

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

ORDER NO. R9-2016-0154

**MASTER RECYCLING PERMIT FOR THE RAMONA MUNICIPAL WATER DISTRICT,
SANTA MARIA WASTEWATER TREATMENT PLANT,
SAN DIEGO COUNTY**

Ramona Municipal Water District is subject to waste discharge requirements as set forth in this Order.

Table 1. Discharger Information

Discharger	Ramona Municipal Water District
Name of Facility	Santa Maria Wastewater Treatment Plant
Facility Address	260 Sawday St
	Ramona, CA 92065
	San Diego County

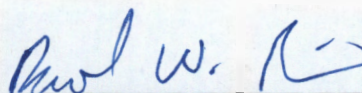
Table 2. Discharge Location

Discharge Point	Effluent Description	Hydrologic Area of Discharge
Ramona Water District's Rangeland Road spray disposal fields and recycled water reuse sites.	Undisinfected Secondary and disinfected tertiary Recycled Water	Ramona HSA (905.41) of the Santa Maria Valley HA (905.40)

Table 3. Effective Date

This Order was adopted by the California Regional Water Quality Control Board, San Diego Region and is effective on:	June 22, 2016
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I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on June 22, 2016.



David W. Gibson, Executive Officer

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I. ADMINISTRATIVE INFORMATION

Administrative information on the Santa Maria Wastewater Treatment Plant (SMWWTP or Facility) is summarized in Table 4. More detailed information on the Facility can be found in Section II of the Information Sheet (Attachment C).

Table 4. Facility Information

Discharger	Ramona Municipal Water District
Name of Facility	Santa Maria Wastewater Treatment Plant
Facility Address	260 Sawday St
	Ramona, San Diego, CA 92065
	San Diego County
Facility Contact, Title and Phone	Mr. Jim Anderson, Wastewater Operations Superintendent (760) 788-2239
Mailing Address	105 West Earlham St, Ramona, CA 92065-1599
Type of Facility	Wastewater Treatment Plant
Facility Design Flow	1.0 million gallons per day(mgd) of secondary treated effluent and 0.35 mgd of disinfected tertiary recycled water (Annual Average Daily Flow)

II. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), finds:

- A. **Background.** Order No. R9-2016-0154 (Order) updates the SMWWTP's Master Reclamation Permit¹ to add requirements of the State *Recycled Water Policy*,² and to add requirements for recycled water fill station should Ramona Municipal Water District (RMWD) choose to operate fill stations in the future. The Order also revises discharge specifications to address compliance issues caused by an increase in constituent concentrations in RMWD's potable water supply.
- B. **Legal Authorities.** This Order is issued pursuant to section 13263 and 13523.1 of the Water Code. This Order serves as a Master Recycling Permit, which also includes Waste Discharge Requirements (WDRs) issued pursuant to article 4, chapter 4, division 7 of the Water Code.
- C. **Rationale for Requirements.** The San Diego Water Board developed the requirements in this Order based on information in self-monitoring reports, water quality control plans and policies, observations made during compliance inspections and site visits, and other available information. An Information Sheet (Attachment C) was prepared for this Order, which contains background information and rationale for Order requirements. The Information Sheet is hereby incorporated into and constitutes findings for this Order.

¹ [Order No. R9-2000-0117, Master Reclamation Permit for the Ramona Municipal Water District, Santa Maria Wastewater Treatment Plant, San Diego County](#)

² State Water Board's Recycled Water Policy (2009 as modified in 2013): http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/draft_amendment_to_policy.shtml

- D. **Antidegradation Policy.** The State Water Resources Control Board (State Water Board) established California's Antidegradation Policy in Resolution No. 68-16, *the Statement of Policy with Respect to Maintaining High Quality of Waters in California*. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The San Diego Water Board's Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. As discussed in Section V of the Information Sheet, the discharge regulated by this Order is consistent with the Antidegradation Policy.
- E. **Standard and Special Provisions.** Standard Provisions apply to all WDRs and Master Recycling Permits. The standard provisions contain language the San Diego Water Board finds necessary to ensure the Order is enforced, the facility is designed and operated for the protection of human health, records are maintained, and changes are reported. The Discharger must comply with all standard provisions.
- F. **Notification of Interested Persons.** The San Diego Water Board has notified the Discharger and interested agencies and persons of its intent to adopt a Master Recycling Permit that also prescribes Waste Discharge Requirements in this Order. The San Diego Water Board also provided stakeholders with an opportunity to submit their written comments and recommendations. Details of the notification are provided in Section IX of the Information Sheet.
- G. **Consideration of Public Comment.** The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the scheduling for the Public Hearing are provided in Section IX of the Information Sheet.
- H. **California Environmental Quality Act.** The San Diego Water Board is the lead agency under the California Environmental Quality Act (CEQA) and has principal responsibility for approving the proposed project. The proposed project is the reissuance of a Master Recycling Permit which includes WDRs. The Discharger is not adding or changing any treatment process to the Facility. As such this project is categorically exempt from the requirements of CEQA as provided by section 15301, and in compliance with title 14, of California Code of Regulations (Cal. Code of Regs.), section 15300.2
- I. **Rescission of Outdated Master Reclamation Permit.** The Santa Maria Wastewater Treatment Plant (SMWWTP) has been regulated under Order No. R9-2000-0177, *Master Reclamation Permit for the Ramona Municipal Water District, Santa Maria Wastewater Treatment Plant, San Diego County*. Order No. R9-2016-0154 supersedes Order No. R9-2000-0177 except for enforcement purposes.

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order No. R9-2000-0177 upon the effective date of this Order except for enforcement purposes. In order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and applicable regulations, it is further ordered that the Discharger comply with the requirements in this Order. If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified in the order granting stay, the Discharger shall comply with the analogous

portions of the previous Order. This action does not prevent the San Diego Water Board from taking enforcement actions for past violations of the previous Order.

III. DISCHARGE PROHIBITIONS

- A. Discharge of waste, other than incidental runoff, to lands which have not been specifically described in this Order or in the Report of Waste Discharge, and for which valid waste discharge requirements are not in force are prohibited.
- B. Discharges of treated or untreated solid or liquid waste to waters of the United States are prohibited unless as authorized by a National Discharge Pollution Discharge Elimination System permit issued by the San Diego Water Board.
- C. Discharges of treated or untreated solid or liquid waste directly or indirectly to any surface waters of the State (including ephemeral streams and vernal pools) are prohibited.
- D. The treatment, storage, or disposal of waste in a manner that creates pollution, contamination, or nuisance, as defined by Water Code section 13050, is prohibited.

IV. DISCHARGE SPECIFICATIONS

- A. The average annual flow of undisinfected secondary effluent to the Rangeland Road spray disposal field shall not exceed 1.0 mgd. The average annual flow of disinfected tertiary effluent from the SMWWTP shall not exceed 0.35 mgd.
- B. Discharges of undisinfected secondary treated and tertiary treated wastewater from the SMWWTP shall not contain constituents in excess of the discharge specifications in Table 5:

Table 5. Discharge Specifications

Constituent	Units	Daily Maximum ¹	Monthly Average ²	Annual Average ³
Biological Oxygen Demand (BOD ₅ @ 20°C)	mg/L	30	45	
Total Suspended Solids (TSS)	mg/L	30	45	
pH	pH units	Within the limits of 6.5-9.0 at all times		
Total Dissolved Solids (TDS)	mg/L	-	-	1,000
Chloride (Cl)	mg/L	-	-	250
Sulfate (SO ₄)	mg/L	-	-	300
Percent Sodium (% Na)	%	-	-	60%
Iron (Fe)	mg/L	-	-	0.30
Manganese (Mn)	mg/L	-	-	0.05
Methylene Blue- Activated Substances (MBAS)	mg/L	-	-	0.5
Boron (B)	mg/L	-	-	0.5
Fluoride (F)	mg/L	-	-	1.0
Aluminum ⁴	mg/L	1.0	-	

Constituent	Units	Daily Maximum ¹	Monthly Average ²	Annual Average ³
Arsenic ⁴	mg/L	0.05	-	
Antimony ⁴	mg/L	0.006	-	
Barium ⁴	mg/L	1.0	-	
Beryllium	mg/L	0.004	-	
Cadmium ⁴	mg/L	0.005	-	
Cyanide ⁴	mg/L	0.2	-	
Mercury ⁴	mg/L	0.002	-	
Nickel ⁴	mg/L	0.1	-	
Perchlorate ⁴	mg/L	0.006	-	
Selenium ⁴	mg/L	0.05	-	
Thallium ⁴	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 12-month average discharge specification shall apply to the arithmetic mean of the results of all samples collected during a calendar year period.

⁴These discharge specifications only apply when recycled water is discharged to landscape irrigation sites or reuse sites subject to Water Recycling Criteria specified in title 22, Cal. Code of Regs.

