CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

Office

73-720 Fred Waring Dr. #100 Palm Desert, CA 92260

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ORDER R7-2020-0011



Order Information

Discharger: Mission Springs Water District

Facility: West Valley Water Reclamation Facility **Address:** 19011 Little Morongo Rd, Desert Hot

Springs, California 92240

County: Riverside County WDID: 7A330104002 GeoTracker ID: WDR100051288

I, PAULA RASMUSSEN, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on September 3, 2020.

Original signed by
PAULA RASMUSSEN
Executive Officer

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

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WASTE DISCHARGE REQUIREMENTS
FOR
MISSION SPRINGS WATER DISTRICT OWNER/OPERATOR
WEST VALLEY WATER RECLAMATION FACILITY
RIVERSIDE COUNTY

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

- Mission Springs Water District (MSWD or Discharger) submitted an application and a Report of Waste Discharge (ROWD) for Waste Discharge Requirements (WDRs) on July 22, 2019 for a proposed, new municipal wastewater treatment facility. The West Valley Water Reclamation Facility (WRF or Facility) would discharge to onsite evaporation/infiltration basins. The Facility is assigned California Integrated Water Quality System (CIWQS) number 7A330104002 and GeoTracker Global Identification number WDR100051288.
- 2. The Facility will be located on 19011 Little Morongo Road, Desert Hot Springs, California 92240. The wastewater reclamation plant portion of the Facility will be located on Assessor's Parcel Number (APN) 666-380-004, and the longitude and latitude coordinates are 116 31' 43" degrees west and 33 54'27" degrees north, respectively. The proposed evaporation/infiltration ponds will be located at APN 666-380-006, and the longitude and latitude coordinates are 116 31' 42" degrees west and 33 54' 20" degrees north, respectively. The Facility's proposed location is shown in **Attachment A** Vicinity Map, and the Facility site map is shown in **Attachment B** Site Map, made part of this Order by reference.
- 3. The new Facility will include three components: (1) a new municipal wastewater reclamation plant in the southwestern portion of MSWD's service area; (2) a new wastewater conveyance system to connect existing sewered areas to the new WRF; and (3) a new wastewater collection system to areas not currently sewered. Total build-out is expected to take 3 to 10 years, depending on the availability of funding.
- 4. Wastewater flow rates are estimated to total 0.29 million gallons per day (MGD) by the end of year 1, increasing to 1.0 MGD by year 7, 1.2 MGD by year 9, 1.5 MGD by year 15 as local urbanization increases. The Facility will provide treatment capacity to aid in the elimination of individual septic systems and to satisfy growing demand within MSWD's service area. The Facility will also prepare MSWD to take the next step towards water recycling, particularly because the Facility design will

accommodate future upgrades to produce recycled water for reuse that meets the standards of title 22 of the California Code of Regulations.

Wastewater Treatment Facility and Discharge

- 5. The Facility will be constructed in phases and have an initial capacity of 1.5 MGD in Phase 1. Phase 1 will consist of influent pumping, preliminary treatment, biological treatment, solids storage, solids dewatering, odor control, and chemical systems. The Process Flow Diagram for the proposed WRF is shown in **Attachment C**–Process Flow Diagram.
- 6. An influent pump station (IPS) will hydraulically lift the wastewater from the collection system to the headworks of the WRF. The IPS is designed to pump a peak flow of 3.75 MGD. Three submersible pumps will be installed for the initial Phase 1 flows. The pumps will be rotated in and out of operation with a maximum of two pumps running at peak flow and one on standby. A magnetic flow meter will be provided to indicate and transmit influent wastewater flow data. The wet well will be sized to accommodate a future plant expansion to 3.0 MGD with dimensions of 16 feet (ft) long by 10 ft wide by 16 ft deep. The hydraulic head created by the influent pumps will allow the wastewater stream to flow by gravity through the headworks and into the sequence batch reactor (SBR) tanks.
- 7. Preliminary treatment includes coarse screening and grit removal systems. Coarse screening will include two multi-rake bar screens with 3.75 MGD capacity to provide 100% redundancy. The screens will share one common shaftless screw conveyor and one washer/compactor for screenings handling. Three parallel channels will be constructed at the headworks, two of which will be equipped with multi-rake bar screens and the third will be reserved for a future bar screen. One grit removal system will be installed and will consist of 2 grit pumps, one of which will be on standby. The grit removal system will have four trays and will be able to achieve 95% removal of grit particles.
- 8. The biological treatment system will consist of the SBR process, which will operate as an anoxic tank, an aeration tank, and a clarifier in the same tank by altering the operating conditions during each treatment cycle. A total SBR tank volume of 1.88 million gallons will be provided in four tanks, each with dimensions of 105 ft long by 30 ft wide by 20 ft deep. Each tank will be equipped with an influent sliding weir gate, fine-pore diffusers, submersible mixers, a waste activated sludge pump, an effluent decanter, and a control package with adequate instrumentation to monitor the treatment process. The four SBR tanks will be able to treat up to 1.5 MGD average daily flow with one unit out of service. When the batch is filled to the desired depth, the flow is diverted to an adjacent reactor tank where all reactions (Biochemical Oxygen Demand [BOD] removal, nitrification, denitrification and settling) take place.
- 9. The Discharger's ROWD summarizes the WRF's anticipated treatment performance as follows:

Table 1. WRF Design Effluent Limits

Parameter	Units	Monthly Average	Annual Average
Biochemical Oxygen Demand (BOD)	mg/L ¹	30	
Total Suspended Solids	mg/L	30	
Total Nitrogen	mg/L	-	10
Total Dissolved Solids (TDS)	mg/L	550	
рН	Standard Units	6.0-9.0	

