effluent limitations.

TABLE F1 – POLLUTANTS WITH PRIMARY MCL

Constituents	Units	Monthly Average MCL	Note
Aluminum	µg/L	1000	---
Antimony	µg/L	6	---
Arsenic	µg/L	10	---
Barium	µg/L	1000	---
Beryllium	µg/L	4	---
Cadmium	µg/L	5	---
Total Chromium	µg/L	50	---
Cyanide	µg/L	150	---
Fluoride	µg/L	2000	---
Mercury	µg/L	2	---
Nickel	µg/L	100	---
Perchlorate	µg/L	6	---
Selenium	µg/L	50	---
Thallium	µg/L	2	---
Copper	µg/L	1300	---
Lead	µg/L	15	---
Benzene	µg/L	1	---
Carbon Tetrachloride	µg/L	0.5	---
1,2-Dichlorobenzene	µg/L	600	---
1,4-Dichlorobenzene	µg/L	5	---
1,1-Dichloroethane	µg/L	5	---
1,2-Dichloroethane (1,2-DCA)	µg/L	0.5	---

Constituents	Units	Monthly Average MCL	Note
1,1-Dichloroethylene (1,1-DCE)	µg/L	6	---
Cis-1,2-Dichloroethylene	µg/L	6	---
Trans-1,2-Dichloroethylene	µg/L	10	---
Dichloromethane	µg/L	5	---
1,2-Dichloropropane	µg/L	5	---
1,3-Dichloropropene	µg/L	0.5	---
Ethylbenzene	µg/L	300	---
Methyl-tert-butyl-ether (MTBE)	µg/L	13	---
Monochlorobenzene	µg/L	70	---
Styrene	µg/L	100	---
1,1,2,2-Tetrachloroethane	µg/L	1	---
Tetrachloroethylene (PCE)	µg/L	5	---
Toluene	µg/L	200	---
1,2,4-Trichlorobenzene	µg/L	5	---
1,1,1-Trichloroethane	µg/L	200	---
1,1,2-Trichloroethane	µg/L	5	---
1,2,3-Trichloropropane	µg/L	0.005	---
Trichloroethylene (TCE)	µg/L	5	---
Trichlorofluoromethane	µg/L	150	---
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/L	1200	---
Vinyl Chloride	µg/L	0.5	---
Xylenes (m,p)	µg/L	1750	a
Alachlor	µg/L	2	---
Atrazine	µg/L	1	---
Bentazon	µg/L	18	---
Benzo(a)pyrene	µg/L	0.2	---
Carbofuran	µg/L	18	---
Chlordane	µg/L	0.1	---
Dalapon	µg/L	200	---
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	0.2	---
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	70	---
Di(2-ethylhexyl) adipate	µg/L	400	---

Constituents	Units	Monthly Average MCL	Note
Di(2-ethylhexyl) phthalate (DEHP)	µg/L	4	---
Dinoseb	µg/L	7	---
Diquat	µg/L	20	---
Endrin	µg/L	2	---
Endothall	µg/L	100	---
Ethylene Dibromide (EDB)	µg/L	0.05	---
Glyphosate	µg/L	700	---
Heptachlor	µg/L	0.01	---
Heptachlor epoxide	µg/L	0.01	---
Hexachlorobenzene	µg/L	1	---
Hexachlorocyclopentadiene	µg/L	50	---
Gamma BHC (Lindane)	µg/L	0.2	---
Methoxychlor	µg/L	30	---
Molinate	µg/L	20	---
Oxamyl	µg/L	50	---
Pentachlorophenol	µg/L	1	---
Picloram	µg/L	500	---
Polychlorinated Biphenyls (PCBs)	µg/L	0.5	---
Simazine	µg/L	4	---
2,4,5-TP (Silvex)	µg/L	50	---
2,3,7,8-TCDD (Dioxin)	µg/L	0.00003	---
Thiobencarb	µg/L	70	---
Toxaphene	µg/L	3	---

Footnotes for Table F1

- a. The MCL is for either a single isomer or the sum of the isomers.