C. Recycled water produced from the SMWWTP tertiary facility shall comply with the following additional requirements.

1. The chlorine disinfection process must provide a chlorine contact time (or CT)³ value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow.
2. The median density of total coliform bacteria measured in the disinfected recycled water effluent from the Facility shall not exceed a Most Probable Number (MPN) of 2.2 organisms per 100 milliliters, utilizing the bacteriological results of the last seven days for which analyses have been completed; and the number of total coliform bacteria shall not exceed a MPN of 23 organisms per 100 milliliters in more than one sample in any 30-day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.
3. Turbidity measurement of the recycled water effluent from the SMWWTP shall not exceed a daily average value of 2 Nephelometric Turbidity Units (NTU), shall not exceed 5 NTU more than 5 percent of the time during a 24-hour period, and shall not exceed 10 NTU at any time.
4. Alternative disinfection processes may be used, that, when combined with the filtration process, have been demonstrated to reduce the concentration of plaque-

³ Defined as the product of total chlorine residual and modal contact time measured at the same point.

forming units of F-specific bacteriophage MS2, or polio virus, per unit volume of water in the wastewater to one hundred thousandths (1/100,000) of the initial concentration in the filter influent throughout the range of qualities of wastewater that will occur during the recycling process. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

V. WATER RECYCLING REQUIREMENTS

- A. The Discharger must develop and submit the following information to the San Diego Water Board, State Water Board Division of Drinking Water (DDW) and County of San Diego Department of Environmental Health (County DEH) upon request.
1. *Rules and Regulations for Recycled Water Users* governing the design and construction of recycled water use facilities and the use of recycled water. Rules and regulations for purveyance of recycled water shall, at a minimum, include the requirements which are contained in Attachment B to this Order.
 2. A program to conduct compliance inspections of recycled water reuse sites. Inspections shall determine the status of compliance with the Discharger's approved rules and regulations for recycled water users.
 3. A report containing the information listed below. The Discharger may submit a report that covers more than one reuse site. The report shall include a detailed description of each reuse site identifying all of the information below:
 - a. The number, location, and type of facilities within the use area proposing to use domestic and recycled water. "Facility" means any type of building or structure, or defined area of specific public use that utilizes or proposes to utilize a dual plumbed system.
 - b. The specific boundaries of the proposed use site area including a map showing the location of each facility, drinking water fountain and impoundment to be served.
 - c. The person or persons responsible for operation of the recycled water system at each use area.
 - d. The specific use to be made of the recycled water at each use area.
 - e. The methods to be used by the Discharger to assure that the installation and operation of the recycled system will not result in cross connections between the recycled water piping system and the potable water piping system. This shall include a description of pressure, dye, or other test methods to be used to test the system.
 - f. Plans and specifications. These shall include the following and shall be submitted to the DDW and County DEH:
 - i. Proposed piping system to be used.

- ii. Pipe locations of both the recycled and potable systems.
 - iii. Type and location of the outlets and plumbing fixtures that will be accessible to the public.
 - iv. The methods and devices to be used to prevent backflow of recycled water into the public water system.
 - v. Plan notes relating to recycled water specific installation and use requirements.
- B. Prior to providing recycled water to a new use site, the Discharger shall do the following:
1. Submit for review and approval a report certifying that the project conforms to all criteria described in Water Recycling Requirements V.A.3. The certification report shall document that all criteria described in Water Recycling Requirements V.A.3 has been submitted to and approved by the appropriate regulatory agency. Information submitted as a supplement to this report shall document compliance with any criteria, as described by Water Recycling Requirements V.A.3, not met through submittal of the initial report.
 2. Ensure that any dual plumbed system within each facility and use area is inspected for possible cross connections with the potable water system. The recycled water system shall also be tested for possible cross connections at least once every four years. The testing shall be conducted in accordance with the method described in the report submitted pursuant to title 22, Cal. Code Regs., section 60314. The inspections and the testing shall be performed by a cross connection control specialist certified by the California-Nevada section of the American Water Works Association or an organization with equivalent certification requirements. The County DEH shall be notified at least 30 days prior to any cross connection test. A written report documenting the result of the inspection or testing for the prior year shall be submitted to the County DEH within 30 days following completion of the inspection or testing.
- C. The Discharger shall ensure the following requirements are met for all reuse sites:
1. Enforce recycled water rules and regulations.
 2. Conduct recycled water reuse site compliance inspections in accordance with the program submitted in compliance with Section V.A.2 of this Order.
 3. Notify the DDW and the County DEH of any incidence of recycled water backflow into the potable water system as soon as possible, but in no case later than 24 hours after finding the incident.
 4. Maintain a current list of all on-site recycled water supervisors.

VI. PROVISIONS

- A. The Discharger shall comply with all of the following Standard Provisions:
1. The Discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the Water Code and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a report of waste discharge in application for new or revised waste discharge requirements.
 2. The Discharger shall allow the San Diego Water Board, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to do the following:
 - a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this Order,
 - b. Have access to and copy, at reasonable times, any records that must be 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 purposes of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at any location.
- B. The Discharger shall report any noncompliance that may endanger health or the environment. Pursuant to section 5411.5 of the Health and Safety Code, any sewage overflow or spill shall be immediately reported to the California Office of Emergency Services (OES), and the County DEH. In addition, any such information shall be provided orally to the San Diego Water Board within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided to the San Diego Water Board within 5 days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the San Diego Water Board within 24 hours:
1. Any bypass from any portion of the treatment facility.
 2. Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge, or any other circumstances.

3. Any treatment plant upset which causes the discharge specifications of this Order to be exceeded.
 4. Failure of disinfection system.
 5. Disinfected tertiary effluent total coliform bacteria greater than 240 MPN/ 100mL.
- C. The Discharger shall report all overflow events that occur at the plant. For purposes of this reporting requirement, an overflow event is defined as a discharge of treated or untreated wastewater at a location onsite or other lands owned by the Discharger not authorized by waste discharge requirements which results from a pump station failure, line break, obstruction, surcharge, or any other operational dysfunction. This reporting requirement applies to all overflow events other than those events subject to regulation under the State Board Order No. 2006-0003-DWQ and San Diego Water Board Order No. R9-2007-0005. Overflows of the kind identified under this provision shall be reported to the San Diego Water Board with the monthly monitoring report in which the overflow occurs.
- D. If the Discharger or end user, without regard to intent or negligence, causes or permits an unauthorized discharge of 50,000 gallons or more of recycled water that has been treated to at least disinfected tertiary recycled water⁴ or 1,000 gallons or more of recycled water that is treated at a level less than disinfected tertiary recycled water in or on any waters of the State, or causes or permits such unauthorized discharge to be discharged where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (1) that person has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the San Diego Water Board in accordance with reporting requirements in Provision VI.B.
- E. The incidental discharge of recycled water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in the receiving water exceeding an applicable water quality objective.
- F. If a need for a discharge bypass is known in advance, the Discharger shall submit prior notice (stating, at a minimum, the purpose, anticipated dates, duration, level of treatment, and volume of bypass) and, if at all possible, the San Diego Water Board shall be made aware of such notice at least 10 days prior to the date of the bypass. "Bypass" means the intentional diversion of waste streams from any portion of the treatment facility other than a sewer system.
- G. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
- H. Upon reduction, loss, or failure of the treatment facility the Discharger shall, to the extent necessary to maintain compliance with this Order, control production or all

⁴ Disinfected tertiary recycled water is defined in title 22, Cal.Code Regs., section 60301.230

discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies for example, when the primary source of power of the treatment facility has failed, is reduced, or is lost.

- I. Except for a discharge which is in compliance with this Order, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County DEH in accordance with Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code title 2, division 1, chapter 7, article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Discharger is in violation of a prohibition in the *Water Quality Control Plan for the San Diego Basin* (Basin Plan).
- J. Except for a discharge which is in compliance with this Order, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code title 2, division 1, chapter 7, article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.
- K. A copy of this Order shall be maintained at the Facility and shall be available to operating personnel at all times.
- L. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Order, and records of all data used to complete the application for this Order. 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 San Diego Water Board.
- M. The Discharger shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The

Discharger shall also furnish to the San Diego Water Board, upon request, copies of records required to be kept by this Order.

- N. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
1. Violation of any terms or conditions of this Order.
 2. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.
 3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- O. The filing of a request by the Discharger for the modification, revocation, reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
- P. The Discharger shall file a new Report of Waste Discharge, stamped and signed by a licensed professional,⁵ at least 120 days prior to the following:
1. Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the wastes.
 2. Significant change in the treatment or disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste).
 3. Change in the disposal area from that described in the findings of this Order.
 4. Increase in flow beyond that specified in this Order.
 5. Other circumstances that result in a material change in character, amount, or location of the waste discharge.
 6. Any planned change in the regulated facility or activity which may result in noncompliance with this Order.
- Q. This Order is not transferable to any person except after notice to the San Diego Water Board. This notice must be in writing and received by the San Diego Water Board at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current Discharger and the new discharger. This agreement shall include an acknowledgement that the existing Discharger is liable for violations up to the transfer

⁵ All reports, plans, and documents required under this Order must be prepared under the direction of appropriately qualified professionals. California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals. The lead professional shall sign and affix their license stamp to the report, plan, or document.

date and that the new discharger is liable from the transfer date on and forward. The San Diego Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the Water Code.

- R. Where the Discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the San Diego Water Board, it shall promptly submit such facts or information.
- S. 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 either a principal executive officer or ranking elected official;
- b. For a municipality, State, federal, or other public agency by either a public Executive Officer or ranking official
- c. By direction of the person designated in paragraph "a" or "b" of this provision, only if:
 - i. The authorization is made in writing by a person described in paragraph S.1.a or S.1.b of this provision;
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and

2. All other reports required by this Order and other information required by the San Diego Water Board shall be signed by a person designated in paragraph (S.1.a or S.1.b) of this provision or a duly authorized representative of that person. An individual is a duly authorized representative only if all of the following are true:

- a. The authorization is made in writing by a person described in paragraph S.1.a. or S.1.b. of this provision.
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.
- 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 a fine and imprisonment."

- T. The Discharger shall submit reports required under this Order 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.

