CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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ORDER NO. R4-2015-XXXX
(File No. 54-035)

WASTE DISCHARGE REQUIREMENTS
AND
TITLE 22 WATER RECLAMATION REQUIREMENTS

ISSUED TO

CAMROSA WATER DISTRICT
(Camrosa Water Reclamation Facility)

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

Table 1. PRODUCER INFORMATION

Producer	Camrosa Water District (CWD, Producer or Permittee)
Name of Facility	Camrosa Water Reclamation Facility (Camrosa WRF or Facility)
Facility Address	1900 South Lewis Road
	Camarillo, CA 93012
	Ventura County

Table 2. ADMINISTRATIVE INFORMATION

This Order was adopted and shall become effective on:	February 12, 2015

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

I. BACKGROUND - DESCRIPTION OF FACILITY AND TREATMENT PROCESS

1. The Camrosa Water District (CWD, Producer or Permittee) owns and operates the Camrosa Water Reclamation Facility located at 1900 South Lewis Road, Camarillo, California, and maintains its treatment processes. During normal operation, 100% of the tertiary-treated effluent is beneficially reused for crop and landscape irrigation. The CWD operates and maintains the recycled water distribution system and conducts training/inspections of individual user sites.

2. The Camrosa WRF is an Eimco System Carrousel® denitIR® extended aeration treatment facility with a dry weather design capacity of 1.5 million gallons per day (MGD). The process flow diagram is depicted in Attachment A-1. The Facility has an oxidation process that provides nitrification in an aerobic zone and denitrification in an anoxic zone. The anoxic basin is attached to the carrousel and connected by inflow and outflow channels. Untreated wastewater is mainly collected from the City of Camarillo and the California State University, Channel Islands (CSUCI). The treatment process consists of two bar screens, headworks lift pumps, two separate carrousels for nitrification and denitrification, secondary clarification, up-flow sand filtration, chlorination, and impoundment in two unlined ponds for reclamation. There is also incidental discharge to the underlying groundwater due to the recycled water storage ponds but the main function of the ponds is to store recycled water for use by the neighboring farmers. Bar screenings are hauled off-site for disposal in a landfill, and sludge from the secondary clarifiers is transferred to drying beds and then hauled off-site for additional processing at a composting facility.

3. Since the adoption of the previous Water Recycling Requirements and Waste Discharge Requirements Order No. 95-059, major modifications were made to the Camrosa WRF's treatment system. In 1997, the facility was upgraded to an Eimco System Carrousel® denitIR® extended aeration treatment facility which improved treatment of the final effluent from secondary to tertiary.

4. The Camrosa WRF also discharges tertiary-treated wastewater into Calleguas Creek when the demand for recycled water is low, under waste discharge requirements (WDRs) contained in Order No. R4-2014-0210, which serves as a permit under the National Pollutant Discharge Elimination System (NPDES), adopted by this Regional Water Board on November 06, 2014.

5. The CWD currently recycles treated wastewater under WRRs/WDRs Order No. 95-059, adopted by this Regional Water Board on March 03, 1995, and amended on April 07, 1997.

II. RECYCLED WATER DISTRIBUTION SYSTEM

1. The CWD generates tertiary-treated recycled water from its Camrosa WRF and distributes it to local farmers and to the CSUCI campus for irrigation. Table 3

below lists the recycled water users and Attachment A-2 shows the location of the current recycled water users in the distribution area.

Table 3. TERTIARY-TREATED RECYCLED WATER USERS

Distribution Point	Recycled Water User	Latitude (North)	Longitude (West)
1	No longer used	34.167778	119.048611
2	3H Custom Farming	34.173056	119.046667
3	3H Custom Farming	34.175	119.045
4	B & H Farms	34.177222	119.045
5	3H Custom Farming	34.180833	119.034167
6	Not in use since 2006	34.18	119.039444
7	Hughan Farms	34.189444	119.023056
8	Marz Farms	34.189722	119.023333
9	Not in use since 2011	34.189722	119.023333
10	Not in use since 2011	34.189722	119.023333
11	No longer used	34.19	119.029167
12	Scarbrough Farms	34.193611	119.026111
13	California State University Channel Islands	34.1625	119.043333

III. QUALITY OF TERTIARY-TREATED EFFLUENT

1. The treatment process at the Camrosa WRF produces tertiary filtered and disinfected treated effluent.

2. From 2004 through 2014, the Camrosa WRF produced recycled water containing a total trihalomethanes (TTHMs) concentration from less than 0.03 µg/L to as high as 219 µg/L. In the past four years, the concentration of TTHMs has consistently exceeded the Maximum Contaminant Level (MCL) of 80 µg/L and therefore this Order includes a limit for TTHMs set at the MCL. Since the Camrosa WRF has consistently exceeded the MCL for TTHMs, interim limits have been assigned in this Order along with a compliance schedule.

3. Chloride and total dissolved solids (TDS) concentrations in the tertiary filtered and disinfected effluent have fluctuated over the years due to the following:

   A. The potable water composition supplied to the Camrosa Water District from the Metropolitan Water District (MWD) has changed as a result of the past two years of dry weather. Instead of 100% State Project water, the potable water composition from MWD has changed to include 80% State Project water and 20% Colorado River water. Colorado River water contains more salts than does the State Project water so the imported water has a higher salt concentration.

   B. Water conservation has resulted in decreased flows that are more concentrated in salts to the sewer system.

C. A significant amount of chloride loading ~~may~~ does occur from the use of water softeners.

~~C.~~D. Due to the drought and reduced supplies of import water, California water agencies have been encouraged to develop and utilize more local resources. Local groundwater typically contains a higher salt content than import water and passes through conventional wastewater treatment. Although the use of local groundwater increases the concentrations of salts in the final effluent, the watershed as a whole experiences no net gain in salts as a result of this process. Local groundwater use displaces the need for imported water and thus, reduces importation of additional salts into the watershed.

4. From January 2009 through June 2014, Camrosa WRF produced recycled water containing chloride concentrations between 144 mg/L and 246 mg/L; and TDS concentrations between 682 mg/L and 992 mg/L. Salts cannot be removed using the existing treatment system at the Camrosa WRF, nor can they be removed with conventional treatment in general. Because salts are a concern regionally, the CWD is collaborating with other dischargers in the watershed to implement a multi-faceted plan for dealing with salts.

5. Because CWD cannot attain immediate compliance with the effluent limitations contained in NPDES Order No. R4-2014-0210, the Regional Water Board adopted Time Schedule Order (TSO) No. R4-2014-0211 concurrently with the NPDES permit on November 06, 2014, establishing interim effluent limitations for TDS and chloride.

IV. GROUNDWATER STUDIES

Although the treatment of the tertiary effluent at the Camrosa WRF does not include salts removal, the CWD has performed several groundwater studies and is currently performing several tasks to help mitigate the high TDS and chloride concentrations in the effluent.

1. In a technical memorandum titled *Perched Zone Study for a Portion of the Pleasant Valley Groundwater Basin - Phase I (July 1997),* Woodward-Clyde Consultants synthesized available information about the groundwater in the vicinity of the Camrosa WRF and its storage ponds. The Pleasant Valley Groundwater Basin covers an area of approximately 41.6 miles and ranges in elevation from about 20 feet to greater than 800 feet above mean sea level. The geology of the basin is complex and includes the Springville, Camarillo, and Bailey Faults. Water-bearing zones include lenticular sand and gravel within recent and upper Pleistocene alluvium geologic formations; the Fox Canyon aquifer zone within the San Pedro formation; and, the Grimes Canyon aquifer zone within the Santa Barbara formation. The Fox Canyon and Grimes Canyon aquifer zones are collectively referred to as the Lower Aquifer System. Groundwater is generally present as perched water in near-surface sandy zones, or is present as confined or semi-confined water within deeper sand or gravel deposits. Water from wells east of the Bailey Fault derived from the upper alluvium generally has a higher mineral content than water derived from wells located west of the Bailey Fault.

2. Another study entitled *Shallow Groundwater of the Eastern Pleasant Valley Basin* (April 2005) was designed to assist in the determination of shallow aquifer geology and groundwater connectivity with other regional aquifers. The results of this study suggest that although the shallow aquifer is relatively well separated from other regional aquifer systems, few wells within the study exhibited true perched behavior in terms of the groundwater level data. The groundwater quality data also suggest that there is limited connectivity of the shallow aquifer to the other regional aquifers.

3. The CWD also conducted a baseline groundwater study entitled *1998 Annual Groundwater Monitoring Report Final Findings from 2-year Baseline Study*. The results of this study indicate that the effluent quality from the Camrosa WRF contains less TDS and chloride than the groundwater in the Pleasant Valley Groundwater Basin. The TDS concentrations up-gradient of the unlined ponds storing the treated effluent ranged from 1904 to 2002 mg/L, and the concentrations of chloride up-gradient of the storage ponds ranged from 312 to 370 mg/L. There was no indication from the study that the local beneficial uses of the groundwater were being impaired by the storage or the agricultural use of the treated wastewater from the Camrosa WRF. The groundwater down-gradient of the storage ponds had concentrations of TDS and chloride ranging from 958 to 1072 mg/L and 204 to 234 mg/L respectfully. The lower concentrations down-gradient of the ponds either implies a possible benefit from the percolation of the effluent into the groundwater or that a natural variation in soil compositions exists.

4. The CWD is currently pumping groundwater from the Pleasant Valley Groundwater Basin, treating it through a reverse osmosis system, and using the treated groundwater to supplement the drinking water supply. The brine from the reverse osmosis treatment is discharged to the Pacific Ocean through the Calleguas Regional Salinity Management Pipeline. This system has been in operation since September 2014 and the CWD is currently collecting data on the amount of salts it exports from the watershed and the effect this operation has on the effluent quality. The TDS and chloride concentrations in the recycled water are expected to eventually decrease as a result of the CWD's efforts to remove salts from the potable water supply.

V. PURPOSE OF ORDER

1. On March 18, 2002, the CWD submitted an updated Engineering Report to the Regional Water Board and to the State Water Resources Control Board, Division of Drinking Water (DDW) to reflect the changes made to the Camrosa WRF treatment process and to inform the Regional Water Board of their intention to use the recycled water on the CSUCI campus for landscape irrigation.