- 10. Settled solids will be removed periodically from the SBR tanks and wasted. Biosolids will be stored and dewatered before being removed by a contract hauler. Biosolids will be wasted from the process tanks daily. Waste biosolids will be stored in aerated sludge storage tanks before dewatering using an onsite belt filter press. Two aerated sludge storage tanks are proposed with a total volume of 350,000 gallons (175,000 gallons each).
- 11. Chemicals to be used at the Facility will consist of polymer (to enhance performance of the biosolids dewatering process), liquid sodium hydroxide (to add alkalinity if needed to the SBR process), and chlorine tablets (to control algae in the decant channel). The chemicals will be stored in the Chemical Room at the Facility. A polymer feed system will be located in the Dewatering Room. Sodium hydroxide will be delivered and stored in totes. Chemical feed pumps in the Chemical Room will transfer the sodium hydroxide to the point of application in the biological treatment process. Chlorine tablets will be stored in plastic buckets with tight fitting lids.
- 12. After the treatment process, all effluent will be discharged onto three onsite evaporation/infiltration basins. A small quantity of treated effluent will be reused within the treatment plant process for equipment and tank wash-water. The design infiltration rate for the basins selected was 2 inches per hour (4 ft/day). Two of the evaporation/infiltration basins will be operational while one will be on standby. The dimensions of the evaporation/infiltration basins will be 220 ft long by 220 ft wide by 5 ft deep.

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¹ Milligrams per liter.

13. The Discharger intends to install a network of three groundwater monitoring wells, one upgradient and two downgradient of the Facility. The Facility's proposed monitoring well locations are shown in **Attachment D** – Proposed Groundwater Monitoring Well Locations.

Hydrogeologic Conditions

- 14. The proposed site for the Facility lies on a south-sloping surface, with grades of approximately two percent.
- 15. A major feature of the area is the Salton Trough, a seismically active extensional basin influenced by the movement along the San Andreas Fault.
- 16. The site lies within the Garnet Hills Subbasin of the Coachella Valley Groundwater Basin. The Banning Fault and Garnet Hill Fault bound the northern and southern edges of the subbasin, respectively, and are the major groundwater controls. Both faults act to limit groundwater movement as these faults have folded sedimentary deposits, displaced water-bearing deposits, and caused once permeable sediments to become impermeable. To the west, the subbasin is bounded by the San Bernardino Mountains and to the east by the Indio Hills and the Mission Creek Fault.
- 17. The Garnet Hills Subbasin is naturally recharged by surface and subsurface flow from the Mission Creek, Dry, and Big Morongo Washes, the Painted Hills, and surrounding mountain drainages. Irrigation return flow and discharges from municipal and individual subsurface wastewater disposal systems also contribute to recharge.
- 18. The depth to groundwater is approximately 200 feet below ground surface (bgs) according to well soundings and historical data. The depth to water at MSWD's Well 33 (located at the WRF site) has ranged from 170 to 190 feet bgs since 2007.
- 19. Soils beneath the site consist of alluvial soils that are medium to very dense silty sand and poorly graded sands with silty gravel. Based on a site-specific geotechnical investigation, the infiltration rate at the proposed basin location ranges from 6 to 9 inches per hour.
- 20. Annual precipitation in the area is approximately 5 inches. Annual evapotranspiration rate in the vicinity is approximately 60 inches.
- 21. The proposed site for the Facility is located in an area that experiences a windy, desert climate.
- 22. MSWD's primary water supply comes from the Mission Creek Subbasin where MSWD pumps the majority of its domestic supply, which is reported to have a background total dissolved solids (TDS) concentration range of 480-625 mg/L. The

remaining 2-5% is pumped from the Garnet Hill Subbasin, via Well 33, which has a background TDS concentration of 230 mg/L.

Basin Plan, Beneficial Uses, and Regulatory Considerations

- 23. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), adopted on November 17, 1993 and most recently amended on January 8, 2019, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Pursuant to Water Code section 13263, subdivision (a), WDRs must implement the Basin Plan and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.
- 24. The Facility is located within the Coachella Hydrologic Unit, and the Basin Plan designates the following beneficial uses for groundwater:
 - a. Municipal Supply (MUN),
 - b. Industrial Supply (IND), and
 - c. Agricultural Supply (AGR).
- 25. This Order establishes WDRs pursuant to division 7, chapter 4, article 4 of the Water Code for discharges that are not subject to regulation under Clean Water Act section 402 (33 U.S.C. § 1342).
- 26. These WDRs implement numeric and narrative water quality objectives for groundwater and surface waters established by the Basin Plan and other applicable state and federal laws and policies. The numeric objectives for groundwater designated for municipal and domestic supply include the maximum contaminant levels (MCLs) specified in California Code of Regulations, title 22, section 64421 et seq. Groundwater for use as domestic or municipal water supply (MUN) must not contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.
- 27. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet MCLs designed to protect human health and ensure that water is safe for domestic use.
- 28. The discharge authorized by this Order, except for discharges of residual sludge and solid waste, are exempt from the solid waste requirements of California Code of Regulations, title 27, section 20005 et seq. This exemption is based on section 20090, subdivision (b) of title 27 of the California Code of Regulations, which provides that discharges of wastewater to land, including but not limited to

evaporation ponds, percolation ponds, or subsurface leachfields are not subject to the requirements of title 27 if the following exemption conditions are met:

- a. The applicable regional water board has issued WDRs, reclamation requirements, or waived such issuance;
- b. The discharge is in compliance with the applicable water quality control plan; and
- c. The wastewater does not need to be managed according to chapter 11, division 4.5, title 22 of the California Code of Regulations as a "hazardous waste."
- 29. The discharge of waste authorized by these WDRs satisfies the conditions to be exempted from the requirements of title 27 of the California Code of Regulations, because (1) the discharge is regulated by these WDRs; (2) these WDRs will ensure the discharge complies with the Basin Plan; and (3) the discharge will not be of a "hazardous waste."
- 30. Consistent with Water Code section 13241, the Regional Water Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:
 - Past, present, and probable future beneficial uses of water.
 - b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
 - c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
 - d. Economic considerations.
 - e. The need for developing housing within the region(s).
 - f. The need to develop and use recycled water.
- 31. Water Code section 13267 authorizes the Regional Water Board to require technical and monitoring reports. The monitoring and reporting requirements in Monitoring and Reporting Program (MRP) R7-2020-0011 are necessary to demonstrate compliance with this Order. The State Water Resources Control Board's (State Water Board's) electronic database, GeoTracker Information Systems, facilitates the submittal and review of monitoring and reporting documents. The burden, including costs, of the MRP bears a reasonable relationship to the need for that information and the benefits to be obtained from that information.