End of Footnotes for Table F1

TABLE F2 – POLLUTANTS WITH SECONDARY MCL

Constituents	Units	Monthly Average MCL
Copper	µg/L	1000
Foaming agents (MBAS)	µg/L	500
Iron	µg/L	300

Constituents	Units	Monthly Average MCL
Manganese	µg/L	50
Silver	µg/L	100
Zinc	µg/L	5000

TABLE F3 – DISINFECTION BYPRODUCTS MCL

Constituents	Units	Monthly Average MCL	Note
Total Trihalomethanes (TTHMs)	µg/L	80	a
Haloacetic acid (five) (HAA5)	µg/L	60	b
Bromate	µg/L	10	---
Chlorite	µg/L	1000	---

Footnotes for Table F3

- a. Total trihalomethanes (TTHMs) is the sum of bromodichloromethane, bromoform, chloroform, and dibromochloromethane.
- b. Haloacetic acid (five) shall mean the sum of monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

End of Footnotes for Table F3

TABLE F4 – RADIONUCLIDE MCLS

Constituent	Units	Monthly Average
Gross Alpha particle activity (excluding radon and uranium)	pCi/L	15
Gross Beta particle activity (excluding radon and uranium)	mrem/yr	4
Radium-226 + Radium-228	pCi/L	5
Strontium-90	pCi/L	8
Tritium	pCi/L	20,000
Uranium	pCi/L	20

TABLE F5 – REMAINING PRIORITY POLLUTANTS

Constituent	Constituent
Acenaphthene	Bis(2-ethylhexyl) phthalate
Acrolein	Butyl benzyl phthalate
Acrylonitrile	di-n-butyl phthalate
Benzidene	di-n-octyl phthalate

Constituent	Constituent
Chlorobenzene	Diethyl phthalate
Hexachloroethane	Dimethyl phthalate
Chloroethane	Benzo(a) anthracene
Bis(2-chloroethyl) ether	Benzo(a) pyrene
2-chloroethyl vinyl ether	Benzo(b) fluoranthene
2-chloronaphthalene	Benzo(k) fluoranthene
2,4,6-trichlorophenol	Chrysene
Parachlorometa cresol	Acenaphthylene
Chloroform	Anthracene
2-chlorophenol	Benzo(ghi) perylene
1,3-dichlorobenzene	Fluorene
3,3-dichlorobenzidene	Phenanthrene
2,4-dichlorophenol	Dibenzo(a,h) anthracene
2,4-dimethylphenol	Indeno (1,2,3-c,d) pyrene
2,4-dinitrotoluene	Pyrene
2,6-dinitrotoluene	Tetrachloroethylene
1,2-diphenylhydrazine	Toluene
Fluoranthene	Trichloroethylene
4-chlorophenyl phenyl ether	Vinyl chloride
4-bromophenyl phenyl ether	Aldrin
Bis(2-chloroisopropyl) ether	Dieldrin
Bis(2-chlorethoxy) methane	4,4-DDT
Methylene chloride	4,4-DDE
Methyl chloride	4,4-DDD
Methyl bromide	Alpha Endosulfan
Bromoform	Beta Endosulfan
Dichlorobromomethane	Endosulfan sulfate
Chlorodibromomethane	Endrin Aldehyde
Hexachlorobutadiene	Alpha BHC
Isophorone	Beta BHC
Naphthalene	Delta BHC
Nitrobenzene	PCB-1242

Constituent	Constituent
2-nitrophenol	PCB-1254
4-nitrophenol	PCB-1221
4,6-dinitro-o-cresol	PCB-1232
N-nitrosodimethylamine	PCB-1248
n-nitrosodiphenylamine	PCB-1260
N-nitrosodi-n-propylamine	PCB-1016
Phenol	---

ATTACHMENT G. PRETREATMENT REPORTING REQUIREMENTS

The Ventura County Waterworks District No. 1 (Permittee) is required to submit annual Pretreatment Program Compliance Report (Report) to the Los Angeles Water Board. This Attachment outlines the minimum reporting requirements of the Report. If there is any conflict between requirements stated in this attachment and provisions stated in the Waste Discharge Requirements (WDRs), those contained in the WDR will prevail.