2. Although the CWD has been using the tertiary recycled water on the CSUCI campus for years, there is no documentation of this use being approved by DDW or the Regional Water Board. In order to permit this use of recycled water, DDW must first review the distribution system and water quality to ensure the system is adequate for the desired use. On November 24, 2014, DDW requested additional information pertaining to the recycled water distribution system on the CSUCI

campus in order to complete a review and submit recommendations to the Regional Water Board prior to the adoption of these WRRs. On December 10, 2014, DDW conducted a site visit and inspected the use of recycled water on the CSUCI campus. DDW approved the use of recycled water on the CSUCI campus and submitted recommendations to the Regional Water Board. DDW's recommendations are incorporated into this Order.

3. The Permittee filed a Report of Waste Discharge (ROWD) and submitted an application on December 09, 2013. CWD requested renewal of its WDRs/WRRs in addition to renewal of the NPDES Order. The NPDES order was renewed on November 06, 2014, and a TSO was concurrently adopted to assign interim effluent limitations for TDS and chloride while the CWD collects salt loading data and makes improvements to the Camrosa WRF.

4. This WDR/WRR is being reissued to the CWD pursuant to California Water Code (CWC) sections 13263 and 13523. This Order updates the findings regarding the Facility upgrades that have taken place since 1995; includes additional uses for recycled water; prescribes limitations for recycled water; and describes the CWD's responsibilities for the production, distribution, monitoring, and application of recycled water. The CWD is responsible for processing individual end-users' applications, inspecting point-of-use facilities, and ensuring end-users' compliance with the requirements contained in this Order. The actual delivery of recycled water to end-users is subject to approval by the DDW and/or its delegated local health agency.

VI. APPLICABLE PLANS, POLICIES AND REGULATIONS

1. The Regional Water Board adopted a revised *Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) on June 13, 1994, and amended by various Regional Water Board resolutions. The Basin Plan (i) designates beneficial uses for surface and groundwater; (ii) establishes narrative and numeric water quality objectives that must be attained or maintained to protect the designated (existing and potential) beneficial uses and conform to the State's antidegradation policy; and (iii) includes implementation provisions, programs, and policies to protect all waters in the region. In addition, the Basin Plan incorporates (by reference) all applicable State Water Resources Control Board (State Water Board) and Regional Water Board plans and policies and other pertinent water quality policies and regulations. This Order implements the plans, policies, and provisions of the Basin Plan and other applicable plans and policies.

   The Basin Plan (Chapter 3) incorporates California Code of Regulations (CCR) Title 22 primary MCLs by reference. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. Also, the Basin Plan specifies that "Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Accordingly, the secondary MCLs, which are limits based on aesthetic, organoleptic standards, are also incorporated into this permit to protect groundwater quality.

2. The Basin Plan contains water quality objectives for the Pleasant Valley Groundwater Basin, which is considered to be the receiving water underlying the current recycled water use area.

3. The beneficial uses of the receiving groundwater are as follows:

Table 4. BENEFICIAL USES OF GROUNDWATER

Receiving Water Name	Beneficial Use(s)
Pleasant Valley (Ventura Central Basin; Department of Water Resources (DWR) Basin No. 4-6)	Confined Aquifers Existing Beneficial Uses: Municipal and domestic water supply (MUN); industrial service supply (IND); industrial process supply (PROC); and agricultural supply (AGR). Unconfined & Perched Aquifers Existing Beneficial Uses: IND; PROC; and AGR. Potential Beneficial Use: MUN.

4. The water quality objectives for these groundwater basins are:

Table 5. WATER QUALITY OBJECTIVES FOR GROUNDWATER

DWR Basin No.	Basin	Objectives (mg/L)			
		TDS	Sulfate	Chloride	Boron
4-6	Pleasant Valley Confined aquifers Unconfined and perched aquifers	700 --	300 --	150 --	1.0 --

CWD's current recycled water use area underlies the unconfined and semi-perched aquifer portion of Pleasant Valley Groundwater Basin.

5. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

6. The State Water Board adopted Resolution No. 77-1, *Policy with Respect to Water Reclamation in California*, which includes principles that encourage and recommend funding for water recycling and its use in water-short areas of the state. On September 26, 1988, the Regional Water Board also adopted Resolution

No. 88-012, *Supporting Beneficial Use of Available Reclaimed Water in Lieu of Potable Water for the Same Purpose*, which encourages the beneficial use of recycled wastewater and supports water recycling projects.

7. A 1996 Memorandum of Agreement (MOA) between the California Department of Public Health – whose functions with respect to recycled water have been transferred to DDW – and the State Water Board on behalf of itself and the Regional Water Boards regarding the use of recycled water allocates primary areas of responsibility and authority between these agencies. The MOA provides methods and mechanisms necessary to ensure ongoing and continuous future coordination of activities relative to the use of recycled water in California. This Order includes requirements consistent with the MOA.

8. The DDW has primary statewide responsibility for protecting public health with respect to the use and application of recycled water. It has established statewide water recycling criteria in California Code of Regulations, title 22, division 4, chapter 3 (hereafter referred to as title 22). Approved uses of recycled water under title 22 depend on the level of treatment, disinfection, and potential for public contact.

9. On October 28, 1968, the State Water Board adopted Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Resolution 68-16), establishing an Antidegradation Policy for the State Water Board and Regional Water Boards. State Board Resolution No. 68-16 (Resolution 68-16) requires the Regional Water Board, in regulating discharge of waste, to maintain high quality waters of the State until it is demonstrated that any change in quality (1) will be consistent with maximum benefit to the people of the State, (2) will not unreasonably affect beneficial uses, and (3) will not result in water quality less than that described in the Regional Water Board's policies. Resolution 68-16 requires the discharge be regulated to meet best practicable treatment or control to assure that pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the State be maintained.

   Application of recycled water for irrigation is limited to agronomic rates and therefore is not expected to measurably impact groundwater quality. This Order allows incidental percolation of the disinfected tertiary effluent to groundwater from holding ponds at the facility. The Order requires the effluent to meet MCLs for drinking water and groundwater quality standards in the Basin Plan. The Order includes a compliance schedule for the final effluent limitations for TTHMs to allow the discharger to continue to supply recycled water for non-potable uses while developing necessary treatment to meet the final limitation. The effluent limitations for TDS and chloride are set at current performance levels which have been found, based on groundwater monitoring, to be of higher quality than existing background concentrations of TDS and chloride in the groundwater.

10. 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. (Wat. Code, § 13511.) 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. (Wat. Code, § 13512.). This Order requires best practicable treatment or control, which is a combination of treatment, storage, and application methods that implement the requirements of title 22 and the Basin Plan. 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 instream uses for fish and wildlife. Treatment technologies required under the permit include tertiary treatment and disinfection for pathogen removal. As required by the Antidegradation Policy, the Regional Water Board finds that the limited degradation of water that may occur as the result of percolation of disinfected tertiary treated effluent to groundwater under the conditions of this Order allows CWD to continue to recycle nearly 100% of the wastewater discharged from the facility and provides maximum benefit to the people of California.On February 3, 2009, the State Water Board adopted *Resolution 2009-0011, Adoption of a Policy for Water Quality Control for Recycled Water* (Recycled Water Policy) (Revised January 22, 2013, effective April 25, 2013.) The Recycled Water Policy promotes the use of recycled water to achieve sustainable local water supplies. The Recycled Water Policy recommends that local water and wastewater entities together with other stakeholders who contribute salt and nutrients to a groundwater basin or sub-basin fund and develop Salt and Nutrient Management Plans (SNMPs) to comprehensively address all sources of salts and nutrients.

The stakeholders within the Calleguas Creek Watershed have developed a Salt and Nutrient Management Plan. The SNMP includes building several groundwater desalters throughout the watershed and a Salt and Nutrient Management Pipeline that discharges to the ocean to remove excess salts from the watershed. Surface water and groundwater monitoring are also an integral part of the SNMP. The plan specifies that baseline monitoring would be conducted 6 months prior to using the pipeline and monitoring would continue for at least one year after use of the pipeline to assess the effect this system has on the watershed. Continuation of the sampling regime after one year of using the pipeline would be determined based on the data generated. The groundwater monitoring in this Order is intended to assess the quality of the groundwater basin and to determine the overall effect the final effluent from the Camrosa WRF has on the surrounding groundwater basin.

11. Section 13523 of the CWC provides that a Regional Water Board, after consulting with and receiving recommendations from DDW or its delegated local health agency, and after any necessary hearing, shall, if it determines such action to be necessary to protect the health, safety, or welfare of the public, prescribe WRRs for water that is used or proposed to be used as recycled water. CWC Section 13523 further provides that, at a minimum, the WRRs shall include, or be in conformance with, the statewide water recycling criteria established by DDW pursuant to CWC Section 13521.

12. Pursuant to CWC Section 13523, the Regional Water Board has consulted with DDW regarding the proposed recycling project and has incorporated their recommendations in this Order.

13. The requirements contained in this Order are in conformance with the goals and objectives of the Basin Plan and implement the requirements of the CWC and CCR Title 22, Division 4, Chapter 3 - *Water Recycling Criteria*.

14. CWC Section 13523.5, on WRRs, states that a Regional Water Board may not deny issuance of WRRs to a project that violates only a salinity standard in a Basin Plan. This provision does not apply to WDRs. WDRs for projects that recycle water may contain effluent and other limitations on discharges of salts, as necessary to meet water quality objectives, comply with the Antidegradation Policy or otherwise protect beneficial uses.