32. Pursuant to Water Code section 13263, subdivision (g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Antidegradation Analysis

- 33. State Water Board Resolution 68-16, entitled *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Resolution 68-16), generally prohibits the Regional Water Board from authorizing discharges that will result in the degradation of high quality waters, unless it is demonstrated that any change in water quality will (a) be consistent with maximum benefit to the people of the state, (b) not unreasonably affect beneficial uses, and (c) not result in water quality less than that prescribed in state and regional policies (e.g., the violation of one or more water quality objectives). The discharger must also employ best practicable treatment or control (BPTC) to minimize the degradation of high quality waters. High quality waters are surface waters or areas of groundwater that have a baseline water quality better than required by water quality control plans and policies.
- 34. Some degradation of groundwater from the discharge to the infiltration basins is consistent with Resolution 68-16, provided that the degradation:
 - a. Is confined to a reasonable area;
 - b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures by the Discharger;
 - Is limited to waste constituents typically encountered in domestic wastewater;
 - d. Does not unreasonably affect any beneficial uses of groundwater prescribed in the Basin Plan, and will not result in the violation of any water quality objective; and
 - e. Is consistent with the maximum benefit to the people of the state.
- 35. Constituents in the WRF effluent that have the potential to degrade groundwater include: nitrogen, chloride, sulfate, TDS, and total coliform. Each of these constituents is discussed below:
 - a. **Nitrogen.** The Primary Maximum Contaminant Level (MCL) found in California Code of Regulations, title 22, section 64431 for nitrate plus nitrite as nitrogen is 10 mg/L. To account for the fate of transport for the various components of total nitrogen, as a conservative value, it is assumed that all nitrogen present converts to nitrate/nitrite. Background total nitrogen is less than 1 mg/L. Groundwater modeling simulates that at the end of 15 years, the near background 1 mg/L concentration influence extends no more than

approximately 2,300 feet to the southeast of the infiltration basins. The degradation of groundwater is believed to be greatest under the infiltration basins based on groundwater modeling simulations. To verify no degradation due to nitrogen is occurring, this Order adds quarterly total nitrogen and nitrate as nitrogen monitoring in the groundwater monitoring wells. This Order also provides an average monthly effluent limit for total nitrogen of 10 mg/L.

- b. Chloride and Sulfate. The "recommended" Secondary MCLs in California Code of Regulations, title 22, section 64449 for chloride and sulfate are both 250 mg/L. Concentrations of chloride and sulfate are included in TDS measurements. Background chloride and sulfate concentrations are 30 mg/L and 160 mg/L, respectively. Groundwater modeling simulates that at the end of 15 years, the near background 30 mg/L (chloride) and 160 mg/L (sulfate) concentration influence extends no more than approximately 1,750 feet and 1,225 feet to the southeast of the infiltration basins, respectively. The degradation of groundwater is believed to be greatest under the infiltration basins based on groundwater modeling simulations. To evaluate the incremental degradation due to chloride and sulfate, this Order adds quarterly chloride and sulfate monitoring in the groundwater monitoring wells.
- **TDS.** The Secondary MCL specified in California Code of Regulations, title C. 22, section 64449 for TDS ranges between the "recommended" consumer acceptance level of 500 mg/L and the "upper" consumer acceptance level of 1,000 mg/L, if it is neither reasonable nor feasible to provide more suitable waters. The typical incremental addition of dissolved salts from domestic water usage in wastewater treatment plants ranges from 150 to 380 mg/L. MSWD Well 33 is the nearest supply well to the proposed WRF discharge location, which has a background TDS concentration of 230 mg/L. Groundwater modeling simulates that at the end of 15 years, the near background 250 mg/L concentration influence extends no more than approximately 2,000 feet to the southeast of the infiltration basins. The degradation of groundwater is believed to be greatest under the infiltration basins based on groundwater modeling simulations. To evaluate the incremental degradation due to TDS, this Order adds quarterly TDS monitoring in the groundwater monitoring wells. An interim regulatory limit of 665 mg/L has been set by the Regional Water Board. This Order also requires that the Discharger conduct a TDS study to assess the water quality conditions for the future establishment of an effluent limitation for TDS that takes into account relevant factors such as site-specific hydrogeologic conditions.
- d. **Total Coliform.** Secondary treatment reduces fecal coliform densities by 90 to 99%; the remaining organisms in effluent are still 10⁵ to 10⁶ most probable number (MPN)/100 mL. (U.S. Environmental Protection Agency,

Design Manual: Municipal Wastewater Disinfection, EPA/625/1-86/021, October 1986.) Given the depth to groundwater, which is approximately 130 to 230 feet, it is not likely that pathogen-indicator bacteria will reach groundwater in excess of that prescribed in California Code of Regulations, title 22, section 64426.1, due to significant attenuation and removal in the soils in the vadose zone. Additionally, groundwater monitoring wells adjacent to similar infiltration basins at the nearby MSWD Alan Horton Wastewater Treatment Plant (Horton WWTP) have previously been sampled and analyzed for bacteria with results demonstrating below detection limits. Both the Horton WWTP and the site of the proposed WRF have similar soil conditions and relatively deep groundwater. To evaluate the potential degradation to groundwater due to pathogens, this Order adds quarterly *E. coli* monitoring in the groundwater monitoring wells.