VII. SPECIAL PROVISIONS: FACILITY DESIGN AND OPERATION SPECIFICATIONS.

- A. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxillary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.
- B. The Discharger must implement the following to ensure that recycled water and fertilizer are applied in use sites at agronomic rates:⁶
1. Monitor nutrient concentrations in recycled water supplies and notify recycled water site supervisors of the nutrient concentrations of recycled water. In the case of recycled water fill stations, customers must be notified of the nutrient concentrations in the recycled water.
 2. Conduct periodic inspections of end use sites.
- C. The Discharger shall submit results of a nitrate study by June 30, 2017 which demonstrates whether or not the discharge from the plant will cause groundwater to exceed the 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, 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 December 12, 2016 which identifies proposed tasks and milestones for completing the nitrate study.
- D. Prior to any changes in the treatment facilities, the Discharger shall prepare an engineering report conforming to title 22, Cal. Code of Regs., section 60323. The

⁶ Agronomic rates refers to rate of application of recycled water to plants necessary to satisfy the plants' evapotranspiration requirements, considering allowances for supplemental water (e.g., effective precipitation), irrigation distribution uniformity, and leaching requirement, thus minimizing the movement of nutrients below the plants' root zone.

engineering report shall be submitted to the DDW, County DEH, and San Diego Water Board for review and response.

- E. A copy of the facility operations manual shall be maintained at the plant and shall be available to operation personnel and San Diego Water Board staff at all times. The following portions of the operations manual shall be posted at the treatment plant as a quick reference for treatment plant operators.
1. Alarm set points for secondary turbidity, tertiary turbidity, and chlorine residual.
 2. Levels at which flow will be diverted for secondary turbidity, tertiary turbidity, and chlorine residual.
 3. When to divert flow for high daily and weekly median total coliform.
 4. When the authorities (DDW, County DEH, San Diego Water Board) will be notified of a diversion.
 5. Names and numbers of those authorities to be notified in case of a diversion.
 6. Frequency of calibration for turbidity meters and chlorine residual analyzers.
- F. The Facility shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to title 23, Cal Code of Regs., chapter 3, subchapter 14.
- G. All waste treatment, storage and purveyance facilities shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.
- H. All wastewater and recycled water storage facilities shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24-hour frequency storm.
- I. The Discharger must submit a workplan, within 180 days of adoption of this Order, identifying proposed tasks and measures it will implement as the lead agency developing a salt and nutrient management plan (SNMP) for the Santa Maria Valley Hydrologic Area (HA 905.40) groundwater basins in accordance with the State Recycled Water Policy. The SNMP shall be submitted to the San Diego Water Board by June 30, 2018. Proposed tasks and measures to be implemented by the Discharger can be based on the Guidelines for Salinity/Nutrient Management Planning in the San Diego Region (guidelines).⁷ Once completed, the Discharger must implement the plan.
- J. The Discharger shall comply with the Monitoring and Reporting Program (Attachment D to Order No. R9-2016-0154) and future revisions thereto as specified by the San Diego Water Board. Monitoring results shall be reported at the frequency specified in Monitoring and Reporting Program No. R9-2016-0154.

⁷ Recommended tasks for development of salt and nutrient management plans can be found in Chapter 5 and Appendix B of the guidelines.

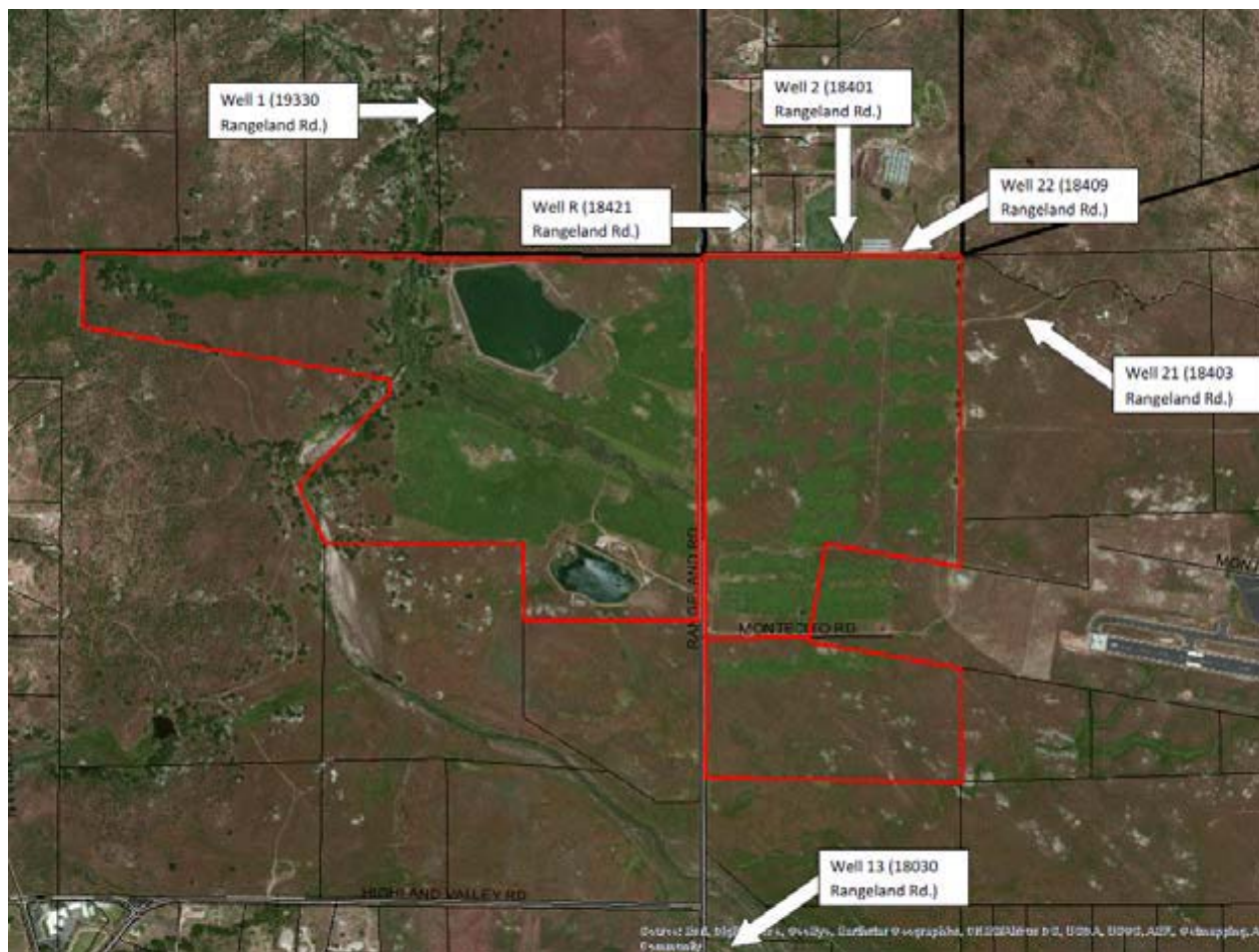
VIII. NOTIFICATIONS

- A. The San Diego Water Board may initiate enforcement action against the Discharger, which may result in the termination of the recycled water discharge, if any person uses, transports, or stores such water in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code section 13050.
- B. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, State or local laws, nor create a vested right for the Discharger to continue the waste discharge.
- C. These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Clean Water Act section 402.
- D. Any person aggrieved by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and title 23, Cal. Code of Regs, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or 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 law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
- E. This Order becomes effective on the date of adoption by the San Diego Water Board.

ATTACHMENT A – LOCATION MAPS



LOCATION OF GROUNDWATER WELLS.



ATTACHMENT B - RULES AND REGULATIONS FOR RECYCLED WATER USE

Pursuant to Water Code Section 13523.1(b)(3), this Order requires the Discharger to establish and to enforce rules and regulations governing the design, construction and use of recycled water distribution and disposal systems by its customers. The rules and regulations shall be consistent with the following criteria:

- Title 22, Cal. Code Regs., division 4, chapter 3, Wastewater Reclamation Criteria;
- Title 17, Cal. Code Regs., division 1, chapter 5, group 4, article 1 and 2;
- The State Water Board Division of Drinking Water (DDW) *Guidelines For Use of Recycled Water*, *Guidelines for Use of Recycled Water for Construction*; and
- Any measures that are deemed necessary for protection of public health, such as the American Water Works Association (AWWA) California/Nevada Section, *Guidelines for the Distribution of Non-Potable Water and Guidelines for Retrofitting to Recycled Water* or alternate measures that are acceptable to the DDW.

I. STANDARD RULES AND REGULATIONS

At a minimum, the rules and regulations shall notify the users that:

- A. The use of recycled water shall not cause a condition of pollution, contamination or nuisance, as defined by Water Code Section 13050. The Discharger, the San Diego Water Board, the DDW, and the County Department of Environmental Health (County DEH), or an authorized representative of these parties, upon presentation of proper credentials, shall have the right to enter upon the recycled water use site during reasonable hours, to verify that the user is complying with the Discharger's rules and regulations.
- B. The recycled water user shall provide written notification, in a timely manner, to the Discharger of any material change or proposed change in the character of the use of recycled water.
- C. Prior to the initiation of recycled water service, the recycled water user shall submit to the Discharger plans and specifications for recycled water distribution facilities.
- D. The recycled water user shall designate an on-site recycled water supervisor who is responsible for the recycled water system at each use area under the user's control. Specific responsibilities of the recycled water supervisor include the proper installation, operation, and maintenance of the irrigation system; compliance of the project with the Discharger's rules and regulations, prevention of potential hazards and preservation of the recycled water distribution system plans in "as built" form. Designated recycled water supervisors shall obtain instruction in the use of recycled water from an institution approved by the DDW and County DEH, as required.
- E. The Discharger may terminate service to a recycled water user who uses, transports, or stores such water in violation of the Discharger's rules and regulations.