1. PRETREATMENT REQUIREMENTS

- 1.1. The Permittee shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR part 403, including any subsequent regulatory revisions to part 403. Where part 403 or subsequent revision places mandatory actions upon the Permittee as Control Authority but does not specify a timetable for completion of the actions, the Permittee shall complete the required actions within six months from the issuance date of this Order or the effective date of the part 403 revisions, whichever comes later.
- 1.2. The Permittee shall enforce the requirements promulgated under sections 307(b), 307(c), 307(d) and 402(b) of the Clean Water Act with timely, appropriate and effective enforcement actions. The Permittee shall cause all nondomestic users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements or, in the case of a new nondomestic user, upon commencement of the discharge.
- 1.3. The Permittee shall perform the pretreatment functions as required in 40 CFR part 403 including, but not limited to:
 - 1.3.1. Implement the necessary legal authorities as provided in 40 CFR section 403.8(f)(1);
 - 1.3.2. Enforce the pretreatment requirements under 40 CFR sections 403.5 and 403.6;
 - 1.3.3. Implement the programmatic functions as provided in 40 CFR section 403.8(f)(2);
and
 - 1.3.4. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR section 403.8(f)(3).
- 1.4. The Permittee shall submit annually a report to the Los Angeles Water Board describing its pretreatment activities over the previous year. In the event the District is not in compliance with any conditions or requirements of this Order, then the District shall also include the reasons for noncompliance and state how and when the District shall comply with such conditions and requirements. This annual report shall cover operations from January 1 through December 31 and is due on April 30 of each year. The report shall contain, but not be limited to, the following information:
 - 1.4.1. A summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the publicly owned treatment works (POTW) influent and effluent for those pollutants USEPA has identified under section 307(a) of the Act which are known or suspected to be discharged by nondomestic users. This will consist of an annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants detected in the full scan. The District is not required to sample and analyze for asbestos. Sludge sampling and analysis are covered in the sludge

section of this Order. The District shall also provide any influent or effluent monitoring data for nonpriority pollutants which the District believes may be causing or contributing to interference or pass through. Sampling and analysis shall be performed with the techniques prescribed in 40 CFR part 136;

- 1.4.2. A discussion of upset, interference or pass through incidents, if any, at the treatment plant which the District knows or suspects were caused by nondomestic users of the POTW system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the nondomestic user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent pass through or interference;
- 1.4.3. An updated list of the District's significant industrial users (SIUs) including their names and addresses, and a list of deletions, additions and SIU name changes keyed to the previously submitted list. The District shall provide a brief explanation for each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations;
- 1.4.4. The District shall characterize the compliance status of each SIU by providing a list or table which includes the following information:
 - a. Name of the SIU;
 - b. Category, if subject to federal categorical standards;
 - c. The type of wastewater treatment or control processes in place;
 - d. The number of samples taken by the POTW during the year;
 - e. The number of samples taken by the SIU during the year;
 - f. For an SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;
 - g. A list of the standards violated during the year. Identify whether the violations were for categorical standards or local limits;
 - h. Whether the facility is in significant noncompliance (SNC) as defined at 40 CFR section 403.8(f)(2)(viii) at any time during the year; and
 - i. A summary of enforcement or other actions taken during the year to return the SIU to compliance. Describe the type of action, final compliance date, and the amount of fines and penalties collected, if any. Describe any proposed actions for bringing the SIU into compliance.
- 1.4.5. A brief description of any programs the POTW implements to reduce pollutants from nondomestic users that are not classified as SIUs;
- 1.4.6. A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning

the program's administrative structure, local limits, monitoring program or monitoring frequencies, legal authority, enforcement policy, funding levels, or staffing levels;

1.4.7. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases; and

1.4.8. A summary of activities to involve and inform the public of the program including a copy of the newspaper notice, if any, required under 40 CFR section 403.8(f)(2)(viii).

2. LOCAL LIMITS EVALUATION

2.1. In accordance with 40 CFR section 122.44(j)(2)(ii), the POTW shall provide a written technical evaluation of the need to revise local limits under 40 CFR section 403.5(c)(1) within 180 days following the effective date of the Moorpark WRF WDRs/WRRs Order. The written technical evaluation shall follow the procedures for local limit reviews described in section 7.1 of USEPA's *Local Limits Development Guidance* document (EPA 833-R-04-002A, July 2004).

3. SIGNATORY REQUIREMENTS AND REPORT SUBMITTAL

3.1. Signatory Requirements.

The annual report must be signed by a principal executive officer, ranking elected official or other duly authorized employee if such employee is responsible for the overall operation of the POTW. Any person signing these reports must make the following certification [40 CFR section 403.6(a)(2)(ii)]:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

3.2. Report Submittal.

The Annual Pretreatment Report shall be submitted electronically using the State Water Board's [GeoTracker database](http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml) (http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml).

A copy of the Annual Pretreatment Report must be sent to USEPA electronically to the following [address](mailto:R9Pretreatment@epa.gov): R9Pretreatment@epa.gov