15. Pursuant to Water Code section 13241 and 13263, the State Water Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:

    A. Past, present, and probable future beneficial uses of water;

    B. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;

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

    D. Economic considerations;

    E. The need for developing housing within the region(s); and

    F. The need to develop and use recycled water.

VII. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) AND NOTIFICATION

1. The CWD, in coordination with the Camarillo Sanitary District and the City of Thousand Oaks, prepared a Program Environmental Impact Report (Program EIR)/ Environmental Assessment (EA) for the proposed *Renewable Water Resource Management Program for the Southern Reaches of Calleguas Creek Watershed* to, among other things, recycle and reuse wastewater to the greatest extent possible. The CWD served as the lead agency for this Program EIR/EA that was finalized in October 2006. Significant impacts were identified for the proposed action. The Regional Water Board is a responsible agency for purposes of CEQA. The Regional Water Board has considered the environmental effects identified in the EIR. Changes or alterations have been required in or incorporated into the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the Regional Water Board, and can and should be adopted by such other public agency. Because the EIR is a Program EIR, some of the changes or alterations that are required in or incorporated into the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR are within the jurisdiction of this

Regional Board but are not within the scope of this particular approval. Legal considerations make infeasible the requirement of mitigation measures for aspects of the project not within the scope of this approval. The Regional Water Board will require mitigation measures at such time as the project proponent seeks approval of those aspects of the project to which the mitigation measures are relevant. The Regional Water Board has incorporated requirements into this Order to protect the quality of the waters of the state consistent with the applicable plans and policies that apply to the discharges regulated by this Order and has established a monitoring and reporting program to determine compliance with the terms of the Order and assure protection of water quality.

2. Pursuant to CWC Section 13320, any aggrieved person may seek review of this Order by filing a petition with the State Water Board in accordance with Title 23 CCR, sections 2050-2068. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, CA 95812, within 30 days of adoption of this Order. The regulations are available at http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml The State Water Board must receive the petition within 30 days of the date of this Order.

The Regional Water Board has notified the CWD and interested agencies and persons of its intent to issue WDRs/WRRs Order No. R4-2015-XXXX for the production, distribution and use of recycled water and has provided them with an opportunity to submit written comments.

The Regional Water Board, in a public meeting, heard and considered all comments pertaining to these WDRs/WRRs.

THEREFORE, IT IS HEREBY ORDERED that Order No. 95-059 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (commencing with section 13000) and regulations and guidelines adopted thereunder, the CWD shall comply with the requirements in this Order.

VIII. FINAL EFFLUENT LIMITATIONS

1. Recycled water shall be limited to tertiary-treated municipal wastewater only, as proposed.

2. The disinfected tertiary-treated effluent shall not contain pollutants in the treated effluent downstream of the dechlorination basin in excess of the following limits listed in Table 3.

Table 6. CONCENTRATIONS IN DISINFECTED TERTIARY EFFLUENT

Constituents	Units	30-Day Average	7-Day Average	Daily Maximum
Biochemical Oxygen Demand ($BOD_5 20^oC$)	mg/L	20[1]	---	45[1]
Total Suspended Solids (TSS)	mg/L	15[1]	---	45[1]
Settleable Solids	mL/L	0.1[1]	---	0.3[1]
Oil and Grease	mg/L	10	---	15
Total Coliform	MPN/100 mL	~~---~~23	2.2	~~---~~240
Total Dissolved Solids	mg/L	947[2]	---	---
Chloride	mg/L	244[2]	---	---
Sulfate	mg/L	300[3]	---	---
Boron	mg/L	1[3]	---	---
Nitrate as Nitrate	mg/L	45[3]	---	---
Nitrate as Nitrogen	mg/L	10[3]	---	---
Nitrite as Nitrogen	mg/L	1[3]	---	---
Nitrate-N + Nitrite-N	mg/L	10[3]	---	---
Total Trihalomethanes	µg/L	80[4]	---	---
Carbon Tetrachloride	µg/L	0.5[4]	---	---
Chromium VI	mg/L	0.010[4]	---	---

3. The pH of the disinfected tertiary-treated effluent used as recycled water shall at all times be within the range of 6.5 to 8.5 pH units.

[1] This is a technology-based limit contained in similar orders for Publicly Owned Treatment Works (POTWs) indicative of treatment levels that are achievable by tertiary-treated wastewater treatment systems.

[2] Order No. 95-059 includes TDS and chloride limitations based on the Basin Plan Water Quality Objectives for the confined aquifers of the Pleasant Valley Groundwater Basin. However, the CWD applies water to ponds overlying the unconfined and semi-perched portion of the Pleasant Valley Groundwater Basin for which there are no groundwater quality objectives in the Basin Plan. Since there are no groundwater quality objectives for the unconfined and semi-perched aquifers of the Pleasant Valley Groundwater Basin, best professional judgment was used to develop performance-based final effluent limitations in this Order. These limitations are intended to protect the MUN beneficial use of the underlying groundwater basins, to prevent future degradation of the groundwater basin, and to help restore the water quality of the impacted aquifer.

The final effluent limitations for TDS and chloride are based on effluent performance data from January 2009 through June 2014 for the Camrosa WRF. Consistent with the procedure contained in Appendix E of the United States Environmental Protection Agency's (USEPA) *Technical Support Document For Water Quality-based Toxics Contro*l (USEPA's TSD), the monthly average was set at the 95th percentile. The final limit was derived statistically from a probability plot, using the MINITAB statistical software, Release 14.

[3] This is a water quality objective for groundwater in the Basin Plan.

[4] Camrosa WRF's tertiary-treated effluent had reasonable potential to cause or contribute to an exceedance of the Basin Plan MCL-based Water Quality Objective.

4. Reclaimed water shall not contain trace constituents or other substances in concentrations exceeding the limits contained in the current edition of the DDW's Drinking Water Standards.

5. Disinfected tertiary-treated effluent used as recycled water that could affect the receiving groundwater shall not contain any substances in concentrations toxic to human, animal, or plant life.

6. Disinfected tertiary-treated effluent used as recycled water shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect the beneficial uses of the receiving groundwater.

7. The use of recycled water shall not impact tastes, odors, color, foaming, or other objectionable characteristics to the receiving water.

8. Maximum Contaminant Level Triggers

   A. Trigger Mechanism

      The effluent will be monitored annually for all constituents with current applicable MCLs for drinking water established by DDW included in Attachment A. If the annual sampling result of these constituents (target chemicals) exceeds the corresponding MCL, using the criteria established in section V.2. of the Monitoring and Reporting Program (MRP) No. 0821, then CWD will perform accelerated effluent monitoring for these target chemicals for two or more consecutive months until the MCL is met, at which point CWD may resume the regular frequency of testing.

   B. New Reasonable Potential Analysis

      The WDRs/WRRs may be reopened to include limitations for constituents which showed reasonable potential to cause or contribute to an exceedance of a Basin Plan water quality objective.

   C. Attenuation Study

      An attenuation study may be conducted for the target chemicals where MCLs are exceeded in accordance with Section V.1. of the MRP. The study will be a minimum of two years or until sufficient data is established to calculate the appropriate attenuation factor, if warranted. CWD is required to submit a work plan acceptable to the Executive Officer, which details the proposed attenuation study within 120 days after an average annual exceedance of the trigger.

IX. COMPLIANCE SCHEDULE FOR TOTAL TRIHALOMETHANES

1. The previous WRR/WDR order (Order No. 95-059) did not include a limit for TTHMs, however the Monitoring and Reporting Program did require monitoring of each trihalomethane individually. Although there is no MCL for each individual trihalomethane, there is an MCL of 80 µg/L for the sum of these compounds which includes: bromodichloromethane, dibromochloromethane, bromoform, and chloroform.

2. The TTHMs samples collected between 2004 and 2014 ranged in concentration from as low as less than 0.03 µg/L to as high as 219 µg/L. The TTHMs MCL was also exceeded every year since 2010 and therefore, the Camrosa Water District requires additional time to comply with the 80 µg/L effluent limitation.

3. Section 13300 of the CWC states:

   "Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a permittee are approaching capacity, the board may require the permittee to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the permittee shall take in order to correct or prevent a violation of requirements."

4. Based on effluent monitoring data, the Permittee is not able to consistently comply with the final effluent limitation for TTHMs in Order No. R4-2015-XXXX. Accordingly, pursuant to CWC section 13300, a discharge of waste is taking place and/or threatens to take place that violates requirements prescribed by the Regional Water Board.

5. The Regional Water Board finds that: (a) the final TTHMs average monthly effluent limitation is a new concentration-based effluent limit in Order No. R4-2015-XXXX, (b) the Permittee needs to implement new or modified control measures in order to comply with the new limit, and (c) new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

6. On December 15, 2014, the CWD submitted a letter to the Regional Water Board requesting a Compliance Schedule to provide interim effluent limitations for TTHMs. The CWD expressed concern that the Camrosa WRF's effluent concentrations may exceed the final effluent limitation for TTHMs and provided the following schedule to reach compliance:

Activity	Start Date	Completion Date	Monitoring Activity	Analysis of Efficacy
Cover Chlorine Contact Chamber to reduce chlorine demand, followed by chlorine reduction	July, 2015	September, 2015	Monitoring of TTHM in effluent	Analysis of effluent to determine THM reductions

Activity	Start Date	Completion Date	Monitoring Activity	Analysis of Efficacy
Evaluate Efficacy of preceding step, review additional alternatives, if necessary, and submit report to Regional Board for approval.	September, 2015	November, 2015	See Above	See Above
Implement recommended alternative for Phase 2	November, 2015	February, 2016	See Above	See Above
Evaluate Efficacy of preceding step and submit report to Regional Board	February, 2016	April, 2016	See Above	See Above
Implement recommended alternative for Phase 3	April, 2016	August, 2016	See Above	See Above
Evaluate Efficacy of preceding step and submit report to Regional Board	August, 2016	October, 2016	See Above	See Above
Submit Workplan to Regional Board to investigate further reduction strategies should THM reductions still not meet requirements	October, 2016	December, 2016	N/A	N/A
Implement Workplan	January 2017	December, 2017	Monitoring of TTHM in effluent	Analysis of effluent to determine THM reductions

7. Since the compliance schedule for the completion of actions necessary to bring the waste discharge into compliance exceeds one year from the effective date of this compliance schedule, this compliance schedule includes interim requirements and the dates for their achievement. The interim requirements include both an interim effluent limitation for TTHMs and, actions and milestones leading to compliance with the final effluent limitation for TTHMs.