- 36. The discharge will be subject to any requirements that may be imposed by a salt and nutrient management plan (SNMP), currently being developed by the Coachella Valley Integrated Regional Water Management Plan (IRWMP) group, pursuant to the *Water Quality Control Policy for Recycled Water* (Recycled Water Policy). The Discharger is participating in the IRWMP effort to develop the SNMP.
- 37. The discharge of wastewater from the WRF, as permitted herein, reflects BPTC. The WRF will incorporate:
 - a. Technology for secondary treated domestic wastewater;
 - Structural controls to dispose of waste constituents in a designated area;
 - c. A network of groundwater monitoring wells;
 - d. Sludge and solids handling facilities;
 - e. An operation and maintenance manual;
 - f. Staffing to ensure proper operation and maintenance; and
 - g. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.
- 38. Degradation of groundwater by some of the typical waste constituents associated with discharges from a facility treating domestic wastewater, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The technology, energy, water recycling, and waste management advantages of regional utility service far exceed any benefits derived from reliance on numerous, concentrated individual wastewater systems, and the impact on water quality will be substantially less. By constructing the Facility, MSWD will be providing a valuable service to the

community that is protective of human health and the environment and will provide treatment capacity to satisfy the growing demand within the MSWD's service area. The Facility will protect groundwater throughout the basin from degradation by septic system discharges. These factors, when taken in conjunction with the associated increase in waste constituents, are consistent with the maximum benefit to the people of the State. Accordingly, the discharge, as authorized, is consistent with the anti-degradation provisions of Resolution 68-16, and the applicable water quality objectives.

Stormwater

- 39. Federal regulations for stormwater discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990 (40 C.F.R. parts 122, 123, and 124) to implement the Clean Water Act's stormwater program set forth in Clean Water Act section 402, subdivision (p) (33 U.S.C. § 1342(p)). In relevant part, the regulations require specific categories of facilities that discharge stormwater associated with industrial activity to "waters of the United States" to obtain National Pollutant Discharge Elimination System (NPDES) permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.
- 40. The State Water Board adopted Order 2014-0057-DWQ (NPDES No. CAS000001), General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit) on July 1, 2015. Facilities used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage with a design flow of one million gallons per day or more, or that are required to have an approved pretreatment program under 40 Code of Federal Regulations part 403, are required to enroll under the Industrial General Permit, unless there is no discharge of industrial stormwater to waters of the United States.
- 41. The Facility is slated that have a design treatment capacity of 0.29 MGD by the end of year 1, increasing to 1.0 MGD by year 7, 1.2 MGD by year 9, 1.5 MGD by year 15. At this time, the Facility is not required to enroll under the Industrial General Permit; however, the Facility will need to evaluate enrollment once design flow capacity reaches 1 MGD.
- 42. The State Water Board also adopted Order 2009-0009-DWQ (NPDES NO. CAS000002), General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), which regulates Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. If appropriate, the Discharger must enroll in the Construction General Permit.

CEQA and Public Participation

- 43. MSWD, acting as the lead agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.), prepared an Environmental Impact Report (EIR) for construction and operation of the WRF (State Clearinghouse [SCH] No. 2019029091). The EIR indicates that the project will not have a significant effect on the environment with the imposition of certain mitigation measures. On August 19, 2019, MSWD adopted the EIR together with a mitigation monitoring and reporting program (MMRP), and on August 22, 2019, the agency filed a Notice of Determination (NOD) with the Riverside County Clerk.
- 44. The Regional Water Board has considered the findings of the EIR, and in making its determinations and findings, must presume that the adopted environmental document comports with the requirements of CEQA and is valid. (Pub. Resources Code, § 21167.3, Cal. Code Regs., tit. 14, § 15231.) The Regional Water Board has reviewed and considered the environmental document and finds that it adequately addresses the project's water resource impacts. (Cal. Code Regs., tit. 14, § 15096, subds. (f), (h).)
- 45. The Regional Water Board has notified the Discharger and all known interested agencies and persons of its intent to issue WDRs for this discharge, and has provided them with an opportunity for a public meeting and to submit comments.
- 46. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED that in order to meet the provisions contained in division 7 of the Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. Effluent Limitations

1. Effluent discharged to the infiltration basins for disposal shall not exceed the following effluent limits:

Table 2. Effluent Limitations

Monthly Average

Constituent	Units	Monthly Average	Weekly Average
20°C BOD₅	mg/L	30	45
Total Suspended Solids	mg/L	30	45
Total Nitrogen	mg/L	10	

- 2. The 30-day average daily dry weather discharge from the WRF into the evaporation/infiltration basins shall not exceed 1.5 MGD at the completion of Phase 1.
- 3. The hydrogen ion concentration (pH) in the infiltration basins shall be maintained within the limits of 6.0 to 9.0 standard units.
- 4. The TDS concentration of the effluent shall not exceed the interim effluent limit 665 mg/L.
- 5. The evaporation/infiltration basins shall be maintained so that they continuously operate in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of the infiltration basins shall be equal to or greater than 1.0 mg/L.

B. Receiving Water Limitations

1. The discharge of wastewater from the Facility shall not cause groundwater to: exceed applicable water quality objectives; acquire taste, odor, toxicity, or color that create nuisance conditions; impair beneficial uses; or contain constituents in excess of California Maximum Contaminant Levels (MCLs), as set forth in title 22 of the California Code of Regulations (including, but not limited to, section 64426.1 for bacteriological constituents; section 64431 for inorganic chemicals; section 64444 for organic chemicals; and section 64678 for lead and copper).

C. Discharge Prohibitions

- 1. Discharge of waste classified as "hazardous," as defined in California Code of Regulations, title 27, section 20164, or "designated," as defined in Water Code section 13173 and California Code of Regulations, title 27, section 20164, is prohibited.
- 2. The discharge of treated wastewater at a location other than the designated disposal areas is prohibited.
- 3. The discharge of wastewater to surface waters or surface drainage courses is prohibited.
- 4. The Discharger shall not accept waste in excess of the design treatment capacity of the Facility's disposal system.
- 5. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
- 6. Bypass or overflow of untreated or partially-treated waste is prohibited, except as permitted in Standard Condition H.13.

- 7. The discharge of wastewater to a location or in a manner different from that described in this Order is prohibited.
- 8. The discharge of wastewater to land not owned or controlled by the Discharger, or not authorized for such use, is prohibited.
- 9. The storage, treatment, or disposal of wastes from the Facility shall not cause contamination, pollution, or nuisance as defined in Water Code section 13050, subdivisions (k), (l), and (m).