- F. All recycled water storage facilities owned and/or operated by recycled water users shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24 hour frequency storm unless the San Diego Water Board approves relaxed storm protection measures for the facility.
- G. All recycled water storage facilities owned and/or operated by recycled water users shall be protected against 100-year frequency peak stream flows as defined by the San Diego County flood control agency unless the San Diego Water Board approves relaxed storm protection measures for the facility.
- H. The San Diego Water Board may initiate enforcement action against any recycled water user who discharges recycled water in violation of any applicable discharge requirement prescribed by the San Diego Water Board or in a manner which creates or threatens to create conditions of pollution, contamination or nuisance, as defined in Water Code section 13050.
- I. A copy of the recycled water rules and regulations, irrigation system layout map, and a recycled water system operations manual shall be maintained at the use area. These documents shall be available to operating personnel at all times.
- J. Irrigation with disinfected tertiary recycled water shall not take place within 50 feet of any domestic water supply well unless all of the following conditions have been met:
 - 1. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface.
 - 2. The well contains an annular seal that extends from the surface into the aquitard.
 - 3. The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.
 - 4. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well.
 - 5. The owner of the well approves of the elimination of the buffer zone requirement.
- K. Impoundment of disinfected tertiary recycled water shall not occur within 100 feet of any domestic water supply well.
- L. Irrigation with, or impoundment of, disinfected secondary-2.2¹ or disinfected secondary - 23² recycled water shall not take place within 100 feet of any domestic water supply well.
- M. Irrigation with, or impoundment of, undisinfected secondary recycled water shall not take place within 150 feet of any domestic water supply well.

¹ Disinfected secondary-2.2 recycled water is defined in title 22, Cal. Code Regs., section 60301.220

² Disinfected secondary-23 recycled water is defined in title 22, Cal. Code Regs., section 60301.225

- N. Recycled water facilities shall be operated in accordance with best management practices (BMPs) to prevent direct human consumption of reclaimed water and to minimize misting, ponding, and runoff. BMPs shall be implemented that will minimize both public contact and discharge onto areas not under customer control.
- O. Irrigation with recycled water shall be during periods of minimal human use of the service area. Consideration shall be given to allow a maximum dry-out time before the irrigated area will be used by the public.
- P. All drinking fountains located within the approved use area shall be protected by location and/or structure from contact with recycled water spray, mist, or runoff. Protection shall be by design, construction practice, or system operation.
- Q. Facilities that may be used by the public, including but not limited to eating surfaces and playground equipment and located within the approved use areas, shall be protected to the maximum extent possible by siting and/or structure from contact by irrigation with recycled water spray, mist, or runoff. Protection shall be by design, construction practice or system operation.
- R. Spray irrigation with recycled water, other than disinfected tertiary recycled water, shall not take place within 100 feet of the property line of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.
- S. All use areas where recycled water is used and that are accessible to the public shall be posted with conspicuous signs, in a size no less than 4 inches by 8 inches, that include the following wording in a size no less than 4 inches high by 8 inches wide: "RECYCLED WATER - DO NOT DRINK". The sign(s) shall be of a size easily readable by the public.
- T. No physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water.
- U. The recycled water piping system shall not include any hose bibs. Quick couplers that are different from that used on the potable water system may be used.
- V. The public water supply shall not be used as a backup or supplemental source of water for a recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of sections 7602(a) and 7603(a) of the Cal. Code of Regs., title 17 and the approval of the public water system has been obtained. If a "Swivel-ell" type connection is used it must be used in accordance with the provisions of the CDPH Policy Memo 95-004. Approved backflow prevention devices shall be provided, installed, tested, and maintained by the recycled water user in accordance with the applicable provisions of Cal. Code of Regs. title 17, division 1, chapter 5, group 4, article 2.
- W. No person other than the Discharger shall make a connection to the recycled water distribution system.

- X. All recycled water piping and appurtenances in new installations and appurtenances in retrofit installations shall be colored purple or distinctively wrapped with purple tape in accordance with the Health and Safety Code, chapter 7.9, section 4049.54.
- Y. Reuse site shut down tests and inspections shall be monitored by the CDPH.
- Z. Customer complaints concerning recycled water use that may involve public illness shall be reported to the County DEH, the CDPH, and to the Discharger who shall maintain a log of all customer complaints regarding recycled water.
- AA. Any backflow prevention device installed to protect the public water system shall be inspected and maintained in accordance with title 17, Cal. Code of Regs., title 17, section 7605.
- BB. Recycled water and fertilizer shall be applied to landscapes at agronomic rates.
- CC. Overwatering of landscapes and runoff shall be avoided.
- DD. Recycled water supervisors shall be responsible for determining onsite fertilizer needs to ensure that recycled water is applied to landscapes at agronomic rates, and shall complete training and education in compliance with recycled water agency rules and regulations to: (1) Minimize the potential for runoff or over-irrigation and, (2) Determine the fertilizer needs of the landscape taking into account the nutrient value of recycled water.

II. General Requirements for Hauling or Transportation of Recycled Water Using Vehicles

The Discharger must submit updated Draft Rules and Regulations for Recycled Water Use to the San Diego Water Board, DDW, and County of San Diego Department of Environmental Health (County DEH) **within three months** of establishing Recycled Water Fill stations the RMWD service area and updated Final Rules and Regulations for Recycled Water Use **within six months** of establishing a Recycled Water Fill station. In addition, the Discharger must submit its draft program for training customers, haulers, and fill station staff on proper handling of recycled water to the DDW and County DEH **within six months** of establishing a Recycled Water Fill station. The final training program must be submitted to the DDW and County DEH within three months of establishing Recycled Water Fill stations to the RMWD service area.

The Discharger's updated Rules and Regulations for Recycled Water Use must include requirements that will be implemented to ensure use and transport of recycled water from the fill stations will be protective of public health and the environment. At a minimum the Rules and Regulations must include the requirements below.

The Discharger or hauler must comply with the following requirements in sections II-IV of Attachment B to this Order, unless the DDW or the County of San Diego Department of Environmental Health determine that alternative criteria provide equivalent or better protection of public health and the environment.

- A. Haulers interested in participating in this program must apply for a Recycled Water Use Permit issued by the Discharger.
- B. Use areas receiving hauled recycled water must follow the same title 17 and title 22, Cal. Code Regs. requirements as a similar use area receiving traditionally piped recycled water. These requirements must be addressed in the Discharger's permitting process.
- C. Before trucks or containers can be filled for the first time, all haulers are required to attend a brief on-site orientation or training in order to learn about using the filling station and the proper handling and safe use of recycled water. Annual refresher training should be required. Records of training should be maintained by the Discharger.
- D. Once the hauler completes the on-site orientation or training and a MRP Recycled Water Program inspector verifies the tanker truck or containers meet the recycled water use requirements, the inspector will issue a signed Recycled Water Use Permit. The Recycled Water Use Permit must be available for inspection at all times. The hauler must carry a copy in the vehicle at all times while hauling recycled water.
- E. Recycled water must not be introduced into any potable water piping system and no connection shall be made between the tank and any part of a potable water system.
- F. If the hauler requests to supply recycled water to a use area that uses any plumbed potable or recycled water distribution systems, the Discharger must follow all applicable Title 17 and Title 22 regulations, including cross connection control testing and backflow prevention device installation prior to allowing pick up of recycled water. Dual plumbed use areas can only receive recycled water from a recycled water agency as specified in Cal. Code of Regs., title 22, section 60313(a).
- G. The hauler should keep a log book for each vehicle, tank, or container used to transport recycled water. The log book must be available for inspection at all times. The hauler must carry a copy in the vehicle at all times while hauling recycled water. The log book should include:
 - 1. Date of delivery/use,
 - 2. Volume of water delivered/used,
 - 3. Intended use of water,
 - 4. Name and address of the recipient/customer.
- H. The hauler or Recycled Water Site Supervisor must notify workers and the public recycled water is used at a site and inform workers and the public not to drink recycled water or use it for food preparation.
- I. Precautions should be taken to avoid food coming in contact with recycled water while the use site is wet.

- J. No irrigation or impoundment of recycled water is allowed within a minimum of 50 feet of any domestic drinking water well.
- K. The haulers shall take adequate measures to prevent overspray, ponding, or run off of recycled water from the authorized recycled water use area.
- L. No connection shall be made between a tank or container of recycled water and any part of a potable water system.
- M. The Recycled Water Use Permit issued by the Discharger must be available for inspection at all times.
- N. Recycled water must not be introduced into any potable water piping system and no connection shall be made between the tank and any part of a potable water system.
- O. Tank trucks, containers, and appurtenances must be clearly identified as “non-potable”, equipped with a legally sized air gap, and must not be used to provide potable water. Containers and hoses associated with hauling recycled water must not be used for potable water. Commercial hauling trucks that may be filled with potable water for non-potable uses must have two separate filling systems, one dedicated to potable water and one dedicated to recycled water. When the truck is filled from a potable water source, there must be a water agency or municipality provided meter and backflow device between the truck fill line and the potable source.
- P. Vehicles, tanks, and containers must have water-tight valves and fittings, must not leak or spill contents during transport, and are cleaned of contaminants. This must be checked by the hauler before each use. Water-containing vessels that are open to the atmosphere during hauling are not acceptable for use.
- Q. Haulers should not overfill containers or trucks.
- R. Hoses used for the application of recycled water shall be removable and shall be stored in a disconnected condition during transport. Hoses should be inspected prior to filling to ensure that they are in serviceable condition and free from leaks.
- S. In the event of an emergency concerning the recycled water hydrant, meter, fill pipe or hose (spillage, leaks, etc.), the hauler should call the emergency contact number listed on the filling station sign for further instructions.
- T. The Discharger may conduct use area visits to ensure proper use of recycled water according to all applicable requirements of titles 17 and 22, Cal. Code Regs. and Recycled Water Use Permit conditions. This may include follow up phone calls or surveys of end users about completion of the hauling process and recycled water application.
- U. Conditions under which haulers may lose their permits should be clarified. Including failure to follow program requirements and/or adhere to applicable State, County or local

codes will result in suspension of the haulers permit. Violations of such codes may also result in fines and applicable administrative fees.