8. This compliance schedule establishes an interim effluent limitation for TTHMs, and requires the Permittee to undertake specific actions to put the Permittee on a path toward compliance with the final effluent limitations for TTHMs in Order No. R4-2015-XXXX. The established time schedule is as short as possible, taking into account the technological, operational, and economic factors that affect the design,

development, and implementation of the control measures that are necessary to comply with the final effluent limitations for TTHMs.

9. The interim monthly average effluent limits for TTHMs prescribed in this compliance schedule are performance-based values set at the ninety-fifth percentile derived from final effluent data, using MINITAB.

10. A compliance schedule is appropriate in these circumstances to allow time for the Permittee to complete capital improvement projects that will bring the Camrosa WRF into compliance with the final effluent limit for TTHMs. These capital improvement projects cannot be designed, installed, and put into operation within 30 calendar days. The temporary TTHMs exceedances allowed by this compliance schedule are in the public interest given the significant environmental benefits associated with promptly achieving compliance with the final effluent limitations for these pollutants and allowing continued water recycling and reuse.

11. From February 12, 2015 to February 11, 2020, the Permittee shall comply with the following interim effluent limit for TTHMs, which apply year-round:

Constituent	Units	Monthly Average Effluent Limitation
Total Trihalomethanes	µg/L	190

If the analytical result of a single sample, monitored monthly, exceeds the interim monthly average effluent limitation for that constituent, CWD may collect up to four additional samples, at approximately equal intervals during that calendar month, to determine compliance with the interim monthly average effluent limitation.

12. The Permittee shall complete the actions and milestones, including capital improvement and monitoring projects, according to the schedule proposed by CWD in its letter dated December 2017.

13. The Permittee shall submit quarterly progress reports as part of the quarterly monitoring report required by the Monitoring and Reporting Program in Attachment B of Order R4-2015-XXXX. The reports shall summarize the progress to date, activities conducted during that quarter, and the activities planned for upcoming quarters.

14. The Permittee shall achieve full compliance with the final effluent limitations for TTHMs in Order No. R4-2015-XXXX as soon as possible, but no later than February 12, 2020.

X. SPECIFICATIONS FOR RECYCLED WATER

1. The treatment, storage, distribution, or use of recycled water shall not cause or contribute to a condition of pollution as defined in Water Code section 13050(l) or nuisance as defined in Water Code section 13050(m).

2. Recycled water shall be managed in conformance with the applicable regulations contained in the CCR Title 22 requirements.

3. The Recycled Water Producer or Distributor[5] shall collectively provide all users *disinfected tertiary recycled water*, as proposed, that meets the standards for recycled water, as described in CCR Title 22, Division 4, Chapter 3, Article1, Sections 60301.230 and 60301.320.

4. Recycled water shall be retained in the areas of use and shall not be allowed to escape as surface flow except as provided for in an NPDES permit.

5. Recycled water use and monitoring shall be consistent with the Total Maximum Daily Load for Boron, Chloride, Sulfate and TDS (Salts) in the Calleguas Creek Watershed and any applicable Salt and Nutrient Management Plan for the basin/sub-basin.

6. Recycled water shall not be applied to uses other than those enumerated below unless a revised engineering report has been submitted to and approved by the Regional Water Board and DDW for such other uses and/or requirements for these uses have been prescribed by this Regional Water Board, in accordance with Section 13523 of the CWC.

7. All recycled water pipelines and valves shall be installed with purple identification tapes or purple polyethylene vinyl wraps according to the American Water Works Association (AWWA) California-Nevada Section guidelines.

8. The CWD is permitted to use tertiary-treated recycled water produced at the Camrosa WRF for the following approved uses:

   A. Crop irrigation, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop; and

   B. California State University, Channel Islands Campus landscape irrigation.

   C. Upon approval of the necessary engineering plans by the Executive Officer of the Regional Water Board, recycled water may be used for the cooling towers located on the CSUCI campus.

XI. SPECIFICATIONS AND REQUIREMENTS FOR DUAL-PLUMBED SYSTEMS

CSUCI has an interest in using recycled water for their cooling towers. If the use is approved by the DDW and the Regional Water Board, the facility will be designated as dual-plumbed. The specifications for cooling towers and dual-plumbed systems are as follows:

[5] The Distributor may be a recycled water wholesaler, retail water supplier, or retailer as defined in CWC Division 7, Chapter 7.5, Section 13575, the *Water Recycling Act of 1991*.

Recycled water used for cooling industrial or commercial cooling or air conditioning that involves the use of a cooling tower, evaporative condenser, spraying, or any mechanism that creates a mist shall be disinfected tertiary recycled water.

2. "Dual plumbed" means a system that utilizes separated piping systems for recycled water and potable water within a facility and where the recycled water is used for either of the following purposes:

   A. To serve plumbing outlets (excluding fire suppression systems) within a building, or

   B. Outdoor landscape irrigation at individual residences.

3. The public water supply shall not be used as a backup or supplemental source of water for a dual-plumbed recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of CCR Title 17, Division 1, Chapter 5, Subchapter 1, Group 4, Article 2, Sections 7602 (a) and 7603 (a), and that such connection has been approved by DDW and/or its delegated local agency.

4. The CWD shall not deliver recycled water to a facility using a dual-plumbed system unless the report of recycled water use, required pursuant to Section 13522.5 of the CWC, and which meets the requirements set forth in Sections IV.4 and/or IV.5 of this Order, has been submitted and approved by DDW and/or its delegated local agency. The Regional Water Board shall be furnished with a copy of DDW approval together with the aforementioned report within 30 days following the approval.

5. The report of recycled water use, submitted pursuant to Section 13522.5 of the CWC, shall contain the following information for dual-plumbed systems, in addition to the information required by CCR Title 22, Division 4, Chapter 3, Article 7, Section 60323 (Engineering Report):

   A. A detailed description of the intended use site identifying the following:

      i. The number, location, and type of facilities within the use area proposing to use dual-plumbed systems;

      ii. The average number of persons estimated to be served by each facility on a daily basis;

      iii. The specific boundaries of the proposed use site including a map showing the location of each facility to be served;

      iv. The person or persons responsible for operation of the dual-plumbed system at each facility; and,

      v. The specific use to be made of the recycled water at each facility.

   B. Plans and specifications describing the following:

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; and,

iv. The methods and devices to be used to prevent backflow of recycled water into the public water system.

C. The methods to be used by the CWD to assure that the installation and operation of the dual-plumbed system will not result in cross connections between the recycled water piping system and the potable water piping system. These shall include a description of pressure, dye or other test methods to be used to test the system every four years.

6. Prior to the initial operation of the dual-plumbed recycled water system and annually thereafter, the dual-plumbed system within each facility and use site shall be inspected for possible cross connections with the potable water system. The recycled water system shall also be tested for possible cross connections at least once every four years. The testing shall be conducted in accordance with the method described in Section V.4.C. of this Order. The inspections and the testing shall be performed by a cross connection control specialist certified by the California-Nevada Section of the AWWA or an organization with equivalent certification requirements. A written report documenting the result of the inspection and testing for the prior year shall be submitted to DDW within 30 days following completion of the inspection or test.

7. The CWD shall notify DDW of any incidence of backflow from the dual-plumbed recycled water system into the potable water system within 24 hours of discovery of the incident.

8. Any backflow prevention device installed to protect the public water system serving the dual-plumbed recycled water system shall be inspected and maintained in accordance with CCR Title 17, Division 1, Chapter 5, Subchapter 1, Group 4, Article 2, Section 7605.

XII. DDW SPECIFICATIONS FOR TREATMENT

1. The recycled water shall be treated to a tertiary filtered disinfected level that does not exceed the following:

A. 7-day median of 2.2 MPN per 100 milliliters;

B. 23 MPN per 100 milliliters in more than one sample in any 30-day period; and,

C. 240 MPN per 100 milliliters in any sample.

2. The recycled water shall be disinfected by one of the following:

A. A chlorine disinfection process following filtration that provides a chlorine contact time (CT); the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or

B. A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as the polio virus may be used for purposes of the demonstration.

3. The turbidity levels for filtered recycled water shall not exceed any of the following:

   A. An average of 2 NTU within a 24-hour period;

   B. 5 NTU more than 5 percent of the time within a 24-hour period; and,

   C. 10 NTU at any time.

4. The CWD shall develop and maintain an operations plan for the Camrosa WRF that addresses issues such as the operation, maintenance, and optimization of unit processes; sludge wasting; alarms; etc.

5. The CWD shall notify DDW in instances of treatment process failures and/or non-compliance with the above requirements by the same means and under the same conditions as CWD would notify the Regional Water Board. Any discharge of untreated or partially treated wastewater to the use area, or the cessation of same, shall be reported immediately by telephone to the Regional Water Board, DDW, and the local County health officer.

6. Operating records and reports shall be maintained at the Camrosa WRF for all analysis specified in the reclamation criteria; records of operational problems; plant and equipment breakdowns; diversions to emergency storage or disposal; corrective or preventative action taken; and, process or equipment failures, time and cause of those failures, and corrective actions taken.

7. Within 6 months of the effective date of this Order, the CWD shall submit to DDW documentation demonstrating the CSUCI campus has an adequate number of recycled water signs in the water use areas.

8. Within 6 months of the effective date of this order, the CWD shall submit the results of a shutdown test completed after the CSUCI irrigation system was converted from potable water to recycled water.

9. Prior to using the recycled water for a cooling tower, the CWD shall submit piping plans of the cooling tower building for the approval of recycled water use within the building.

10. Within 6 months of the effective date of this order, the CWD shall supply DDW with plans of the recycled water distribution system within the CSUCI campus including the storage tank. The plan shall include the locations of signs, drip irrigation locations and spray irrigation locations. Additionally, drinking water fountains and tables/sitting areas within the recycled water irrigation use areas shall be designated.

XIII. USE AREA[6] REQUIREMENTS

1. Application of recycled water to the use area shall be at reasonable agronomic rates and shall consider soil, climate, and nutrient demand. Application rates shall ensure that a nuisance is not created.

2. For each new/proposed recycled water use area, a use site report that addresses compliance with the following use area requirements and includes results of a completed shut-down test shall be submitted to the Regional Water Board and to DDW for approval.