D. Discharge Specifications

- The Discharger shall maintain sufficient freeboard in the evaporation/infiltration basins to accommodate seasonal precipitation and to contain a 100-year storm event, but in no case no less than two (2) feet of freeboard (measured vertically). Freeboard shall be utilized for wake and waves of fluid motion and emergency or natural disaster purposes only.
- 2. All treatment, storage, and disposal areas shall be designed, constructed, operated and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 3. Evaporation/infiltration basins shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
- 4. The evaporation/infiltration basins shall be managed to prevent breeding of mosquitoes. In particular:
 - An erosion control program should ensure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
- 5. Public contact with wastewater shall be precluded through such means as fences, signs, or other acceptable alternatives.
- 6. Objectionable odors originating at the Facility shall not be perceivable beyond the property boundary.

7. The evaporation/infiltration basins shall be maintained and operated so as to maximize infiltration and minimize the increase of salinity in the groundwater.

E. Sludge and Solids Limitations

- Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes shall be pursuant to title 27 of the California Code of regulations.
- 2. Sludge use and disposal shall comply with federal and state laws and regulations, including permitting requirements, and technical standards in 40 Code of Federal Regulations (C.F.R.) part 503.
- 3. Any proposed change in use or disposal of biosolids requires the approval of the Regional Water Board's Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least **90** days in advance of the change.
- 4. The Discharger shall maintain a permanent log of all solids hauled away from the Facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the MRP of this Order. Sludge that is stockpiled at the Facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the MRP of this Order and as required by 40 C.F.R. part 503. The results of the analyses shall be submitted to the Regional Water Board as part of the MRP.

F. Special Provisions

- 1. **Construction-Related Notifications.** The Discharger shall notify the Regional Water Board, in writing:
 - a. Within **15 days** of the issuance of a contract for construction of the WRF,
 - b. Within **15 days** of the start of construction of the WRF, and
 - c. Within **180 days** prior to receiving domestic wastewater at the WRF and prior to start up activities.
- Submittal of Final Design Documents. When construction of Phase 1 of the WRF is complete, the Discharger will submit final design engineering documents and as-built drawings certified by the registered engineer in charge of the project.

Groundwater Monitoring Network Workplan. At least two years prior to 3. initial start-up of the WRF, the Discharger shall submit a technical report in the form of a workplan with milestones, time schedule for implementation, and technical rationale for the installation of a groundwater monitoring well network in the vicinity of the proposed evaporation/infiltration basins. The purpose of the groundwater monitoring wells in the area of the evaporation/infiltration basins shall be to determine the water quality conditions of groundwater in the vicinity of the proposed evaporation/infiltration basins prior to discharge and to monitor the effects of discharge on first encountered groundwater after discharge has been initiated. The groundwater monitoring wells for the infiltration basins shall be installed at least one year prior to initial WRF start-up to allow for baseline sampling. The groundwater monitoring network shall include, at a minimum, one upgradient and two downgradient monitoring wells, and the locations shall be approved by the Regional Water Board's Executive Officer.

4. TDS Impact Evaluation Report and Work Plan

- a. Within nine (9) months of adoption of this order, the Discharger shall submit to the Regional Water Board's Executive Officer for review and approval a technical report that includes a work plan and time schedule to:
 - Monitor groundwater and determine a background concentration for TDS in the area of discharge from the West Valley Water Reclamation Facility.
 - ii. Determine if wastewater discharged to the infiltration basins is causing or contributing to the increased TDS levels in areal groundwater;
 - iii. Ensure that any proposed effluent limitation for TDS does not cause an exceedance of the receiving water limitations for groundwater.
- b. Evaluation by the Discharger in the report may include the following:
 - i. Evaluation of local hydrogeology.
 - ii. Identification of sources that contribute to the increased TDS level in the source water well. For example, natural TDS increases due to local geology, introduction of TDS due to the discharge of the infiltration basins.

- iii. A proposal to install groundwater monitoring wells to further evaluate the impact of the discharge to the infiltration basins as defined in Special Provisions F.3.
- 5. **Request for Extension.** If the Discharger is unable to comply with the Special Provisions within the applicable schedule, the Discharger may request an extension for approval by the Regional Water Board's Executive Officer. The extension request must be in writing and submitted as soon as a delay is recognized and prior to the compliance date. The extension request should include justification for the delay.

G. Standard Provisions

- 1. **Noncompliance.** The Discharger shall comply with all of the terms, requirements, and conditions of this Order and MRP R7-2020-0011. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.) and grounds for: (1) an enforcement action; (2) termination, revocation and reissuance, or modification of these waste discharge requirements; or (3) denial of an Order renewal application.
- 2. Enforcement. The Regional Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code section 13308, or referral to the California Attorney General for recovery of judicial civil liability.
- 3. Proper Operation and Maintenance. The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment, and control installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes, but is not limited to, effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained and made available to the Regional Water Board on request.
- 4. **Reporting of Noncompliance.** The Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Regional Water Board office and the Office of Emergency Services within twenty-four (24) hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, the Discharger shall leave a message on the Regional

Water Board's office voicemail. A written report shall also be provided within five business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. All other forms of noncompliance shall be reported with the Discharger's next scheduled Self-Monitoring Report (SMR), or earlier if requested by the Regional Water Board's Executive Officer or if required by an applicable standard for sludge use and disposal.

- 5. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.
- 6. **Material Changes.** Prior to any modifications which would result in any material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board, and if required by the Regional Water Board, obtain revised requirements before any modifications are implemented.
- 7. **Design Capacity Report.** The Discharger shall provide a report to the Regional Water Board when it determines that the Facility's average dryweather flow rate for any month exceeds 80 percent of the design capacity. The report should indicate what steps, if any, the Discharger intends to take to provide for the expected wastewater treatment capacity necessary when the plant reaches design capacity.
- 8. **Operational Personnel.** The Facility shall be supervised and operated by persons possessing certification of appropriate grade pursuant to section 3680, chapter 26, division 3, title 23 of the California Code of Regulations.
- Familiarity with Order. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order and maintain a copy of this Order at the site.
- 10. **Inspection and Entry.** The Discharger shall allow the Regional Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter the premises regulated by this Order, or the place where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, records kept under the conditions of this Order;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.
- 11. **Records Retention.** The Discharger shall retain copies of all reports required by this Order and the associated MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board's Executive Officer.
- 12. Change in Ownership. This Order is not transferable to any person without written approval by the Regional Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Regional Water Board's Executive Officer in writing at least 30 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The Regional Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.
- 13. **Bypass**. Bypass (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is prohibited. The Regional Water Board may take enforcement action against the Discharger for bypass unless:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in fee collection; and
 - b. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent bypass occurring during equipment downtime, or preventative maintenance; or

c. Bypass is (1) required for essential maintenance to ensure efficient operation; (2) neither effluent nor receiving water limitations are exceeded and (3) the Discharger notifies the Regional Water Board ten (10) days in advance.