- V. Residential hauling programs shall have fill stations staffed at all times by a representative from the Discharger. This is to ensure proper handling and filling procedures are being conducted at the fill stations.
- W. Residential hauling programs should limit onetime hauls to 300 gallons.
- X. The permitted hauler shall notify the Discharger prior to using recycled water for a use not approved by the Discharger.
- Y. The Discharger, San Diego Water Board, DDW, and County DEH will have the right to enter any recycled water use site during reasonable hours to ensure the user is complying with these requirements and the Discharger's Rules and Regulations for Recycled Water Use.

III. Rules and Regulations for Hauling or Transportation of Recycled Water From Commercial Vehicle Fill Stations

- A. Trucks hauling recycled water that may also be filled with potable supplies for non-potable purposes shall have a dedicated potable use fill line through an air gap separation. The fill lines shall be properly labeled as potable or recycled water. As an alternative, the water supplier may install a reduced pressure principle backflow device on the potable system for filling trucks with potable water. Vehicles used to transport recycled water shall not be used to carry water for potable purposes.
- B. The risers, hoses, and fittings for each supply shall be color coded (painted), blue for potable and purple for recycled water.
- C. The hoses, hydrants and risers for each supply shall have separate and unique fittings (e.g., 2-1/2 inch diameter on the potable system and 2 inch diameter on the recycled water system) such that the potable system cannot accidentally be used on the recycled system and vice versa.
- D. All vehicles used in transporting recycled water must be clearly marked with typical signage that reads: "CAUTION: RECYCLED WATER - DO NOT DRINK" in English and Spanish. The Discharger shall conduct annual inspections of the trucks to assure that all requirements in this Order are being met and that recycled water is being used in compliance with the requirements of this Order.
- E. Vehicles used for transportation or distribution of recycled water, or for street sweeping must be equipped with an air gap to ensure backflow protection.
- F. The use of recycled water for street sweeping or construction shall comply with the appropriate local storm water ordinance. Typical compliance measures include preventing overspray, ponding, or runoff of recycled water from the use area.

- G. Haulers shall be required to enter the date and amount collected on the fill station log sheet during each visit. Include locations the recycled water will be used and approximate amounts.
- H. For Hydrant Meter Filling Stations ensure the meter is shut off before disconnecting the fill line and make sure no water is leaking from the meter or hydrant.
- I. For Gate Access Filling Stations ensure no water is leaking from the fill pipe or hose and securely re-lock the gate after leaving the filling station.
- J. A truck or tank that has contained material from a septic tank or cesspool shall not be used to contain or distribute recycled water.

IV. Rules and Regulations for Use of Recycled Water for Fire Fighting

- A. Unused recycled water must not be released into streams, rivers, or waterways.
- B. Fire hydrants supplied with recycled water must be clearly identified by purple paints, signs, tags, stencils, or other such labeling, in order to notify firefighters that the fire hydrants are supplied with recycled water.
- C. Fire truck tanks must be disinfected following the use of recycled water for firefighting since fire trucks could be used to distribute drinking water during civil emergencies.
- D. Firefighting personnel must be adequately trained in safe use of recycled water. New and current firefighting personnel must receive periodic refresher courses regarding proper handling and use of recycled water.

ATTACHMENT C
INFORMATION SHEET
ORDER NO. R9-2016-0154

MASTER RECYCLING PERMIT
FOR THE RAMONA MUNICIPAL WATER DISTRICT,
SANTA MARIA WASTEWATER TREATMENT PLANT, SAN DIEGO COUNTY

This Information Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of Order No. R9-2016-0154 (Order).

I. ADMINISTRATIVE INFORMATION

The following table summarizes administrative information related to the facility.

Table 1. Facility Information

WDID	9 000000077
Discharger	Ramona Municipal Water District
Name of Facility	Santa Maria Wastewater Treatment Plant
Facility Address	260 Sawday Street
	Ramona, CA 92055
	San Diego County
Facility Contact, Title and Phone	Mr. Jim Anderson, Wastewater Operations Superintendent, 760-788-2239
Mailing Address	105 W. Earlham St, Ramona, CA 92065-1599
Billing Address	Mr. Jim Anderson, 105 W. Earlham St, Ramona, CA 92065-1599
Type of Facility	Wastewater Treatment Plant
Threat to Water Quality	2
Complexity	B
Reclamation Requirements	Producer
Facility Permitted Flow	1.0 million gallons per day (mgd) of secondary treated effluent and 0.35 mgd for disinfected tertiary recycled water
Receiving Water	Ramona HSA (905.41) of the Santa Maria Valley HA (905.40)
Receiving Water Type	Groundwater

The SMWWTP has been regulated under Order No. R9-2000-0177, *Master Reclamation Permit for the Ramona Municipal Water District, Santa Maria Wastewater Treatment Plant, San Diego County*. This permit was updated to include requirements of the *State Recycled Water Policy*, to give Ramona Municipal Water District (RMWD) the ability to add a recycled water fill station, and to revise the sulfate and total dissolved solids discharge specifications in response to an observed increase in RMWD's potable water supply.

For the purposes of this Order, references to the “discharger” in applicable state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- A. The discharge of secondary and tertiary treated wastewater from the SMWWTP will occur in the Santa Maria Valley HA (905.40).
- B. On January 17, 2014, California’s Governor proclaimed a [Drought State of Emergency](#) and directed state officials to take all necessary actions to prepare for drought conditions. The California Legislature has declared that a substantial portion of the future water requirements of the State may be economically met by beneficial use of recycled water (Water Code, section 13511.) The Legislature also expressed its intent that the State under take 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). The Order is consistent with the legislature’s declaration because it encourages the increased use of recycled water in place of potable water supplies.
- C. On February 3, 2009, the State Water Resources Control Board (State Water Board) adopted Resolution No. 2009-0011, *Adoption of a Policy for Water Quality Control for Recycled Water* (Recycled Water Policy, revised January 22, 2013 and effective April 25, 2013).¹ The Recycled Water Policy promotes the use of recycled water to achieve sustainable local water supplies and reduce greenhouse gas emissions. This Order is consistent with the Recycled Water Policy because it requires the RMWD to conduct priority pollutant monitoring, implement nutrient management measures, and to develop a salt and nutrient management plan for the Santa Maria Valley groundwater basin.

Recycled water use can help to reduce the scarcity of local water supplies. It is not the only option for bringing supply and demand into a better balance, but it is a viable cost effective solution that is appropriate in many cases. The feasibility of recycled water use depends on local circumstances, which affect the balance of costs and benefits. In drought conditions, recycled water can be particularly valuable given the scarcity of alternative potable water supplies. In normal precipitation years recycled water use may reduce groundwater extraction. Broader and more effective uses of recycled water are consistent with the goals and objectives of the Recycled Water Policy and the San Diego Water Board’s Practical Vision strategy for achieving a sustainable local water supply.²

- D. The Order adds new provisions for the safe transport and use of recycled water from possible future recycled water fill stations. If the Discharger chooses to establish recycled water fill stations, the Order requires the Discharger to amend its *Rules and Regulations for Recycled Water Use* and implement measures to ensure that the use

¹ http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2013/rs2013_0003_a.pdf

² See Practical Vision for “Strategy for Achieving a Sustainable Local Water Supply”
http://www.waterboards.ca.gov/sandiego/water_issues/Practical_Vision/index.shtml

and transport of recycled water from the fill stations complies with the Uniform Statewide Recycling Criteria, and is protective of public health and the environment.

II. FACILITY DESCRIPTION

A. **Description of Santa Maria Wastewater Treatment Plant.** The Santa Maria Wastewater Treatment Plant provides secondary and tertiary treatment of domestic wastewater generated in downtown Ramona. Ramona's potable water supply comes from the San Diego County Water Authority. The primary treatment consists of two grinders, a pump station, and two equalization basins. Secondary treatment consists of two aeration basins and four secondary clarifiers. The tertiary filter plant consists of a flocculation tank, a Dynex sand filter, and chlorine disinfection. Associated solids handling processes consist of an aerobic digester, a centrifuge, and drying beds. The SMWWTP currently has a 30-day average dry weather effluent flow limit of 1.0 million gallons per day (mgd) for the secondary treatment processes. The 30-day average dry weather flow limit for the tertiary processes is 0.35 mgd.

B. **Recycled Water Use and Discharge.** Secondary treated effluent produced from the SMWWTP will be discharged to the RMWD's Rangeland Road spray disposal fields. Tertiary treated effluent from the SMWWTP is beneficially reused for irrigation at the Mount Woodsen Golf Course Development area. Both the secondary and tertiary effluents are discharged to land which has the potential to affect groundwater resources located in the Santa Maria Valley.

