

applications to land, as groundwater quality is not discernibly impacted by short-term differences in the quality of applied water, but can be influenced by long-term trends.

C. Title 22 Specifications. This Order contains discharge specifications for chlorine residual, turbidity, chlorine contact time, and total coliform bacteria. These specifications are based upon concentration limits found in title 22 and recommendations from the DDW for the protection of human health at use sites. Recycled water from the CWRF discharged to reuse sites must meet the definition of “disinfected tertiary recycled water” in title 22 section 60301.230 and by reference “filtered wastewater” in title 22 section 60301.320, including future changes to the incorporated provisions as the changes take effect. The turbidity discharge specification in the Order is based on title 22 section 6031.320 (b) and requires that the turbidity of effluent from the microfiltration and ultrafiltration units not exceed 0.2 NTU more than 5 percent of the time within a 24-hour period and 0.5 NTU at any time.

D. Discharge Specifications for Order No. R9-2016-0183. The discharge specifications contained in the Order are shown in Table 4.

Table 4. Discharge Specifications

Constituent	Units	Daily Maximum ¹	Monthly Average ²	Annual Average ³
Biological Oxygen Demand (BOD ₅ @ 20°C)	mg/L	45	30	
Total Suspended Solids (TSS)	mg/L	45	30	
pH	pH units	Within the limits of 6.5-8.5 at all times		
Total Dissolved Solids (TDS)	mg/L	-	-	1,100
Chloride (Cl)	mg/L	-	-	350
Sulfate (SO ₄)	mg/L	-	-	350
Percent Sodium (% Na)	%	-	-	60%
Iron (Fe)	mg/L	-	-	0.3
Manganese (Mn)	mg/L	-	-	0.1
Methylene Blue- Activated Substances (MBAS)	mg/L	-	-	0.5
Boron (B)	mg/L	-	-	0.75
Fluoride (F)	mg/L	-	-	1.0
Aluminum	mg/L	-	-	1.0
Arsenic	mg/L	-	-	0.05
Antimony	mg/L	-	-	0.006
Barium	mg/L	-	-	1.0
Beryllium	mg/L	-	-	0.004
Cadmium	mg/L	-	-	0.005
Cyanide	mg/L	-	-	0.2
Mercury	mg/L	-	-	0.002

Constituent	Units	Daily Maximum ¹	Monthly Average ²	Annual Average ³
Nickel	mg/L	-	-	0.1
Perchlorate	mg/L	-	-	0.006
Selenium	mg/L	-	-	0.05
Thallium	mg/L	-	-	0.002

¹The daily maximum discharge specification shall apply to the results of a single composite or grab sample representing non-overlapping 24 hour periods.

²The monthly average discharge specification shall apply to the arithmetic mean of the results of all samples collected during each calendar month.

³The annual average discharge specification shall apply to the arithmetic mean of the results of all samples collected during a calendar year period in accordance with the Monitoring and Reporting Program.

V. COMPLIANCE WITH THE ANTIDegradATION POLICY

State Water Board Resolution No. 68-16, the *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (the Antidegradation Policy) requires that disposal of waste into the waters of the State be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the State. The quality of some waters is higher than established by adopted policies and that higher quality water must be maintained to the maximum extent possible consistent with the Antidegradation Policy. The Antidegradation Policy requires the following.

- Higher quality water will be maintained until it has been demonstrated to the State that any change will be consistent with the maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of the water, and will not result in water quality less than that prescribed in the Basin Plan.
- Any activity that produces waste or may produce waste or increased volume or concentration of waste, and discharges to existing high quality waters will be required to meet waste discharge requirements that will result in the best practicable treatment or control of the discharge necessary to assure pollution or nuisance will not occur, and the highest water quality consistent with the maximum benefit to the people of the State will be maintained.

A. **Maximum Benefit to the People of the State.** In a semi-arid climate, such as that of the San Diego Region, the maximum benefit to the people of the State can only be achieved by ensuring long and short-term protection of economic opportunities, human health, and environmental protection. In order to do that, water uses must be better matched to water quality, and use of local supplies must be encouraged to the extent possible, including reusing treated wastewater that would otherwise flow to the ocean or

other salt sinks without supporting beneficial uses during transmission.⁹ The use of recycled water in place of both raw and potable water supplies for the non-potable uses allowed under this Order improves water supply availability and helps to ensure that higher quality water will continue to be available for human uses and for in stream uses for fish and wildlife. The limited degradation of receiving groundwater that may occur as the result of recycling under the conditions of the Order provides maximum benefit to the people of the State, provided recycled water treatment and use are managed to ensure long-term reasonable protection of beneficial uses of waters of the State.