In the event of an unanticipated bypass, the Discharger shall immediately report the incident to the Regional Water Board. During non-business hours, the Discharger shall leave a message on the Regional Water Board's office voicemail. A written report shall be provided within five (5) business days after the Discharger is aware of the incident. The written report shall include a description of the bypass, ay noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- 14. **Backup Generators.** Standby, power generating facilities shall be available to operate the Facility during a commercial power failure.
- 15. Format of Technical Reports. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with California Code of Regulations, title 23, division 3, chapter 30, as raw data uploads electronically over the Internet into the State Water Board's GeoTracker database, found at: https://geotracker.waterboards.ca.gov/. Documents that are normally mailed by the Discharger to the Regional Water Board, such as regulatory documents, narrative monitoring reports or materials, and correspondence, shall also be uploaded into GeoTracker in the appropriate Microsoft Office software application format, such as Word or Excel files, or as a Portable Document Format (PDF) file. Large documents must be split into appropriately-labelled, manageable file sizes and uploaded into GeoTracker.
- 16. Qualified Professionals. In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, describe the conduct of investigations and studies, or contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately-qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field

activities are to be conducted under the direct supervision of one or more of these professionals.

- 17. **Certification Under Penalty of Perjury.** All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the State of California, that the reports were prepared under his or her supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted, and that based on his or her inquiry of the person or persons who manage the system, the information submitted is, to the best of his or her knowledge and belief, true, complete, and accurate.
- 18. **Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.
- 19. **Property Rights.** This Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights.
- 20. Modification, Revocation, Termination. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for an Order modification, rescission, or reissuance, or the Discharger's notification of planned changes or anticipated noncompliance, does not stay any Order condition. Causes for modification include, but are not limited to, the violation of any term or condition contained in this Order, a material change in the character, location, or volume of discharge, a change in land application plans or sludge use/disposal practices, or the adoption of new regulations by the State Water Board, Regional Water Board (including revisions to the Basin Plan), or federal government.
- 21. **Severability.** The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of these requirements shall not be affected.

Any person aggrieved by this Regional Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the statutes and regulations applicable to filing petitions are available on the State Water Board's website and can be provided upon request.

Order Attachments

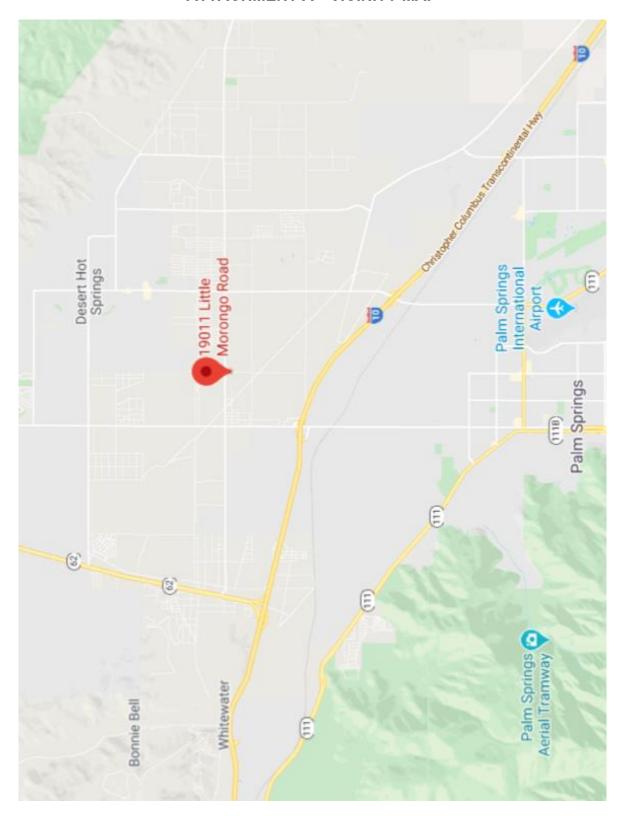
Attachment A—Vicinity Map

Attachment B—Site Map

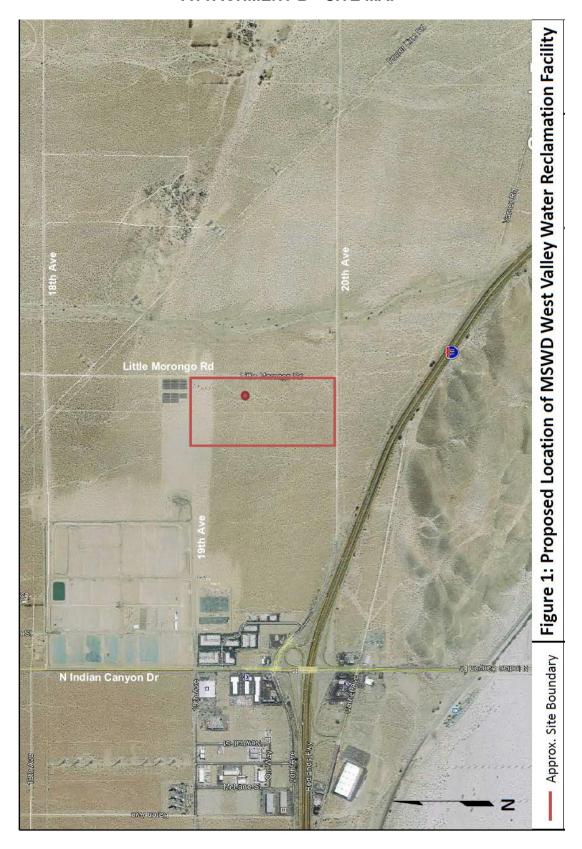
Attachment C—Proposed Groundwater Monitoring Well Locations