The Order also includes requirements for the transport and use of water from recycled water filling stations. The RMWD currently does not operate recycled water filling stations but may do so pursuant to this Order. Customers may transport recycled water from future filling stations to use sites for the following uses.

1. Street sweeping and cleaning of sidewalks and outdoor work areas.
2. Dust control, soil compaction, and construction.
3. Sewer flushing and pressure testing of newly constructed tertiary recycled water pipelines, sewer force main pipelines, and gas pipelines.
4. Irrigation of commercial and residential landscapes, crops, and nursery stock.
5. Fire protection.

C. **Plant Effluent Quality.** Table 2 below shows analytical results of average annual concentrations of selected chemical constituents for effluent samples collected between 2011 and 2015. The constituents shown below are the results reported in the annual monitoring reports as required by Monitoring and Reporting Program No.R9-2000-0177.

Table 2. Effluent Quality (units in milligrams per liter)

Year	TDS	Cl	SO ₄	Fe	Mn	B	F
2011	761	185	160	0.041	0.020	0.30	0.72
2012	677	161	137	0.061	0.026	0.30	0.75
2013	734	154	177	0.088	0.021	0.31	0.76
2014	744	145	201	0.070	0.017	0.28	0.68
2015	843	165	232	0.034	0.018	0.30	0.69

End Notes for Table 2

Notes: TDS = Total Dissolved Solids, Fe = Iron, Mn = Manganese, B = Boron ,
Cl- = Chloride, Fl- = Fluoride, SO₄ = Sulfate.

- D. **Proposed Changes in Master Recycling Permit.** As requested by the RMWD in its April 2, 2015 letter, this Order modifies the discharge specifications for sulfate and TDS. The Order raises the discharge specification for sulfate from 200 mg/L to 300 mg/L and raises the TDS discharge specification from 800 mg/L to 1,000 mg/L. This Order also eliminates daily maximum discharge specifications, and changes the 12-month running average specifications to calendar averages for the following constituents:

- Boron
- Chloride
- Fluoride
- Iron
- Manganese
- Sulfate; and
- TDS.

The daily maximum discharge specifications were eliminated for the constituents above to provide operator flexibility to short term changes variations in water quality and to emphasize long term water quality as the priority. Calendar averages provide long term protection of constituents of concern in groundwater quality.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

- A. **Legal Authorities.** This Order is issued pursuant to sections 13263 and 13523.1 of the Water Code. This Order serves as a Master Recycling Permit, which also includes Waste Discharge Requirements (WDRs) issued pursuant to article 4, chapter 4, division 7 of the Water Code.

- B. **California Environmental Quality Act.** In December 1990 the RMWD certified a final Environmental Impact Report in accordance with the California Environmental Quality Act (CEQA).³ The proposed project is a permit revision and the Facility is not adding or changing any treatment process. As such this project is categorically exempt from the requirements of CEQA as provided by section 15301, and in compliance with section 15300.2, Cal. Code Regs., title 14.
- C. **Water Quality Control Plans.** The *Water Quality Control Plan for the San Diego Basin* (hereinafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The beneficial uses of groundwater designated for the Ramona Hydrologic Subarea of the Santa Maria Valley Hydrologic Area are municipal and domestic supply, agricultural supply, industrial process supply, and industrial service supply.⁴

This Order implements the Basin Plan by prescribing requirements for the production, reuse, and disposal of recycled water that will not adversely impact water quality, beneficial uses, human health, or the environment.

- D. **Recycled Water Policy.** The Recycled Water Policy establishes criteria for recycled water projects, recycling requirements, and WDRs. The intent of the Policy is to protect designated beneficial uses and protect water quality while increasing recycled water use, allowing for streamlined permitting for appropriate landscape irrigation projects, and allowing basin-wide management of salts and nutrients. The Recycled Water Policy states that the appropriate way to address salts and nutrients is through development of regional and sub-regional salt and nutrient management plans. This Order requires the RMWD to complete a salt and nutrient management plan for the Santa Maria Valley Basin by May 2018. The salt and nutrient management plan must include implementation measures to ensure that salt and nutrient inputs to the basin from use of recycled water and from other discharges will not adversely affect groundwater quality.

The salt and nutrient management plan must include measures to ensure that salt and nutrient inputs to the basin from use of recycled water and from other discharges will not adversely affect groundwater quality. Proposed tasks and measures to be implemented by the Discharger may be based on the *Guidelines for Salinity/Nutrient Management Planning in the San Diego Region* (guidelines).⁵ Once completed, the Discharger must implement the plan.

³ Public Resources Code section 21000 et seq.

⁴ Basin Plan Chapter 2, Beneficial uses:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

⁵ Recommended tasks for development of salt and nutrient management plans can be found in Chapter 5 and Appendix B of the guidelines.

- E. **Antidegradation Policy.** The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings.

IV. RATIONALE FOR DISCHARGE SPECIFICATIONS

The Order establishes technology and water quality based discharge specifications, and discharge specifications based on the Cal. Code Regs. title 22, for the discharge of recycled water from the SMWWTP.

- A. **Technology-based Discharge Specifications.** The technology based effluent limitations are for biological oxygen demand, total suspended solids, and pH. These discharge specifications are based on design criteria for removal of these constituents by secondary wastewater treatment technology.
- B. **Water Quality-based Discharge Specifications.** The water quality-based discharge specifications are derived from the water quality objectives needed to support the beneficial uses of groundwater in the Santa Maria Valley, and on the basin-specific water quality objectives in Table 3 below (from Table 3-3 of the Basin Plan for the Santa Maria Valley HA 905.40).

Table 3. Basin-Specific Groundwater Water Quality Objectives

HYDRO LOGIC AREA	CONSTITUENT (mg/L or as noted)												
	(Concentrations not to be exceeded more than 10% of the time during any one year period)												
	TDS	Cl	SO ₄	%Na	NO ₃ ⁻	Fe	Mn	MBAS	B	ODOR	TURB (NTU)	COLOR (UNITS)	F
Santa Maria Valley 905.40	1,000 ^b	400	500	60	45	0.3	0.05	0.5	0.75	none	5	15	1.0

Endnotes for Table 3

mg/L = milligrams per liter, TDS = Total Dissolved Solids, Cl⁻ = Chloride, SO₄ = Sulfate, % Na = Percent Sodium, NO₃⁻ = Nitrate, Fe = Iron, Mn = Manganese, MBAS = Methylene Blue Activated Substances, B = Boron, TURB = Turbidity, NTU = Nephelometric Turbidity Units, F⁻ = Fluoride

Monitoring Reports for the SMWWTP show that groundwater samples from Wells Nos. 2 and 22 have concentrations of nitrate and TDS that violate water quality objectives.⁶ The TDS concentrations in Wells Nos. 2 and 22 were reported at 1,980 mg/L and 1,310 mg/L respectively; both higher than the TDS concentration in the effluent discharged at the spray field. The nitrate concentrations in Wells Nos. 2 and 22 were

⁶ Recycled Water Policy section 9.c(1): http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2013/rs2013_0003_a.pdf

reported at 500 mg/L and 324 mg/L.⁷ The likely source of the salts and nutrients contributing to the concentrations measured in Wells Nos. 2 and 22 was a historical concentrated animal feeding operation located upgradient from the two wells. Staff was not able to determine if the former concentrated animal feeding operation had obtained Waste Discharge Requirements from the San Diego Water Board during the timeframe of operations. Based on this information, the discharge specification for TDS and total nitrogen were not changed for the discharge of secondary effluent into the spray field since the violation of TDS and nitrate water quality objectives cannot be conclusively linked to the spray field discharge.

The observed condition of groundwater pollution warrants additional investigation by the San Diego Water Board staff. The investigation should include a further assessment of potential sources of groundwater pollution that may be associated with the historical concentrated animal feeding operation located to the north of Wells Nos. 2 and 22.

D. Title 22 Specifications. This Order contains discharge specifications for chlorine residual, turbidity, chlorine contact time, and total coliform bacteria. Title 22 specifications are included in this Order because the RMWD currently provides recycled water from the SMWWTP to Mt. Woodsen Golf Course. These specifications are based upon concentration limits found in title 22, Cal. Code Regs., and upon recommendations from the DDW for the protection of human health at use sites. Recycled water from the SMWWTP discharged to reuse sites must meet the definition of “disinfected tertiary recycled water” in title 22, Cal. Code Regs., section 60301.230 and by reference “filtered wastewater” in section 60301.320 incorporated by reference, including future changes to the incorporated provisions as the changes take effect.

E. Discharge Specifications for Order No. R9-2016-0154. 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	30	45	
Total Suspended Solids (TSS)	mg/L	30	45	
pH	pH units	Within the limits of 6.5-8.5 at all times		
Total Dissolved Solids (TDS)	mg/L	-	-	1000
Chloride (Cl)	mg/L	-	-	250
Sulfate (SO ₄)	mg/L	-	-	300
Percent Sodium (% Na)	%	-	-	60%
Iron (Fe)	mg/L	-	-	0.30
Manganese (Mn)	mg/L	-	-	0.05

⁷ Santa Maria Wastewater Treatment Plant 2014 Annual Monitoring Report

Constituent	Units	Daily Maximum ¹	Monthly Average ²	Annual Average ³
Methylene Blue- Activated Substances (MBAS)	mg/L	-	-	0.5
Boron (B)	mg/L	-	-	0.5
Fluoride (F)	mg/L	-	-	1.0
Aluminum ⁴	mg/L	1.0	-	-
Arsenic ⁴	mg/L	0.05	-	-
Antimony ⁴	mg/L	0.006	-	-
Barium ⁴	mg/L	1.0	-	-
Beryllium	mg/L	0.004	-	-
Cadmium ⁴	mg/L	0.005	-	-
Cyanide ⁴	mg/L	0.2	-	-
Mercury ⁴	mg/L	0.002	-	-
Nickel ⁴	mg/L	0.1	-	-
Perchlorate ⁴	mg/L	0.006	-	-
Selenium ⁴	mg/L	0.05	-	-
Thallium ⁴	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.