B. Present and Anticipated Uses of Water and Water Quality Prescribed in the Basin Plan. Constituents associated with recycled water that have the potential to degrade groundwater quality include Total Dissolved Solids (TDS or salts), nutrients, pathogens (represented by coliform bacteria), disinfection by-products (DBPs), and other mineral constituents. The use of recycled water permitted under the Order will not unreasonably affect present and anticipated beneficial uses or result in water quality that is less than that prescribed in the Basin Plan because of the following characteristics of the discharge and Order requirements associated with each of the recycled water constituents of concern. Each of the recycled water constituents are discussed below.

1. The TDS groundwater quality objective for the HA/HSA in which recycled water from the CWRP is used is 3,500 mg/L. Some portions of the HAs/HSA have no designated beneficial uses for groundwater, thus no groundwater quality objectives apply in these areas. Average annual TDS concentrations in recycled water between 2010-2015 ranged from 927-1037 mg/L, which is well below the TDS groundwater quality objective of 3,500 mg/L. As a result, the use of recycled water from the CWRP is not expected to cause the concentration of TDS in groundwater to exceed the TDS groundwater quality objective nor to further degrade the TDS quality of the groundwater.
2. Nitrogen is a nutrient that may be present in recycled water at a concentration that can degrade groundwater quality. This Order requires end users to take into consideration nutrient levels in recycled water and nutrient demand by plants when using recycled water for landscape irrigation. Application of recycled water at agronomic rates considers nutrient and water demand, and minimizes the movement of nutrients below the plant's root zone. When applied to cropped or landscaped areas, some of the nitrogen in recycled water will be taken up by the plants, and lost to the atmosphere through volatilization of ammonia or denitrification. The Rules and Regulations for Recycled Water Use (Attachment B) require recycled water supervisors to ensure that recycled water and fertilizer are applied to landscapes at agronomic rates in end use areas, and to avoid overwatering. Furthermore, supervisors are required to receive the training needed to manage fertilizer and recycled water applications to achieve agronomic rates. The Discharger is required to inform the recycled water supervisors of the nitrogen

⁹ The Legislature also expressed its intent that the State undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water requirements of the state (Water Code section 13512).

content of the recycled water supplied for irrigation. These requirements are expected to prevent the use of recycled water from impairing an existing or potential beneficial use of groundwater. Nonetheless, the Order includes a special provision that the Discharger conduct a nitrate study to verify that the discharge of recycled water will not cause receiving groundwater to exceed 45 mg/L in areas with nitrate groundwater quality objectives where recycled water is applied to the landscape. The result of the study will enable the San Diego Water Board to determine if a discharge specification for total nitrogen should be added to the Order in the future.

3. Pathogens and other microorganisms may be present in recycled water depending upon the disinfection status of the recycled water. Recycled water from the CWRP has been treated to levels that comply with discharge specifications contained in the Order pursuant to the Basin Plan and title 22 requirements. Treatment technologies required under title 22 include secondary treatment, tertiary treatment, and disinfection for pathogen removal. Title 22 imposes limitations on the uses of recycled water based on the level of treatment and the specific uses in order to protect human health. This Order restricts the uses of recycled water to be consistent with title 22 requirements ensuring that recycled water is used safely.

Coliform bacteria are used as a surrogate (indicator) for pathogens because they are present in untreated wastewater, survive in the environment similar to pathogenic bacteria, and are easy to detect and quantify. Pathogens are generally limited in their environmental mobility when applied to land.