Attachment D—Monitoring and Reporting Program R7-2020-0011

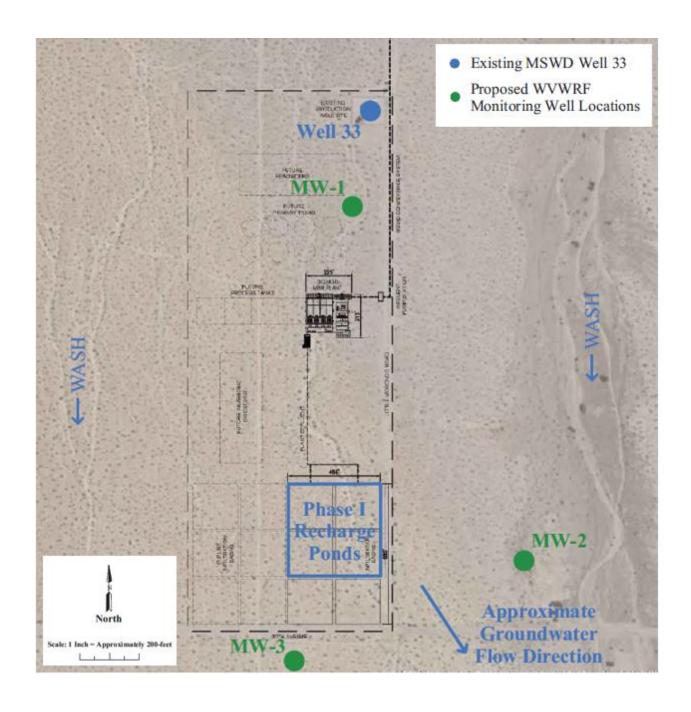
ATTACHMENT A—VICINITY MAP



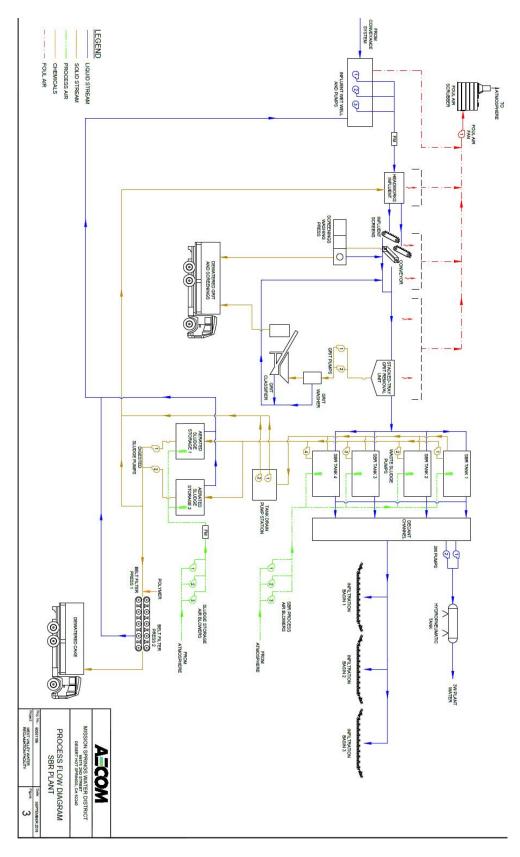
ATTACHMENT B—SITE MAP



ATTACHMENT C—PROPOSED GROUNDWATER MONITORING WELL LOCATIONS



ATTACHMENT D—PROCESS FLOW DIAGRAM



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN

ATTACHMENT E MONITORING AND REPORTING PROGRAM R7-2020-0011 FOR

MISSION SPRINGS WATER DISTRICT OWNER/OPERATOR
WEST VALLEY WATER RECLAMATION FACILITY
RIVERSIDE COUNTY

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

The Discharger owns and operates the wastewater treatment system that is subject to Order R7-2020-0011. The reports required herein are necessary to ensure that the Discharger complies with the Order. Pursuant to Water Cole section 13267, the Discharger shall implement the MRP and shall submit monitoring reports described herein.

A. Sampling and Analysis General Requirements

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

- 4. **Sampling Location(s).** Samples shall be collected at the location(s) specified in the WDRs. If no location is specified, sampling shall be conducted at the most representative sampling point available.
- 5. Representative Sampling. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the chain of custody form for the sample. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Regional Water Board staff
- 6. **Instrumentation and Calibration.** All monitoring instruments and devices used by the Discharger shall be properly maintained and calibrated to ensure their continued accuracy. Any flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices. In the event that continuous monitoring equipment is out of service for a period greater than 24 hours, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.
- 7. **Field Test Instruments.** Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:
 - a. The user is trained in proper use and maintenance of the instruments;
 - b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
 - c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
 - d. Field calibration reports are submitted.
- 8. **Records Retention.** The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, for a minimum of five (5) years from the date of the sampling or measurement. This period may be extended by request of the Regional Water Board's Executive Officer at any time. Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurement(s);
- b. The individual(s) who performed the sampling or measurement(s);
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or method used; and
- f. All sampling and analytical results, including:
 - i. units of measurement used;
 - ii. minimum reporting limit for the analyses;
 - iii. results less than the reporting limit but above the method detection limit (MDL);
 - iv. data qualifiers and a description of the qualifiers;
 - v. quality control test results (and a written copy of the laboratory quality assurance plan);
 - vi. dilution factors, if used; and
 - vii. sample matrix type.
- 9. **Inoperative Facility.** If the Facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Regional Water Board indicating that there has been no activity during the required reporting period.

B. Influent Monitoring

1. Influent to the WRF shall be monitored according to the following schedule:

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Flow	MGD ²	Measurement	Daily ³	Monthly

² Million gallons per day.

³ Monitored daily, reported as a daily monthly average.