3. For existing recycled water use areas, use site reports and use site agreements shall be submitted to the Regional Water Board and to DDW within six months.

4. The use and distribution of recycled water shall comply with DDW's CCR, Title 22, Division 4, Chapter 3 - *Water Recycling Criteria*; and the CCR, Title 17, Division 1, Chapter 5, Subchapter 1, Group 4, Cross-Connection Control Requirements.

5. No physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water. All back-up/ auxiliary potable supplies shall discharge through approved air-gaps or swivel-ell connections with approved backflow prevention on the potable supply line. Back-up/auxiliary supply piping plans shall be submitted and reviewed by DDW. A certified tester shall test all backflow devices annually. Air gaps shall be at least twice the pipe diameter and be located above ground. Swivel-ell connections shall be controlled by the domestic water supplier. The use site agreements shall include conditions that clarify the control and operation of swivel-ell connections.

6. The American Water Works Association's (AWWA) *Guidelines for the Distribution of Non-Potable Water* needs to be followed, including purple pipe, adequate signs, etc. Adequate separation of at least 4-foot horizontal and 1-foot vertical separation shall be provided between recycled water lines and domestic potable water lines.

7. Plans and maps showing domestic water lines and recycled water lines at each use site shall be maintained. The lines must be marked clearly and labeled as domestic water lines and recycled water lines. Shut-down tests may be needed to demonstrate that cross-connections do not exist.

8. Supervisors must be appointed for the recycled water use areas and their staff

[6] "Use area" is an area of recycled water use with defined boundaries, which may contain one or more facilities where recycled water is used.

must be trained on the hazards of working with recycled water and periodically retrained.

9. Recycled water use areas shall be inspected by the reclaimed water provider.

10. No impoundment of *disinfected tertiary recycled water* shall occur within 100 feet of any domestic water supply well.

11. No irrigation with *disinfected tertiary recycled water* shall take place within 50 feet of any domestic water supply well unless all of the following conditions have been met:

    A. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface;

    B. The well contains an annular seal that extends from the surface into the aquitard;

    C. The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities;

    D. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well; and,

    E. The owner of the well approves of the elimination of the buffer zone requirement.

12. Any irrigation runoff shall be confined to the recycled water use area, unless the runoff does not pose a public health threat and is authorized by the Regulatory Agency[7]. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.

13. Recycled water use should be limited to hours when public is not present.

14. No recycled water shall be applied to irrigation areas during periods when soils are saturated.

15. Incidental runoff from landscape irrigation shall be controlled through the following practices:

    A. Implementation of an operations and management plan that may apply to multiple sites and provides for detection of leaks, (for example, from broken

[7] CCR Title 22, Division 4, Chapter 3, Article 1, defines “Regulatory agency” as the California Regional Water Quality Control Board(s) that have jurisdiction over the recycling plant and use areas.

sprinkler heads), and correction either within 72 hours of learning of the runoff, or prior to the release of 1,000 gallons, whichever occurs first,

B. Proper design and aim of sprinkler heads,

C. Refraining from application during precipitation events, and

D. Management of any ponds containing recycled water such that no discharge occurs unless the discharge is a result of a 25-year, 24-hour storm event or greater, and there is notification of the appropriate Regional Water Board Executive Officer of the discharge, unless the discharge is otherwise regulated pursuant to an NPDES permit.

16. All use areas that are accessible to the public shall be posted with signs that are visible to the public. The size shall be no less than 4 inches high by 8 inches wide, and shall include the following wording: "RECYCLED WATER – DO NOT DRINK". Each sign shall display an international symbol similar to that shown in CCR Title 22, Division 4, Chapter 3, Article 4, Section 60310-A, (See Figure A-3). Alternative signage and wording, or an educational program, may be acceptable on a case-by-case basis, provided the use site demonstrates to the Regional Water Board and to DDW that the alternative approach will assure an equivalent degree of public notification.

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

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

XIV. GENERAL REQUIREMENTS

1. Recycled water shall not be used for direct human consumption or for the processing of food or drink intended for human consumption.

2. Bypass, discharge, or delivery to the use area of inadequately treated recycled water, at any time, is prohibited.

3. The recycling facility shall be adequately protected from inundation and damage by storm flows.

4. Recycled water use or disposal shall not result in earth movement in geologically unstable areas.

5. Adequate freeboard and/or protection shall be maintained in the recycled water storage tanks and process tanks to ensure that direct rainfall will not cause overtopping.

6. The wastewater treatment and use of recycled water shall not result in problems caused by breeding of mosquitoes, gnats, midges, or other pests.

7. Odors of sewage origin shall not be perceivable at any time outside the boundary of the treatment facility.

8. The CWD shall, at all times, properly operate and maintain all treatment facilities and control systems (and related appurtenances) which are installed or used by the CWD to achieve compliance with the 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).

9. A copy of these requirements shall be maintained at the water reclamation facility so as to be available at all times to operating personnel.

10. The CWD shall furnish each user of recycled water a copy of these requirements and ensure that the requirements are maintained at the user's facility so as to be available at all times to operating personnel.

11. Supervisors and operators of this publicly owned wastewater treatment facility shall possess a certificate of appropriate grade as specified in CCR Title 23, Chapter 3, Subchapter 14, Sections 2455 and 2460.

12. For any material change or proposed change in character, location, or volume of recycled water, or its uses, CWD shall submit at least 120 days prior to the proposed change an engineering report or addendum to the existing engineering report to the Regional Water Board and DDW (pursuant to CWC Division 7, Chapter 7, Article 4, Section 13522.5 and CCR Title 22, Division 4, Chapter 3, Article 7, Section 60323) for approval. The Engineering Report shall be prepared by a qualified engineer registered in California. This updated engineering report shall describe the current treatment plant, the impacts on the recycled water operation, and contain the operation and maintenance management plan, including a preventive (fail-safe) procedure and contingency plan for controlling accidental discharge and/or delivery to users of inadequately treated recycled water.

XV. PROVISIONS

1. The CWD shall continue to submit plans for proposed and as-built drawings for recycled water projects to and obtain approval from DDW or its delegated local health agency for each recycled water project. The AWWA *Guidelines for the Distribution of Non-Potable Water* shall be followed, including installation of purple pipe, adequate signs, etc. As-built drawings shall show the final locations of the potable water, sewer, and recycled water pipelines, and indicate adequate separation between the recycled water and potable domestic water lines, both of which shall also be marked clearly or labeled using separate colors for

identification. In addition, a copy of each application to DDW for a recycled water project shall be delivered to the Regional Water Board for inclusion in the administrative file with the following information:

A. A description of each use area including, but not limited to, a description of what will be irrigated (e.g., landscape, specific food crop, etc.); method of irrigation (e.g., spray, flood, or drip); the location of domestic water supply facilities adjacent to the use areas; site containment measures; the party responsible for the distribution and use of the recycled water at the site; and, identification of other governmental entities which may have regulatory jurisdiction over the reuse site(s); and,

B. A map showing specific areas of use, areas of public access, surrounding land uses, the location and construction details of wells in or near the use areas, the location and type of signage, the degree of potential access by employees or the public, and any exclusionary measures (e.g. fencing). The CWD shall submit to the Regional Water Board a copy of the approved Recycled Water Project for the recycled water distribution system and DDW approval within 30 days of approval.

2. For any extension or expansion of the recycled water system or use areas not covered by the March 18, 2002 Engineering Report, the CWD shall submit a report detailing the extension or expansion plan for approval by DDW or its delegated local health agency. The plan shall include, but not be limited to, the information specified in Sections XIII.1.A. and B., above. Following construction, as-built drawings shall be submitted to DDW or its delegated local health agency for approval prior to delivery of recycled water. The CWD shall submit to the Regional Water Board a copy of the approved expansion plan and DDW approval within 30 days of approval.

3. If the recycled water system lateral pipelines are located on an easement contiguous to a homeowner's private property and where there is a reasonable probability that an illegal or accidental connection to the recycled water line could be made, the CWD shall provide a buffer zone or other necessary measures between the recycled water lines and the easement to prevent any illegal or accidental connection to the recycled water lines. The CWD shall notify homeowners about the recycled water lateral and restrictions on usage of recycled water.

4. The CWD shall inspect the recycled water use areas on a periodic basis. The CWD shall propose an inspection schedule, based the type of use site, for approval by DDW within 90 days of the effective date of this permit. A report of findings of the inspection shall be submitted to DDW, the County Health Department, and the Regional Water Board on a quarterly basis.

5. The CWD shall submit to the Regional Water Board, under penalty of perjury, technical self-monitoring reports according to the specifications contained in the Monitoring and Reporting Program, as directed by the Executive Officer.

6. The CWD shall notify this Regional Water Board and DDW by telephone or electronic means within 24 hours of knowledge of any violations of recycled water use conditions or any adverse conditions as a result of the use of recycled water from this facility; written confirmation shall follow within 5 working days from date of notification. The report shall include, but not be limited to, the following information, as appropriate:

   A. The nature and extent of the violation;

   B. The date and time when the violation started; when compliance was achieved; and, when injection was suspended and restored, as applicable;

   C. The duration of the violation;

   D. The cause(s) of the violation;

   E. Any corrective and/or remedial actions that have been taken and/or will be taken with a time schedule for implementation to prevent future violations; and,

   F. Any impact of the violation.

7. The CWD shall notify this Regional Water Board and DDW, immediately by telephone, of any confirmed coliform counts that could cause a violation of the requirements. This information shall be confirmed in the next monitoring report. For any actual coliform limit violation that occurred, the report shall also include the cause(s) of the high coliform counts, the corrective measures undertaken (including dates thereof), and the preventive measures undertaken to prevent a recurrence.

8. The direct use of Title 22 tertiary-treated and disinfected recycled water for impoundments and irrigation could affect the public health, safety, or welfare; requirements for such uses are, therefore, necessary in accordance with CWC Division 7, Chapter 7, Article 4, Section 13523.

9. Discharges from the two off-site recycled water storage ponds shall comply with NPDES Order No. R4-2014-0210.

10. This Order does not exempt the CWD from compliance with any other laws, regulations, or ordinances which may be applicable; it does not legalize the recycling and use facilities; and it leaves unaffected any further constraint on the use of recycled water at certain site(s) that may be contained in other statutes or required by other agencies.