Setbacks from recycled water use areas are required in, title 22 as a means of reducing pathogenic risks by coupling pathogen inactivation rates with groundwater travel time to a well or other potential exposure route such as water contact activities. In general, a substantial unsaturated zone reduces pathogen survival compared to saturated soil conditions. Fine grained soil particles, like silt or clay, reduce the rate of groundwater transport and therefore are generally less likely to allow transport of pathogens in groundwater. Setbacks also provide attenuation of other recycled water constituents through physical, chemical, and biological processes. Attachment B of the Order requires the Discharger to include requirements for implementing and maintaining adequate setback distances in the end use areas from drinking water wells. These requirements must be specified in the Discharger's Rules and Regulations for Recycled Water Use. This Order also requires the Discharger to treat recycled water to meet disinfection requirements for pathogens for tertiary treated recycled water as specified in title 22.

4. Disinfection by-products consisting of organic and inorganic substances may be present in recycled water. These by-products may be produced by the interaction of chemical disinfectants with naturally occurring substances in the water source. Common disinfection by-products (DBPs) include trihalomethanes, haloacetic acids, bromate, and chlorite. DBPs present in recycled water receive additional treatment when applied to land. Biodegradation, adsorption, volatilization, and other attenuative processes that occur naturally in soil will reduce the concentrations and retard migration of DBPs in the subsurface.

Consistent with the Framework for Monitoring and Assessment in the San Diego Region,¹⁰ which requires that all monitoring be question driven, the monitoring required by the MRP is designed to answer the two overarching questions below.

- Will the production, conveyance, and end use of recycled water regulated by this Order be done in a manner that protects public health and the environment?
- Is groundwater designated for municipal and domestic use safe to drink in irrigation end use areas regulated by this Order?

The MRP has two basic components; effluent quality monitoring, and recycled water production and distribution monitoring. Monitoring required by the MRP for these two components is designed to answer the following specific monitoring questions that relate to the overarching questions.

1. Effluent monitoring consists of the basic site-specific monitoring necessary to measure compliance with individual effluent discharge specifications and/or assess potential impacts to groundwater water quality. Monitoring is typically conducted at the end of the treatment process and prior to distribution of recycled water to use sites. Effluent monitoring will answer the following questions.
 - a. Does the effluent comply with permit discharge specifications and other requirements of this Order, thereby ensuring that water quality objectives are achieved in the groundwater?
 - b. Does the effluent comply with the statewide treatment standards for recycled water, as required by title 22?
 - c. Is the Facility being properly operated and maintained to ensure compliance with the conditions of the Order?
2. Recycled water distribution monitoring provides information necessary to track the distribution of recycled water in the San Diego Region. This information provides an essential part of a cumulative picture of the distribution and use of recycled water within the San Diego Region.

Collection and analysis of recycled water production and use site data will help answer the following questions.

- a. What is the total volume of recycled water produced from the CWRP?
- b. Where are the recycled water use sites located?
- c. What is the volume of recycled water delivered to each use site?
- d. What is the level of compliance with Rules and Regulations at recycled water reuse sites?

¹⁰ California Regional Water Quality Control Board, San Diego Region, Staff Report, November 2012.

ATTACHMENT D

MONITORING AND REPORTING PROGRAM NO. R9-2016-0183

FOR CARLSBAD MUNICIPAL WATER DISTRICT CARLSBAD WATER RECYLING FACILITY, SAN DIEGO COUNTY

This Monitoring and Reporting Program (MRP) is issued to the Carlsbad Municipal Water District (Discharger) pursuant to Water Code section 13267, which authorizes the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to require the Discharger to furnish technical and monitoring reports. The San Diego Water Board Executive Officer has the authority to modify this MRP as appropriate. Monitoring in accordance with this MRP shall begin on January 1, 2017.

I. GENERAL MONITORING PROVISIONS

- A. Samples and measurements collected as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be collected at the monitoring points specified in this MRP and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. Monitoring points shall not be changed without notifying, and receiving approval from the San Diego Water Board for the proposed monitoring location change.
- B. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.
- C. Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved under 40, Code of Federal Regulations (CFR), part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act* (USEPA Guidelines) as amended, unless other test procedures have been specified in this MRP.
- D. Unless otherwise permitted by the San Diego Water Board, all analyses shall be conducted at a laboratory certified to perform such analyses by the State Water Resources Control Board Division of Drinking Water (DDW). The Discharger must use a laboratory capable of producing and providing quality assurance/quality control (QA/QC) records for San Diego Water Board review. The director of the laboratory whose name appears on the certification must supervise all analytical work in his/her laboratory and must sign all reports submitted to the San Diego Water Board.
- E. Any report presenting new analytical data is required to include the complete laboratory and analytical report(s). The laboratory analytical report must be signed by the laboratory director and contain:

1. A complete sample analytical report.
 2. A complete laboratory quality assurance/quality control (QA/QC) report.
 3. A discussion of the QA/QC data.
 4. A transmittal letter indicating whether or not all the analytical work was supervised by the director of the laboratory. The transmittal laboratory must contain the following statement, "All analyses were conducted at a laboratory certified for such analyses by the DDW in accordance with current USEPA procedures."
- F. Specific methods of analysis must be identified in the Discharger's monitoring reports. If the Discharger proposes to use methods or test procedures other than those included in the most current version of the USEPA Guidelines, the exact methodology must be submitted for review and must be approved by the San Diego Water Board prior to use.
- G. 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 and copies of all reports required by this MRP, and records of all data used to complete the Report of Waste Discharge (ROWD) for Order No. R9-2016-0183 and any subsequent ROWDs. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report or ROWD. This period may be extended during the course of any unresolved litigation regarding this discharge or when required by the San Diego Water Board. Records of monitoring information shall include the following:
1. The date, exact place, and time of sampling or measurements.
 2. The individual(s) who performed the sampling or measurements.
 3. The date(s) analyses were performed.
 4. The individual(s) who performed the analyses.
 5. The analytical techniques or methods used.
 6. The results of such analyses.
- H. All monitoring instruments and devices that are used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
- I. All applications, reports, or information submitted to the San Diego Water Board shall be signed and certified as follows:
1. The Report of Waste Discharge shall be signed as follows.

- a. For a corporation- by a principal Executive Officer of at least the level of Vice President.
 - b. For a partnership or sole proprietorship- by a general partner or the proprietor, respectively.
 - c. For a municipality, State, federal or other public agency- by either a public Executive Officer or ranking elected officials.
2. All other reports required by Order No. R9-2016-0183 and other information required by the San Diego Water Board shall be signed by a person designated in Section I.1 or a duly authorized representative of that person. An individual is duly authorized representative only if the following are true:
- a. The authorization is made in writing by a person described in Section I.1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
 - c. The written authorization is submitted to the San Diego Water Board.
3. 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."
- J. A composite sample is defined as a combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
- K. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
- L. The Discharger shall identify all missing or non-valid monitoring or sampling results in monitoring reports submitted. All instances of missing or non-valid results must be accompanied by an explanation of their root cause and the steps the Discharger has or will take to prevent future instances. Missing or non-valid results may be considered violations of Order No. R9-2016-0183 that could result in enforcement action depending

on the frequency of such instances and efforts by the Discharger to prevent such failures.

II. DISCHARGE MONITORING REQUIREMENTS

A. Effluent Monitoring Requirements

1. Effluent that will be discharged to landscape irrigation sites or reuse sites subject to Water Recycling Criteria specified in title 22, shall be monitored downstream from the chlorine contact basin. Required effluent monitoring is shown in Table 1. Required monitoring for constituents specified in Table 1 shall begin on January 1, 2017.
2. Effluent samples collected to determine turbidity (when required) shall be collected after the media filters. Effluent tertiary turbidity analyses shall be conducted continuously using a continuous monitoring and recording turbidity meter. Compliance with the daily average operating filter effluent turbidity limit of 2 NTU shall be determined using levels of recorded turbidity taken at a minimum of four-hour intervals over a 24-hour period. Compliance with the turbidity standard of not exceeding 0.2 NTU from the microfiltration or ultrafiltration or 5 NTU more than 5 percent of the time from the granular media filters over a 24-hour period shall be determined using the levels of recorded turbidity taken at intervals of no more than 1.2 hours over a 24-hour period. Should the continuous turbidity meter and/or recorder fail, grab sampling at a minimum frequency of 1.2 hours may be substituted for a period of up to 24 hours. The Discharger shall report monthly results of four-hour turbidity readings, average effluent turbidity (24-hours), 95 percentile effluent turbidity (24-hours), and daily maximum turbidity readings.
3. Turbidity of the combined microfiltration and ultrafiltration units effluent shall be measured prior to the break tank to demonstrate compliance with section 60301.32 (b) of title 22, and section III.E of Order No. R9-2016-0183. Turbidity of the granular media filters shall be measured from each individual unit or from the combined effluent of the two units.