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
20°C BOD ₅ ⁴	mg/L	24-Hr. Composite	Monthly	Monthly
Total Suspended Solids	mg/L	24-Hr. Composite	Monthly	Monthly

C. Effluent Monitoring

1. Effluent from the WRF to the evaporation/infiltration basins shall be monitored according to the following schedule:

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
20°C BOD₅	mg/L	24 Hr. Composite	2x/Month	Monthly
Total Suspended Solids	mg/L	24 Hr. Composite	2x/Month	Monthly
рН	mg/L	Grab	Weekly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Total Nitrogen	mg/L	Grab	Monthly	Monthly
Nitrate as N	mg/L	Grab	Monthly	Monthly
VOCs ⁵	μg/L ⁶	Grab	Annually	Annually

D. Evaporation/Infiltration Pond Monitoring

1. The evaporation/infiltration ponds shall be monitored according to the following schedule:

⁴ 5-Day Biochemical Oxygen Demand at 20 degrees Celsius.

⁵ Analysis of Volatile Organic Compounds is to be accomplished using the USEPA test methods 601 and 602 or 624.

⁶ Micrograms per liter.

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
рН	Standard Units	Grab	Monthly	Monthly
Dissolved Oxygen ⁷	mg/L	Grab	Monthly	Monthly
Freeboard	0.1 Feet	Measurement	Monthly	Monthly
Berm Condition		Observation	Monthly	Monthly
Odors	mg/L	Observation	Monthly	Monthly

E. Domestic Water Supply Monitoring

1. The domestic water supply shall be monitored according to the following schedule:

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
General Minerals ⁸	mg/L	Grab	Annually	Annually

F. Groundwater Monitoring

1. Upon completion of the groundwater monitoring network as required by Special Provision, F.3, the groundwater monitoring wells shall be monitored according to the following schedule:

⁷ Dissolved oxygen shall be monitored at the upper one-foot layer of the infiltration basins.

⁸ The General Minerals should include: total dissolved solids, calcium, chloride, fluoride, iron, magnesium, manganese, nitrate, potassium, sodium, sulfate, barium, total alkalinity (including alkalinity series), and hardness.

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Nitrate as N	mg/L	Grab	Quarterly	Quarterly
Sulfate	mg/L	Grab	Quarterly	Quarterly
Chloride	mg/L	Grab	Quarterly	Quarterly
Fluoride	mg/L	Grab	Quarterly	Quarterly
E. Coli	MPN/100mL ⁹	Grab	Quarterly	Quarterly
VOCs	μg/L	Grab	Quarterly	Quarterly
Groundwater Elevation	ft(msl) ¹⁰	Measurement	Quarterly	Quarterly
Depth to Groundwater	ft(bgs) ¹¹	Measurement	Quarterly	Quarterly

G. Sludge Monitoring

1. Prior to disposal, sludge that is generated at the WRF shall be sampled and analyzed for the following:

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Arsenic	mg/kg ¹²	Composite	Annually	Annually
Cadmium	mg/kg	Composite	Annually	Annually

⁹ Most Probable Number per 100 milliliters.

¹⁰ Feet above mean sea level.

¹¹ Feet below ground surface.

¹² Milligrams per kilogram.

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Copper	mg/kg	Composite	Annually	Annually
Lead	mg/kg	Composite	Annually	Annually
Mercury	mg/kg	Composite	Annually	Annually
Molybdenum	mg/kg	Composite	Annually	Annually
Nickel	mg/kg	Composite	Annually	Annually
Selenium	mg/kg	Composite	Annually	Annually
Zinc	mg/kg	Composite	Annually	Annually
E. Coli	MPN/gram ¹³	Composite	Annually	Annually

H. Reporting Requirements

- Daily, weekly, and monthly monitoring shall be included in the Monthly Self-Monitoring Reports (SMRs). Monthly SMRs shall be submitted by the 15th day of the following month. Quarterly SMRs shall be submitted by January 15th, April 15th, July 15th, and October 15th. Annual SMRs shall be submitted by January 31st of the following year.
- 2. SMRs shall include, at a minimum, the following:
 - a. **Cover Letter.** A transmittal letter summarizing the essential points in the report.
 - b. **Maps.** Maps depicting the Facility layout and the location of sampling points.
 - c. **Summary of Monitoring Data.** Tables of the data collected. The tables shall include all of the data collected to-date at each monitoring point, organized in chronological order, with the oldest data in the top row and progressively newer data in rows below the top row. Each row shall be a monitoring event and each column shall

¹³ Most Probable Number per gram.

be a separate parameter at a single location (or a single average, as appropriate).

- d. **Graphical Display.** Graphs depicting monitoring parameters through time, with the concentrations being the y-axis and time being the x-axis. Logarithmic scales can be used for values that vary by orders of magnitude. Individual graphs can combine multiple locations or multiple chemicals if that allows the data to be compared more easily.
- e. **Compliance Summary.** Identification of any violations found since the last report was submitted, and actions taken or planned for correcting each violation. If the Discharger previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. If no violations have occurred since the last submittal, this shall be stated.
- 3. SMRs shall be certified under penalty of perjury to be true and correct. Each SMR submitted to the Regional Water Board shall contain the following completed declaration:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on the	day of	at	
			(Signature)
			(Title)"

- 4. The SMRs and any other information requested by the Regional Water Board shall be signed by a principal executive officer or ranking elected official. A duly authorized representative of the Discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and

- c. The written authorization is submitted to the Regional Water Board's Executive Officer.
- 5. The results of any analysis taken more frequently than required at the locations specified in this MRP shall be reported to the Regional Water Board.
- 6. As specified in Standard Provision F.16, technical reports shall be prepared by or under the direction of appropriately qualified professional(s). Each technical report submitted shall contain a statement of qualification of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
- 7. As specified in Standard Provision F.15, the Discharger shall comply with Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under MRP R7-2020-0011 and any future revision(s) hereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and PDF monitoring reports to the State Water Board's Geotracker database. Documents too large to be uploaded into Geotracker should be broken down into smaller electronic files and labelled properly prior to uploading into Geotracker.