11. This Order does not alleviate the responsibility of the CWD to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency. Expansion of the recycled water distribution facility shall be contingent upon issuance of all necessary requirements and permits, including a conditional use permit.

12. After notice and opportunity for a hearing, this Order may be modified, revoked and reissued, or terminated for cause, including but not limited to, failure to comply with any condition in this Order; endangerment of human health or environment resulting from the permitted activities in this Order; obtaining this Order by misrepresentation or failure to disclose all relevant facts; or, acquisition of new information that could have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the CWD for modification, revocation and reissuance, or termination of the Order or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

13. The CWD shall furnish, within a reasonable time, any information the Regional Water Board or DDW may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The CWD shall also furnish the Regional Water Board, upon request, with copies of records required to be kept under this Order for at least three years.

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

15. To assess potential increases in overall TDS and chloride levels due to the long-term application of recycled water, the CWD is required to implement a groundwater monitoring program to track TDS and chloride levels in strategically located ground water wells as identified in the Section IV of the Monitoring and Reporting Program (CI-0821).

16. This Order includes the attached *Standard Provisions Applicable to Waste Discharge Requirements* (Attachment B.) If there is any conflict between the provisions stated hereinbefore and the Standard Provisions, the provisions stated hereinbefore shall prevail.

17. This Order includes the attached Monitoring and Reporting Program No. CI-0821. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the Monitoring and Reporting Program prevail.

XVI. REOPENER

This Order may be reopened to include the most scientifically relevant and appropriate limitations for this recycling Facility, including (1) a revised chloride limit based on monitoring results, Antidegradation studies, or other Board Policy or (2) the application of an attenuation factor based upon an approved site-specific attenuation study conducted by the CWD.

XVII. EFFECTIVE DATE OF THE ORDER

This Order takes effect upon its adoption.

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the Regional Water Board, Los Angeles Region on February 12, 2015.

Samuel Unger, P.E.
Executive Officer

FIGURE 1 – PROCESS FLOW DIAGRAM

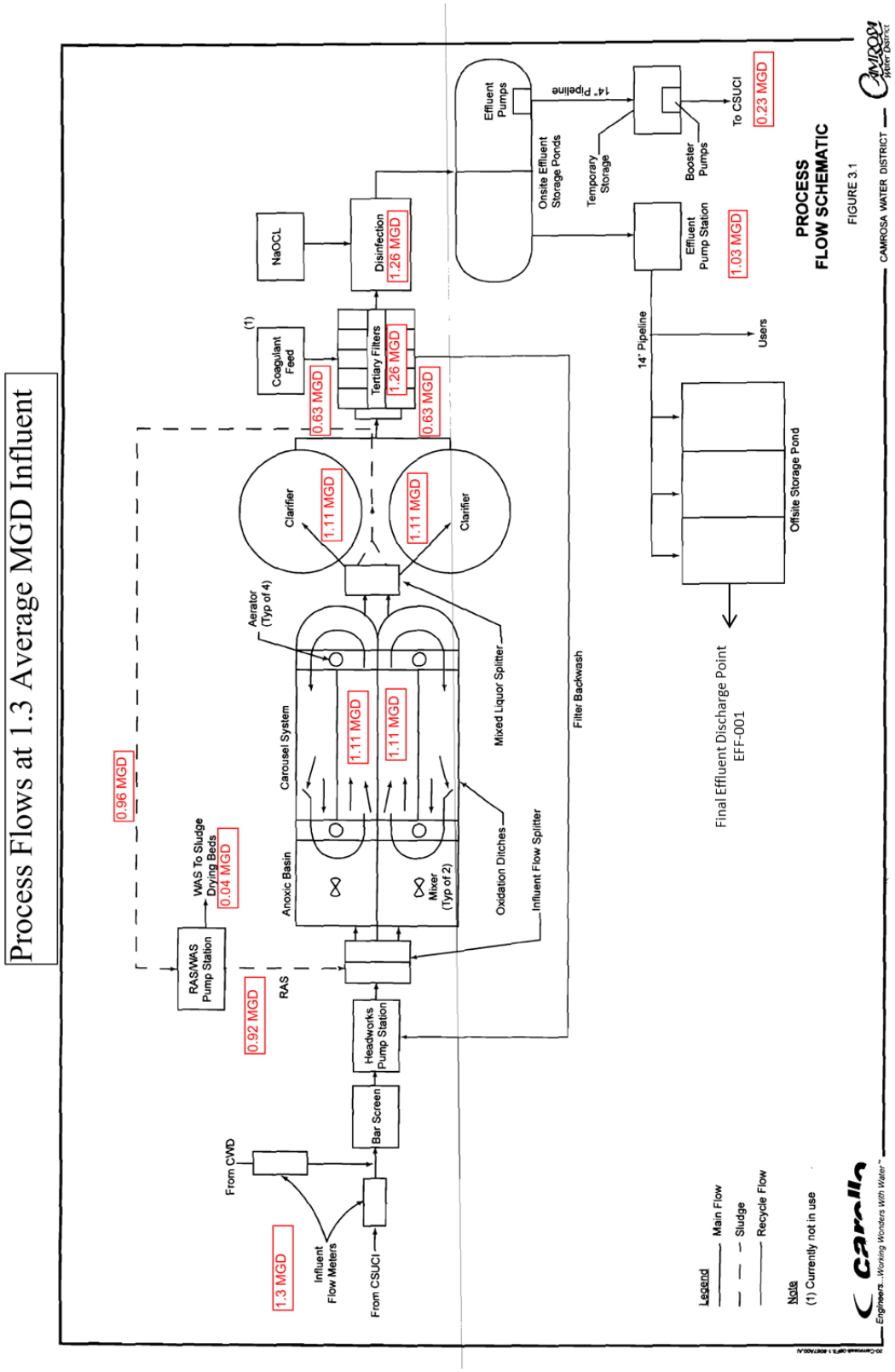
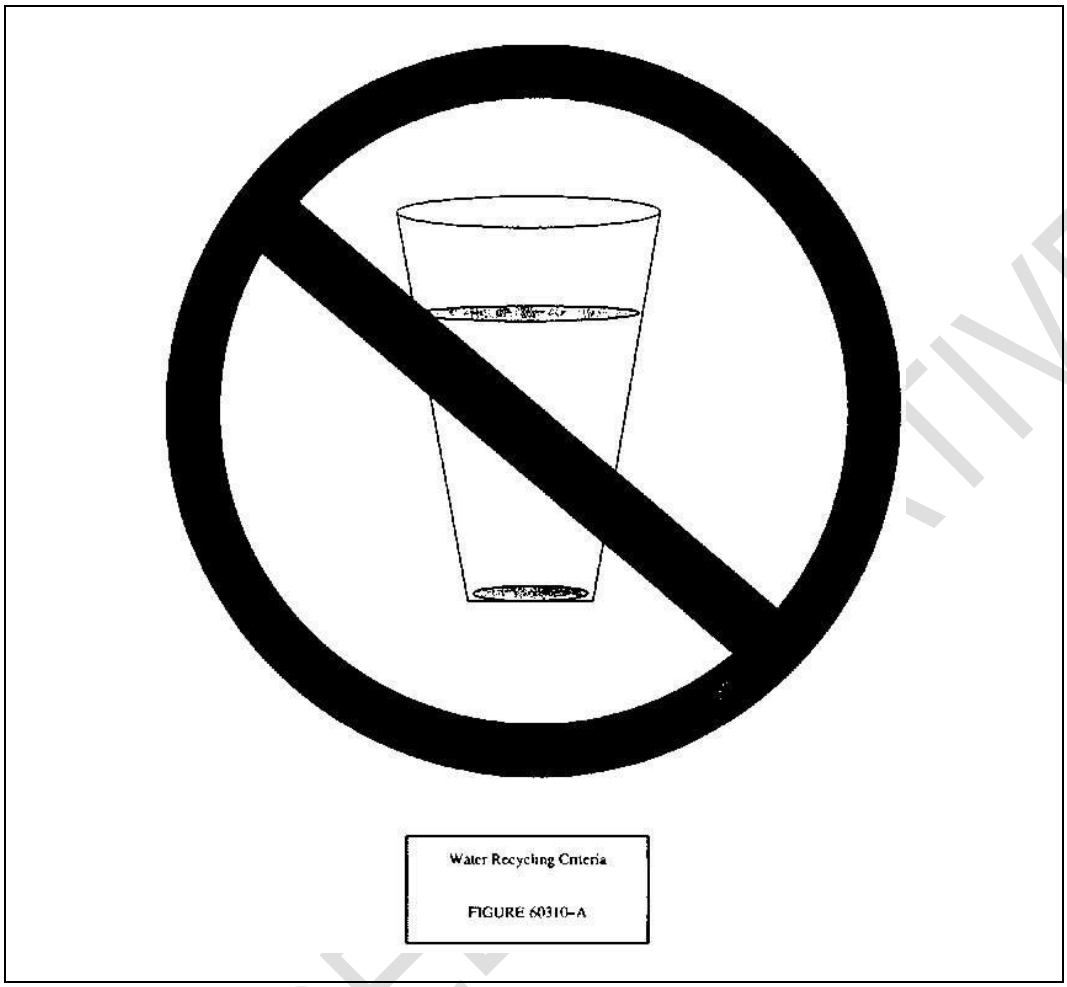


FIGURE 2 – RECYCLED WATER USERS

FIGURE 3 – WATER RECYCLING CRITERIA



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM (CI-0821)
(File No. 54-035)

FOR

WASTE DISCHARGE REQUIREMENTS
AND
TITLE 22 WATER RECYCLING REQUIREMENTS

ISSUED TO

CAMROSA WATER DISTRICT
(Camrosa Water Reclamation Facility)

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Tables

MONITORING AND REPORTING PROGRAM (MRP) CI-0821

This Monitoring and Reporting Program is issued by the Regional Water Quality Control Board. **Los Angeles Region (Regional Water Board) pursuant to California Water Code (CWC) section** 13267(b)(1), which authorizes the Regional Water Board to require the submittal of technical and monitoring reports. The reports required by this MRP are necessary to ensure compliance with Waste Discharge Requirements (WDRs) and Water Recycling Requirements (WRRs) Order No. R4-2015-XXXX for the Camrosa Water Reclamation Facility (WRF). The Camrosa Water District (CWD, Producer or Permittee) owns and operates the Camrosa WRF and the recycled water distribution system, respectively, and is therefore, responsible for compliance with Order No. R4-2015-XXXX. CWD shall implement this MRP on the effective date of this Order. Failure to comply with this MRP could result in the imposition of monetary civil liability pursuant to Division 7 of the California Water Code and other applicable laws.