Table 1. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency ^{a,b}	Reporting Frequency
Flow Rate	mgd	Continuous	Continuous	Monthly
Chlorine Residual ^c	mg/L	Continuous	Continuous	Monthly
Chlorine-Contact Time (CT) ^c	mg-min/L	Continuous	Continuous	Monthly
Total Coliform Bacteria ^d	MPN/100 mL	Grab	Daily	Monthly
Turbidity ^e	NTU	Continuous	Continuous	Monthly
Biological Oxygen Demand (BOD ₅ @ 20°C)	mg/L	Composite	Weekly	Monthly
Total Suspended Solids	mg/L	Composite	Weekly	Monthly
pH	pH units	Grab	Weekly	Monthly

Parameter	Units	Sample Type	Minimum Sampling Frequency ^{a,b}	Reporting Frequency
Chloride (Cl)	mg/L	Composite	Quarterly	Quarterly
Sulfate (SO ₄)	mg/L	Composite	Quarterly	Quarterly
Percent Sodium (% Na)	%	Composite	Quarterly	Quarterly
Nitrate (NO ₃)	mg/L	Composite	Quarterly	Quarterly
Total Nitrogen	mg/L	Composite	Quarterly	Quarterly
Iron (Fe)	mg/L	Composite	Quarterly	Quarterly
Manganese (Mn)	mg/L	Composite	Quarterly	Quarterly
Methylene Blue-Activated Substances (MBAS)	mg/L	Composite	Quarterly	Quarterly
Boron (B)	mg/L	Composite	Quarterly	Quarterly
Fluoride (F)	mg/L	Composite	Quarterly	Quarterly
Total Dissolved Solids (TDS)	mg/L	Composite	Quarterly	Quarterly
Aluminum	mg/L	Composite	Annually	Annually
Barium	mg/L	Composite	Annually	Annually
Priority Pollutants ^f	mg/L	Composite	Annually	Annually

a. The Discharger shall increase the sampling frequency from weekly to daily, from quarterly to monthly, and from annually to quarterly for any constituent that exceeds the discharge specifications of this Order. The increased frequency of monitoring shall continue until the Discharger achieves compliance with the specification for three consecutive periods, at which point the Discharger shall resume sampling at the specified frequency.

b. Weekly is defined as a calendar week (Sunday through Saturday). Monthly is defined as a calendar month. Quarterly is defined as a period of three consecutive calendar months beginning on January 1, April 1, July 1, or October 1. Annually is defined as a period of 12 consecutive calendar months beginning on January 1.

c. Calculated CT (chlorine concentration multiplied by modal contact time) values shall be determined and recorded continuously. The daily minimum CT value shall be reported monthly. The Discharger shall report monthly the date(s), value(s), time and duration when the CT value falls below 450 mg-min/L, and/or the modal contact time falls below 90 minutes.

d. Samples for total coliform bacteria shall be collected at least daily and at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures. Results of daily coliform bacteria monitoring, running 7-day median determination shall be reported monthly.

e. See Sections II. A. 2 and II.A.3 of this MRP.

f. Priority pollutant monitoring is required by Section 7.b.4 of the State Water Board *Recycled Water Policy*. Priority pollutants are constituents listed in Appendix A to the 40 Code of Federal Regulations part 423.

III. RECYCLED WATER REPORTS

- A. The Discharger shall submit quarterly recycled water users' summary reports containing the following information.
1. Total volume of recycled water supplied to all recycled water users for each month of the reporting period.
 2. Total number of recycled water use sites receiving recycled water.

3. Address of the recycled water use site.
 4. Basin Plan name and number of hydrologic subarea underlying the recycled water use sites.
- B. The Discharger shall submit annual recycled water users' compliance reports containing the following information:

1. Recycled water use site summary report
 - a. Name of each recycled water reuse site.
 - b. Owner of each recycled water use facility.
 - c. Address of each reuse site.
 - d. Name of the recycled water on-site user supervisor.
 - e. Phone number of the on-site user supervisor.
 - f. Mailing address of the recycled water on-site use supervisor, if different from site address.
 - g. Volume of reclaimed water delivered to each reuse site for each of the 12 months in a calendar year.
 - h. Total area (in acres) of each landscape irrigation site.
 - i. The amount of nitrogen (in pounds per acre per year) applied in recycled water on each landscape irrigation site.
2. Recycled water user site inspections.