⁴ These discharge specifications only apply when recycled water is discharged to landscape irrigation sites or reuse sites subject to Water Recycling Criteria specified in title 22, Cal. Code Regs.

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 the discharge necessary to assure pollution or nuisance will not occur, and the highest water quality consistent with the maximum benefit of 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.⁸ 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 manganese. 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 and requirements associated with each of the recycled water constituents of concern. Each of the recycled water constituents are discussed below.

1. This Order proposes to raise the annual average TDS discharge specification from 800 mg/L to 1,000 mg/L, to account for the observed trend of increasing TDS concentrations in the RMWD potable water supply and the decreasing volume of influent to the SMWWTP due to water conservation. TDS or salts can be present in recycled water at a concentration that can degrade groundwater quality. TDS levels in the receiving water can be affected by the use of recycled water if the recycled water has elevated TDS concentrations. The groundwater quality objective for the Santa Maria Valley HA is 1,000 mg/L. Using all effluent samples reported for SMWWTP between 2011 and 2015, the average TDS concentration of the effluent is 752 mg/L. The SMWWTP collects annual groundwater samples for

⁸ 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).

evaluation of groundwater quality as part of the requirements of Order No. R9-2000-0177. The average TDS concentration in groundwater samples, collected since December 2012, was 950 mg/L. Therefore, raising the TDS discharge specification in the Order from 800 mg/L to 1,000 mg/L will not unreasonably affect beneficial uses or result in water quality less than that prescribe in the Basin Plan.

2. This Order proposes to raise the annual average sulfate discharge specification from 200 mg/L to 300 mg/L, to account for the observed trend of increasing sulfate concentrations in the RMWD potable water supply, and the decreasing volume of influent to the SMWWTP due to water conservation. Sulfates can be present in recycled water at concentrations that can degrade groundwater quality. The groundwater quality objective for sulfate in the receiving water is 500 mg/L. Raising the sulfate discharge specification to 300 mg/L will ensure compliance with the Order, without causing receiving groundwater to violate water quality standards. Raising the sulfate discharge specification from 200 mg/L to 300 mg/L will not unreasonably affect beneficial uses of groundwater or result in water quality that is less than that prescribed in the Basin Plan.
3. 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 land, 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 content of the recycled water supplied for irrigation. These requirements will prevent the use of recycled water from impairing an existing or potential beneficial use of groundwater.
4. Pathogens and other microorganisms may be present in recycled water depending upon the disinfection status of the recycled water. Recycled water from the SMWWTP has been treated to levels that comply with discharge specifications contained in the Order pursuant to the Basin Plan and title 22, Cal. Code Regs. 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, Cal. Code Regs. 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 City'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.

5. 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.
6. Manganese may be present in recycled water at a concentration that can degrade groundwater quality. When present in domestic water supplies at high concentrations can cause unpleasant tastes, deposits on food during cooking, stains on laundry and plumbing fixtures, and could lead to regrowth of some microorganisms in reservoirs, filters, and distribution systems. Most of the HAs in the San Diego Region have a groundwater quality objective of 0.05 mg/L, which is also the secondary drinking water standard for manganese. Secondary drinking water standards are guidelines regulating contaminants that may cause cosmetic or aesthetic effects in drinking water. The discharge specification for manganese in this permit is set at the water quality objective to prevent the use of recycled water from impairing an existing or potential beneficial use of groundwater.

VI. RATIONALE FOR WATER RECYCLING REQUIREMENTS

Water Recycling Requirements are included in this Order pursuant to Water Code section 13523 and based on recommendations from the DDW. In accordance with title 22, Cal. Code Regs., the DDW reviews engineering reports for the production, distribution, and use

of recycled water. The San Diego Water Board relies on the expertise of the DDW and includes recommendations from DDW in WDRs to ensure recycled water is treated and used in a manner that protects human health. The Discharger must certify that the Facility and other existing purveyance facilities meet DDW's requirements, or must update the title 22 engineering report to comply with DDW's requirements. The Order also requires the Discharger to maintain Rules and Regulations for Recycled Water Use (Attachment B) that comply with DDW's requirements. The Rules and Regulations must include an inspection and cross-connection testing program. The Order also requires the Discharger to update its Rules and Regulations to include requirements to ensure use and transport of recycled water from recycled water fill stations will be protective of public health and the environment if, in the future, the Discharger operates recycled water fill stations.

VII. RATIONALE FOR STANDARD PROVISIONS, SPECIAL PROVISIONS, AND NOTIFICATIONS

A. Standard Provisions

The standard provisions contain language that allows the San Diego Water Board to enforce Order No. R9-2016-0154. Provisions include need for inspection, spill and emergency reporting, records maintenance, and reporting of changes. Standard provisions apply to all WDRs and are consistent with San Diego Water Board findings.

B. Special Provisions- Facility Design and Operation Specifications

The SMWWTP was designed and constructed in accordance with a title 22 engineering reports reviewed by the DDW. The Design and Operation Specifications in the Order require that the plant be operated by appropriately certified wastewater operators, require application of recycled water and fertilizer in end use sites at agronomic rates, require maintenance of a facility operation manual and appropriate references, and require implementation of best management practices for protection of human health.

This Order requires the Discharger to conduct a nitrate study to verify that the discharge of recycled water will not cause receiving groundwater to exceed 45 mg/L in areas 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. This Order requires end users to apply recycled water at agronomic rates, which considers the nutrient and water demand of the plants in the end use sites. When applied to cropped (or landscaped) land, some of the nitrogen in recycled water will be taken up by the plants, lost to the atmosphere through volatilization of ammonia or denitrification, or stored in the soil matrix. As a result, the use of recycled water is not expected to cause nitrogen concentrations in groundwater to exceed 45 mg/L.

This Order requires that the Discharger develop and submit a salt and nutrient management plan (SNMP) for the Santa Maria Valley groundwater basin by June 30, 2018. The State Recycled Water Policy requires local water and wastewater entities

and local salt/nutrient contributing stakeholders to develop regional or sub-regional SNMPs for all groundwater basins within the State. Pursuant to the Recycled Water Policy, local agencies were to be complete SNMPs and propose them to the Regional Water Boards by May 2014, five years after adoption of the policy. The Discharger is required to develop a SNMP for the Santa Maria Valley HA. The SNMP shall include an analysis of the current monitoring network to assess if the network is providing an accurate representation of the groundwater quality in the Basin. In addition to complying with the Recycled Water Policy, San Diego Water Board staff determined that it was necessary to require a SNMP be completed in the Santa Maria HA because of the condition of pollution reported in groundwater monitoring reports.

C. Notifications

Notifications are included in the Order to inform the Discharger of administrative issues regarding this Order.

VIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

The purpose of Monitoring and Reporting Program (MRP) No. R9-2016-0154 (the MRP) is to determine and ensure compliance with discharge specifications and other requirements established in this Order, assess treatment efficiency, characterize effluents, and characterize the receiving water and the effects of the discharge on the receiving water. The MRP also specifies requirements concerning the proper use, maintenance, and installation of monitoring equipment and methods, and the monitoring type intervals and frequency necessary to yield data that are representative of the activities and discharges regulated under this Order.

The MRP is issued pursuant to Water Code section 13267, which authorizes the San Diego Water Board to require technical and monitoring reports. The use of laboratories certified for federally standardized test methods, and quality assurance and control procedures ensures the reliability and validity of the data as well as consistency and comparability with regulations.

Consistent with the Framework for Monitoring and Assessment in the San Diego Region,⁹ the monitoring required by the Order answers the two specific monitoring 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?

This monitoring program has basic two components, effluent quality monitoring and recycled water production/distribution monitoring. Specific monitoring questions related to the questions above for each component are provided below.

⁹ California Regional Water Quality Control Board, San Diego Region, Staff Report, November 2012.

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. Core 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, Cal. Code Regs.?
 - 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 SMWWTP?
 - 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?
3. Groundwater monitoring provides information necessary to ensure that the disposal of effluent in the spray field does not have an adverse impact on groundwater quality. The current monitoring network consists of five water supply wells, not dedicated monitoring wells. The monitoring network may not yield groundwater samples that are representative of water quality conditions associated with the operation of the wastewater disposal area because there are no wells downgradient of the spray field. The monitoring and reporting program requires the Discharger to propose a revised groundwater monitoring network in the vicinity of the spray field to help answer the following questions.
 - a. Does receiving groundwater quality meet water quality objectives?
 - b. Are impacts from the discharge of effluent in the spray field evident in concentrations of constituents in the groundwater?
 - c. Is groundwater quality down gradient of the spray field affected by the discharge?

IX. PUBLIC PARTICIPATION

Two of the four values of the San Diego Water Board espoused in its Practical Vision are communication and transparency. Participation of the public in the decision making process of the Board is a hallmark of the board governmental structure in California and essential to this Board's success. The San Diego Water Board has taken the following steps to encourage public participation in the Master Recycling Permit adoption process.