I. GENERAL MONITORING REQUIREMENTS

1. Whenever possible, quarterly monitoring shall be performed during the months of February, May, August, and November; semiannual monitoring shall be performed during the months of February and August; and annual monitoring shall be performed during the third quarter (July thru September) of each calendar year. Should there be instances when monitoring could not be conducted during the specified months, the Permittee shall notify the Regional Water Board, state the reason why the monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual and annual analyses shall be reported in the quarterly monitoring report following the analysis. If the use of recycled water does not occur during that monitoring period, the Permittee shall collect a sample during the next reuse event. If there is no use of recycled water during the reporting period, the report shall so state. Monitoring reports shall continue to be submitted to the Regional Water Board, regardless of whether or not there was a use of recycled water.

2. Monitoring shall be used to determine compliance with the requirements of this Order. A monitoring and reporting plan shall include, but not be limited to, the following:

   A. Locations of each groundwater monitoring station where representative samples can be obtained and the rationale for the selection. The CWD must include a map, at a scale of 1 inch equals 1,200 feet or less, that clearly identifies the locations of all monitoring wells and production wells.

   B. Sampling protocols (as specified in Title 40 Code of Federal Regulations (CFR) Part 136 or American Water Works Associations (AWWA) standards where appropriate) and chain of custody procedures.

   C. For groundwater monitoring, an outline of the methods and procedures to be used for measuring water levels; purging wells; collecting samples; decontaminating equipment; containing, preserving, and shipping samples, and maintaining appropriate documentation. Also include the procedures for handling, storing, testing, and disposing of purge and decontamination waters generated from the sampling events.

D. Laboratory or laboratories, which conducted the analyses. Include copy or copies of laboratory certifications by the California Health Services Environmental Laboratory Accreditation Program (ELAP) every year or when the CWD changes their contract laboratory.

E. Analytical test methods used and the corresponding reporting detection limits (RDLs).

F. Quality assurance and control measures.

3. The samples shall be analyzed using analytical methods described in 40 CFR Part 136; or where no methods are specified for a given pollutant, by methods approved by the State Water Resources Control Board, Division of Drinking Water (DDW), the Regional Water Board and/or the State Water Resources Control Board (State Water Board). The Permittee shall select the analytical methods that provide RDLs lower than the limits prescribed in this Order. For those constituents that have drinking water notification levels (NLs) and/or public health goals (PHGs), the RDLs shall be equal to or lower than either the NLs or the PHGs whenever feasible. Every effort should be made to analyze pollutants using the lowest RDL possible.

4. The Permittee shall instruct its laboratories to establish calibration standards so that the RDLs (or equivalent if there is a different treatment of samples relative to calibration standards) are the lowest calibration standard. At no time shall the analytical data be derived from extrapolation beyond the lowest point of the calibration curve.

5. Upon request by the Permittee, the Regional Water Board, in consultation with DDW and the State Water Board Quality Assurance Program, may establish RDLs, in any of the following situations:

   A. When the pollutant has no established method under 40 CFR 136;

   B. When the method under 40 CFR 136 for the pollutant has a RDL higher than the limit specified in this Order; or

   C. When the Permittee agrees to use a test method that is more sensitive than those specified in 40 CFR Part 136.

6. The laboratory conducting the analyses shall be certified by ELAP or approved by DDW, the Regional Water Board, or the State Water Board for a particular pollutant or parameter.

7. Recycled water samples must be analyzed within allowable holding time limits specified in 40 CFR Part 136.3. All quality assurance / quality control (QA/QC) analyses must be run on the same dates when samples are actually analyzed. The Permittee shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Water Board or DDW staff. Proper chain of custody procedures must be followed, and a copy of that documentation shall be

submitted with the quarterly report.

8. For all bacterial analyses, sample dilutions shall be performed so the range of values extends from 1 to 800. The detection methods used for each analysis shall be reported with the results of the analyses.

II. RECYCLED WATER MONITORING

A sampling station(s) shall be established where representative samples of recycled water can be obtained. For this recycling project, recycled water samples shall be obtained from the Camrosa WRF's effluent channel immediately downstream of the chlorine contact basin. Should there be any change in the sampling station, the proposed station shall be approved by the Executive Officer prior to its use. The following shall constitute the recycled water monitoring program:

TABLE M1. TITLE 22 RECYCLED WATER MONITORING

Constituent	Units	Type of Sample	Minimum Frequency of Analysis[8]
Total recycled water flow	MGD	recorder	continuous[9]
pH	pH units	recorder	continuous[9]
Turbidity[10]	NTU	recorder	continuous[9]
Total Coliform[11]	MPN/100 mL	grab[12]	daily[13]
Total Chlorine Residual[14]	mg/L	grab[12]	daily

[8] The frequency of monitoring shall be performed as specified in Table M1. However, if the MCL or corresponding Basin Plan water quality objective is exceeded for a given pollutant, then its frequency of monitoring shall be increased to monthly for at least two consecutive months until the discharge no longer exceeds the given MCL, or achieves compliance with the corresponding effluent limitation.

[9] For those constituents that are continuously monitored, the Permittee shall report the monthly minimum, the monthly maximum, and the daily average values.

[10] Turbidity shall be continuously monitored and recorded at a point after final filtration. The average value recorded each day, the amount of time that 5 NTU is exceeded, and the incident of exceeding 10 NTU, if any, shall be reported.

[11] Samples shall be obtained subsequent to the chlorination process.

[12] A grab sample is an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. When an automatic composite sampler is not used, composite sampling shall be done as follows: If the duration of the discharge is equal to or less than 24 hours but greater than eight (8) hours, at least eight (8) flow-weighted samples shall be obtained during the discharge period and composited. For discharge duration of less than eight (8) hours, individual 'grab' sample may be substituted.

[13] Daily samples shall be collected Monday through Friday, except for holidays.

Constituent	Units	Type of Sample	Minimum Frequency of Analysis[8]
Oil & Grease	mg/L	grab[12]	quarterly
Settleable Solids	mL/L	grab[12]	weekly
Total Suspended Solids (TSS)	mg/L	24-hr comp.	weekly
Biochemical Oxygen Demand ($BOD_5$20ºC)	mg/L	24-hr comp.	weekly
Total Dissolved Solids (TDS)	mg/L	24-hr comp.	monthly
Sulfate	mg/L	24-hr comp.	monthly
Chloride	mg/L	24-hr comp.	monthly
Boron	mg/L	24-hr comp.	quarterly
Nitrate-N + nitrite-N	mg/L	24-hr comp.	quarterly
Nitrate-N	mg/L	24-hr comp.	quarterly
Nitrite-N	mg/L	24-hr comp.	quarterly
Ammonia-N	mg/L	24-hr comp.	quarterly
Total Organic Carbon (TOC)	mg/L	grab[12]	quarterly
Chromium VI	mg/L	grab[12]	monthly
Carbon Tetrachloride	µg/L	grab[12]	monthly
Total Trihalomethanes	µg/L	grab[12]	monthly
Radioactivity[15]	pCi/L	grab[12]	annually
Remaining Attachment A Pollutants	µg/L	grab[12]	annually
Remaining Priority Pollutants	µg/L	grab[12]	annually

III. RECYCLED WATER USE MONITORING

The Permittee shall submit a quarterly report, in a tabular form, listing the users serviced during the quarter, the amount of recycled water delivered to each user (reported in both gallons and in acre-feet), and the use of the recycled water. A summary of these data shall also be included in the annual report.

IV. GROUNDWATER MONITORING

The Permittee shall establish suitable and accessible groundwater monitoring wells and develop a groundwater monitoring work plan within 180 days following the adoption of this Order. A minimum of two wells shall be monitored and there shall be at least one well up-gradient and one well down-gradient of the recycled water storage ponds. Groundwater monitoring shall also provide background conditions in the groundwater basin, indicate the direction of groundwater flow, and specify the depth to groundwater for each monitoring well.

14 Chlorine residual concentration shall be monitored and recorded at a point after the final chlorine contact basins.

15 Radionuclides to be monitored are: Combined Radium-226 and Radium-228, Gross Alpha particle activity (excluding radon and uranium), Uranium, Strontium-90, Tritium, and Gross Beta.

The following shall constitute the groundwater monitoring program:

TABLE M2. GROUNDWATER MONITORING

Constituent	Units	Type of Sample	Minimum Frequency of Analysis[16]
Water Level Elevation[17]	feet	---	~~quarterly~~semianually
Total Coliform	MPN/100ml	grab	~~quarterly~~semianually
Total Dissolved Solids	mg/L	grab	~~quarterly~~semianually
Chloride	mg/L	grab	~~quarterly~~semianually
Sulfate	mg/L	grab	~~quarterly~~semianually
Boron	mg/L	grab	~~quarterly~~semianually
Nitrate-N	mg/L	grab	~~quarterly~~semianually
Nitrite-N	mg/L	grab	~~quarterly~~semianually
Total Organic Carbon	mg/L	grab	~~quarterly~~semianually
Remaining Attachment A Pollutants	mg/L	grab	annually

V. GENERAL REPORTING REQUIREMENTS

The Permittee shall submit all reports to the Regional Water Board and DDW by the dates indicated below. All monitoring and annual summary reports must be addressed to the Regional Water Board, Attention: Information Technology Unit. Reference the reports to Compliance File No. CI-0821 to facilitate routing to the appropriate staff and file.

1. Quarterly Monitoring Reports

A. These reports shall include, at a minimum, the following information:

i. The volume of the recycled water used. If no recycled water is used during the quarter, the report shall so state.