The Discharger shall report the number of recycled water reuse site inspections conducted by its staff and identify the sites inspected for the reporting period.

3. Recycled water user violations of the Discharger's rules and regulations.

The Discharger shall identify all recycled water users known to be in violation of its rules and regulations for recycled water users. The report shall include a description of the noncompliance and its cause, including the period of noncompliance, 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.

- C. If the Discharger establishes recycled water fill stations, then the following information shall also be included in the annual recycled water compliance report.

1. A list of all approved residential and commercial recycled water haulers. The Discharger's annual list must indicate any new recycled water haulers that were approved during the calendar year.
 2. A list of users receiving or proposing to receive recycled water from the fill stations (including a list of uses of recycled water for each user).
 3. A list of recycled water end use sites outside the Discharger's recycled water service area.
 4. A summary of the volume of recycled water used (in acre feet) from the fill stations each quarter during the calendar year.
 5. A summary table of all inspections conducted of recycled water use sites which received water from the fill stations during the calendar year, and enforcement and corrective actions initiated by the Discharger during the calendar year. Include a discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the Order. Copies of any enforcement actions taken by the Discharger shall be provided to DDW, the San Diego Water Board, and County DEH.
 6. An evaluation of the performance of the recycled water treatment facility, including discussion of capacity issues, system problems, and a forecast of the flows anticipated in the next year.
 7. The name and contact information for the recycled water operator/staff responsible for overseeing operation, maintenance, and system monitoring of the fill stations.
- D The Discharger shall submit results of a nitrate study by June 15, 2018 which demonstrates whether or not the discharge from the plant will cause groundwater to exceed the proposed groundwater quality objective for nitrate of 45 mg/L as nitrate (in areas with applicable numerical groundwater quality objectives). The nitrate study must evaluate factors such as existing nitrogen removal achieved at the plant, need for additional treatment processes to remove nitrate, fate and transport of nitrogen in the groundwater, nitrate uptake rates by vegetation in the use sites, groundwater monitoring, application of recycled water and fertilizer at agronomic rates, and other best management practices. A workplan for the nitrate study must be submitted by September 15, 2017 which identifies proposed tasks and milestones for completing the nitrate study.

IV. REPORTING REQUIREMENTS

- A. The Discharger shall prepare Self-Monitoring Reports (SMR) that include the results of all monitoring specified in Section II (Discharge Monitoring Requirements) of this MRP. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

- B. Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in Table 2:

Table 2. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period	SMR Due Date
Continuous	All	Submit with monthly SMR
Daily	Daily	Submit with monthly SMR
Monthly	January, February, March, April, May, June, July, August, September, October, November, December	By the first day of the second month following sampling (i.e March 1 for January)
Quarterly	January 1 through March 30 April 1 through June 30 July 1 through September 30 October 1 through December 31	April 1 August 1 October 1 February 1
Annually	January 1 through December 31	February 1

Laboratory reporting limits shall be lower than or equal to the discharge specifications. Constituents not detected below the method detection limit shall be reported as non-detect with the applicable value (e.g. ND<0.05 mg/L). Constituents detected between the laboratory reporting limit and method detection limit shall be reported as “estimated concentrations” or noted with appropriate laboratory flags.

- C. The Discharger shall furnish SMRs in accordance with the following requirements:
1. The Discharger 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 discharge specifications.
 2. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the Master Recycling Permit; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. For identified violations, the letter must include a description of the requirement that was violated and a description of the violation.
 3. SMRs must be submitted in text searchable PDF format to the San Diego Water Board via email. The email submittals must include a signed cover/transmittal letter (with the facility name, facility contact information, and reference code), and, unless directed otherwise by the Executive Officer, be sent via email to sandiego@waterboards.ca.gov.

Ordered by: TENTATIVE
 David W. Gibson
 Executive Officer
 DATE: December 14, 2016