A. Notification of Interested Parties

Consistent with Water Code section 13167.5, the San Diego Water Board has notified the Discharger and interested agencies and persons of its intent to adopt a Master Recycling Permit for the discharge and made Tentative Order No. R9-2016-0154 available on its website. The San Diego Water Board has notified the Discharger, interested agencies and the public of its intent to adopt a Master Recycling Permit and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the San Diego Water Board website and board meeting agenda publication.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning Tentative Order No. R9-2016-0154. Comments must be submitted either in person, in writing, or by email including a signed cover/transmittal letter sent via email to sandiego@waterboards.ca.gov in text searchable Portable Document Format (PDF) or Microsoft Word format by **5:00 p.m. on Friday, June 3, 2016**. Comments should be addressed to the attention of Mr. Alex Cali.

To be fully responded to by staff and considered by the San Diego Water Board, written comments must be received at the San Diego Water Board offices **by 5:00 p.m. on Friday, Friday, June 3, 2016**.

C. Public Hearing

The San Diego Water Board will hold a public hearing on the Tentative Order No. R9-2016-0154 during its regular Board meeting on the following date and time and at the following location:

Date: **June 22, 2016**
Time: **9:00 am**
Location: **2375 Northside Drive, Suite 100
San Diego, CA 92108**

Interested persons are invited to attend. At the public hearing, the San Diego Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/sandiego/board_info/agendas/ where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the San Diego Water Board regarding the final WDRs. The petition must be submitted within 30 days of the San Diego Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative discharge specifications and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the San Diego Water Board by calling (619) 516-1990.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the Order should contact Mr. Alex Cali at (619) 521-3355 or at alex.cali@waterboards.ca.gov reference this facility, and provide a name, address, phone number, and email address.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Mr. Alex Cali at (619) 521-3355 or at acali@waterboards.ca.gov.

ATTACHMENT D

MONITORING AND REPORTING PROGRAM NO. R9-2016-0154

FOR THE RAMONA MUNICIPAL WATER DISTRICT SANTA MARIA WASTEWATER TREATMENT PLANT, SAN DIEGO COUNTY

This Monitoring and Reporting Program (MRP) is issued to the Ramona Municipal Water District (RMWD) pursuant to Water Code section 13267, which authorizes the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to require technical and monitoring reports. The San Diego Water Board Executive Officer has the authority to modify this MRP as appropriate.

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 shall supervise all analytical work in his/her laboratory and shall 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. If the Discharger monitors any pollutants more frequently than required by this MRP, using test procedures approved under the USEPA Guidelines or as specified in this MRP, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's monitoring report. The increased frequency of monitoring shall also be reported.
- H. 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 application for this MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when 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.
- I. 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.

- J. The Discharger shall report any noncompliance that may endanger health or the environment. Pursuant to section 5411.5 of the Health and Safety Code, any sewage overflow or spill shall be immediately reported to the County of San Diego, Department of Environmental Health. In addition, any such information shall be provided orally to the San Diego Water Board within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the San Diego Water Board within 24 hours:
1. Any bypass from any portion of the treatment facility.
 2. Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge, or any other circumstances.
 3. Any treatment plant upset which causes the discharge specifications of this Order to be exceeded.
 4. Failure of disinfection system.
 5. An effluent total coliform bacteria value greater than 240 MPN/100 mL.
- K. If the Discharger or end user, without regard to intent or negligence, causes or permits an unauthorized discharge of 50,000 gallons or more of recycled water that has been treated to at least disinfected tertiary recycled water¹ or 1,000 gallons or more of recycled water that is treated at a level less than disinfected tertiary recycled water in or on any waters of the State, or causes or permits such unauthorized discharge to be discharged where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (1) that person has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the San Diego Water Board in accordance with reporting requirements in Provision VI. B.
- L. 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.

¹ Disinfected tertiary recycled water is defined in California Code of Regulations, Title 22, Chapter 3, section 60301.230

- 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 this Order and other information required by the San Diego Water Board shall be signed by a person designated in Section L.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 L.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."
- M. 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.
- N. 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.
- O. 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 MRP No. R9-2016-0154 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, Cal. Code Regs., shall be monitored downstream from the tertiary processes. All required secondary and tertiary effluent monitoring is shown in Table 1.

Table 1. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency ^{a,b}	Reporting Frequency
Flow Rate	mgd	Continuous	Continuous	Monthly
Chlorine Residual ^{c,f}	mg/L	Continuous	Continuous	Monthly
Chlorine-Contact Time (CT) ^{d,f}	mg-min/L	Continuous	Continuous	Monthly
Total Coliform Bacteria ^{e,f}	MPN/100 mL	Grab	Daily	Monthly
Turbidity ^f	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
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 ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Arsenic ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Antimony ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Barium ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Beryllium ^f	mg/L	Composite	Once every 5 years	Once every 5 years

Parameter	Units	Sample Type	Minimum Sampling Frequency ^{a,b}	Reporting Frequency
Cadmium ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Cyanide ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Mercury ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Nickel ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Perchlorate ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Selenium ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Thallium ^f	mg/L	Composite	Once every 5 years	Once every 5 years
Priority Pollutants ^g	mg/L	Composite	Once every 5 years	Once every 5 Years

- a. The Discharger shall increase the sampling frequency from weekly to daily, from quarterly to monthly, and from once every 5 years to annually 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 Recycled Water Agency 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. 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 levels at a minimum of four-hour intervals over a 24-hour period. Compliance with the turbidity standard of not exceeding 5 NTU more than 5 percent of the time 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 quarterly results of four-hour turbidity readings, average effluent turbidity (24-hours), 95 percentile effluent turbidity (24-hours), and daily maximum turbidity readings.
- f. The following constituents shall be monitored when effluent is discharged to landscape irrigation sites or reuse sites subject to Water Recycling Criteria specified in title 22, Cal. Code Regs.
- g. Priority pollutant monitoring is required by the State Water Board *Recycled Water Policy*, section 7.b.4.

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 nitrogen² (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.

² Concentration of nitrogen in recycled water can be obtained from the recycled water producer.

- 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 District'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 District's recycled water service area.
 4. A summary of the volume of recycled water used (in acre fee) 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/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 the following documents to the San Diego Water Board by June 30, 2018.
1. A work plan to conduct a study at the Discharger's largest reuse site to identify target agronomic rates for the site, and to determine if nitrogen loads from applied fertilizer and recycled water are consistent with appropriate agronomic rates for the landscape. The workplan shall include the tasks and a schedule needed to prepare a final technical report to evaluate nitrogen loads applied to the site for a 12-month period. .
 2. A final technical report for the nitrogen loading study. The technical report shall be furnished to the San Diego Water Board within 18 months of adoption of this Order. The technical report shall also include a review of groundwater quality monitoring data, an evaluation of groundwater nitrate concentrations in the vicinity

of the use sites, and a summary of actions the Discharger has taken to comply with the requirements established in Section VII.B, Special Provisions, of this Order.

3. A workplan identifying tasks and measures the Discharger will implement as the lead agency to develop a salt and nutrient management plan (SNMP) for the Santa Maria Valley Basin, in accordance with the State *Recycled Water Policy*. The complete SNMP shall be furnished to the San Diego Water Board by June 30, 2018. Proposed tasks and measures to be implemented by the Discharger can be based on the *Guidelines for Salinity/Nutrient Management Planning in the San Diego Region* (guidelines).³

IV. GROUNDWATER MONITORING

- A. The Discharger shall submit a proposed groundwater monitoring plan and site plot plan that identifies proposed groundwater monitoring wells for characterizing groundwater quality in the vicinity of the recycled water use sites. The plan must be received by the San Diego Water Board within 90 days of the adoption of this Order. The Discharger shall provide a location map with each quarterly groundwater monitoring report that includes the location of the Facility and monitoring wells.
- B. For each of the wells identified within the monitoring plan submitted pursuant to Groundwater Monitoring Requirement IV.A, the Discharger shall conduct groundwater monitoring in accordance with the groundwater monitoring program outlined in Table 2. Results of the groundwater monitoring program shall be reported quarterly.
- C. The Discharger shall continue using the current monitoring network, until its proposed Groundwater Monitoring Plan is approved by the San Diego Water Board.

³ Recommended tasks for development of salt and nutrient management plans can be found in Chapter 5 and Appendix B of the guidelines.

Table 2. Groundwater Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Reporting Frequency
Total Dissolved Solids (TDS)	mg/L	Grab	Semiannually	Semiannually
Chloride	mg/L	Grab	Semiannually	Semiannually
Sulfate	mg/L	Grab	Semiannually	Semiannually
Nitrate (NO ₃)	mg/L	Grab	Semiannually	Semiannually
Iron (Fe)	mg/L	Grab	Semiannually	Semiannually
Manganese (Mn)	mg/L	Grab	Semiannually	Semiannually
Boron (B)	mg/L	Grab	Semiannually	Semiannually
Fluoride (F)	mg/L	Grab	Semiannually	Semiannually

V. REPORTING REQUIREMENTS

- A. The Discharger shall include in the Self-Monitoring Report (SMR) the results of all monitoring specified in Section II (Discharge Monitoring Requirements) of this MRP. The Discharger shall submit semiannual SMRs containing the results of all required monitoring using test methods approved by the USEPA or other test methods specified in this Order. 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:

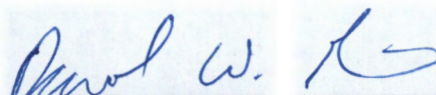
Table 3. Monitoring Periods and Reporting Schedule

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
Semiannually	January 1 through June 30 July 1 through December 31	August 1 February 1
Annually	January 1 through December 31	February 1
5 years	5 year period	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 interim and/or final 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 WDRs; 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. Self-Monitoring Reports 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:



David W. Gibson
Executive Officer

DATE: June 22, 2016