[16] After two years the Permittee may propose a reduced groundwater monitoring schedule, or elimination of the groundwater monitoring program completely, based on data collected during that period. The rationale used to determine the request for a ~~reduced~~ modified ~~—~~groundwater monitoring program must be stated, and is subject to the Regional Water Board's approval.

[17] Water level elevations must be measured to the nearest 0.01 feet, and referenced to mean sea level (MSL).

ii. A table listing the users serviced during the quarter, the amount of recycled water delivered to each user (reported in both gallons and in acre-feet), and the use of the recycled water.

iii. The date and time of sampling and analyses.

iv. All analytical results of samples collected during the monitoring period of the recycled water and groundwater.

v. The monitoring report shall specify the USEPA analytical method used, the method detection limit (MDL), and the RDL for each constituent analyzed.

vi. Records of any operational problems, plant upset(s), equipment breakdowns or malfunctions, and any diversion(s) of off-specification recycled water and the location(s) of final disposal.

vii. Discussion of compliance, noncompliance, or violation of requirements.

viii. All corrective or preventive action(s) taken or planned with a schedule of implementation, if any.

B. For the purpose of reporting compliance with numeric limitations, analytical data shall be reported using the following reporting protocols:

i. Sample results greater than or equal to the RDL must be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample);

ii. Sample results less than the RDL but greater than or equal to the laboratory's method detection limit must be reported as "Detected but Not Quantified", or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."); or

iii. Sample results less than the laboratory's MDL must be reported as "Not Detected", or ND.

C. If the Permittee samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) more frequently than required in this MRP using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.

D. The Regional Water Board may request supporting documentation, such as daily logs of operations.

2. Annual Reports

A. Tabular summaries of the monitoring data obtained during the previous calendar year.

B. A table listing the users serviced during the year, the amount of recycled water delivered to each user (reported in both gallons and in acre-feet), and the use of the recycled water.

C. A discussion of the compliance record and corrective or preventive action(s) taken or planned to bring the recycled water into full compliance with the requirements in this Order.

D. A description of any changes and anticipated changes, including any impacts in operation of any unit processes or facilities shall be provided.

E. A list of the analytical methods employed for each test and associated laboratory quality assurance/quality control procedures shall be included. The report shall re-state, for the record, the laboratories used by the Permittee to monitor compliance with this Order, their status of certification, and a summary of performance.

F. A list of current operating personnel, their responsibilities, and their corresponding grade and date of certification.

G. The date of the facility's Operation and Maintenance (O&M) Management Plan, the date the plan was last reviewed, and whether or not the plan is complete and valid for the current facilities.

3. Report Submittal Dates

A. The Permittee shall submit the required reports to the Regional Water Board and to DDW. The reports shall be received on the dates indicated as follows:

i. **Quarterly Monitoring Reports** shall be received by the 15th day of the second month following the end of each quarterly monitoring period accord. The first Quarterly Monitoring Report under this program shall be received at the Regional Water Board and DDW by August 15, 2015, covering the monitoring period from April 1 to June 30, 2015.

Table M1 Quarterly Report Periods and Due Dates

Reporting Period	Report Due
January – March	May 15th
April – June	August 15th
July – September	November 15th
October – December	February 15th

ii. The **Annual Summary Monitoring Report** shall be received by April 15th

of each year. The first Annual Summary Report under this program shall be received at the Regional Water Board and DDW by April 15, 2016, covering the monitoring period of year 2015.

4. Electronic Monitoring

A. The Regional Water Board requires the Permittee to submit signed and certified self-monitoring reports (SMRs). Paper SMRs should be converted to a Portable Document Format (PDF). Documents that are less than 10 megabytes (MB) should be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed below:

California Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA90013
Attention: Information Technology Unit

Permittees who have been certified to only submit electronic SMRs (eSMRs) to the California Integrated Water Quality System (CIWQS) should continue doing so, as previously required.

Reference the reports to Compliance File No. CI-0821 to facilitate routing to the appropriate staff and file.

B. Reports to DDW may be submitted:

i. Via email to the following address if they are in PDF format and they are less than or equal to 10 MB: Kurt.Souza@waterboards.ca.gov .

ii. Via hard copies to the following address if they are greater 10 MB or less:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15th Floor Sacramento, CA 95814

6. Summary of Non-compliance

All monitoring reports shall contain a separate section titled “Summary of Non-Compliance” that discusses the compliance record and corrective actions taken or planned to bring the reuse into full compliance with this Order. This section shall clearly list all instances of non-compliance. For every item where the requirements are not met, the Permittee shall submit a statement of the actions undertaken or proposed that will bring the recycled water program into full compliance with requirements at the earliest possible time and a timetable for implementation of the corrective measures.

7. Monitoring reports shall be signed by either the principal Executive Officer or ranking elected official. A duly authorized representative of the aforementioned signatories may sign documents if all of the following are true:

   A. An authorization is made in writing by the signatory;

   B. The authorization specifies the representative as either an individual or position having responsibility for the overall operation of the regulated facility or activity; and,

   C. The written authorization is submitted to the Executive Officer of this Regional Water Board.

8. The monitoring report shall contain the following completed declaration:

   "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments thereto; and that, based on my inquiry of the 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."

   Executed on the day of _____ at _____

   _____ Signature
   _____ Title

9. The Permittee shall retain records of all monitoring information, including all calibration and maintenance, monitoring instrumentation, and copies of all reports required by this Order, for a period of at least three (3) years from the date of sampling measurement or report. This period may be extended by request of the Regional Water Board or DDW at any time and shall be extended during the course of any unresolved litigation regarding the regulated activity.

10. Records of monitoring information shall include:

    A. The date, exact place, and time of sampling or measurements;

    B. The individual(s) who performed the sampling or measurements;

    C. The date(s) analyses were performed;

    D. The individual(s) who performed the analysis;

    E. The analytical techniques or methods used; and

    F. The results of such analyses.

11. The Permittee shall submit to the Regional Water Board, together with the first

monitoring report required by this Order, a list of all chemicals and proprietary additives which could affect the quality of the recycled water, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly. An annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used in the treatment process shall be included in the annual report.

Ordered by:

_____
Samuel Unger, P.E.
Executive Officer

Date: February 12, 2015

/SWebb

ATTACHMENT A - MAXIMUM CONTAMINANT LEVELS (MCLS)

These pollutants shall be analyzed at least annually, or more frequently if specified in the Monitoring and Reporting Program of Order No. R4-2015-XXXX. However, if the annual test result exceeds the corresponding MCL listed below, then the Camrosa Water District (CWD) shall perform accelerated monthly effluent monitoring for the target chemicals for two or more consecutive months until the MCL is no longer exceeded, at which point CWD may resume the regular frequency of testing. The MCLs in this list serve as triggers for accelerated monitoring, not as effluent limitations.

TABLE A1 – Concentrations of Primary MCLs

Constituents	Units	Monthly Average
Aluminum	µg/L	1000
Antimony	µg/L	6
Arsenic	µg/L	10
Barium	µg/L	1000
Beryllium	µg/L	4
Cadmium	µg/L	5
Total Chromium	µg/L	50
Chromium VI	µg/L	10
Cyanide	µg/L	150
Fluoride	µg/L	2000
Mercury	µg/L	2
Nickel	µg/L	100
Perchlorate	µg/L	6
Selenium	µg/L	50
Thallium	µg/L	2
Copper	µg/L	1300
Lead	µg/L	15
Benzene	µg/L	1
Carbon Tetrachloride	µg/L	0.5
1,2-Dichlorobenzene	µg/L	600
1,4-Dichlorobenzene	µg/L	5
1,1-Dichloroethane	µg/L	5
1,2-Dichloroethane (1,2-DCA)	µg/L	0.5
1,1-Dichloroethylene (1,1-DCE)	µg/L	6
Cis-1,2-Dichloroethylene	µg/L	6
Trans-1,2-Dichloroethylene	µg/L	10
Dichloromethane	µg/L	5
1,2-Dichloropropane	µg/L	5
1,3-Dichloropropene	µg/L	0.5
Ethylbenzene	µg/L	300
Methyl-tert-butyl-ether (MTBE)	µg/L	13
Monochlorobenzene	µg/L	70
Styrene	µg/L	100
1,1,2,2-Tetrachloroethane	µg/L	1
Tetrachloroethylene (PCE)	µg/L	5
Toluene	µg/L	150

TABLE A1 – Concentrations of Primary MCLs		
Constituents	**Units**	**Monthly Average**
1,2,4-Trichlorobenzene	µg/L	5
1,1,1-Trichloroethane	µg/L	200
1,1,2-Trichloroethane	µg/L	5
Trichloroethylene (TCE)	µg/L	5
Trichlorofluoromethane	µg/L	150
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/L	1200
Vinyl Chloride	µg/L	0.5
Xylenes (m,p)	µg/L	1750[18]
Alachlor	µg/L	2
Atrazine	µg/L	1
Bentazon	µg/L	18
Benzo(a)pyrene	µg/L	0.2
Carbofuran	µg/L	18
Chlordane	µg/L	0.1
Dalapon	µg/L	200
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	0.2
2,4-Dichlorophenoxyacetic acid (2,4-D)	µg/L	70
Di(2-ethylhexyl)adipate	µg/L	400
Di(2-ethylhexyl)phthalate (DEHP)	µg/L	4
Dinoseb	µg/L	7
Diquat	µg/L	20
Endrin	µg/L	2
Endothall	µg/L	100
Ethylene Dibromide (EDB)	µg/L	0.05
Glyphosate	µg/L	700
Heptachlor	µg/L	0.01
Heptachlor epoxide	µg/L	0.01
Hexachlorobenzene	µg/L	1
Hexachlorocyclopentadiene	µg/L	50
Gamma BHC (Lindane)	µg/L	0.2
Methoxychlor	µg/L	30
Molinate	µg/L	20
Oxamyl	µg/L	50
Pentachlorophenol	µg/L	1
Picloram	µg/L	500
Polychlorinated Biphenyls (PCBs)	µg/L	0.5
Simazine	µg/L	4
2,4,5-TP (Silvex)	µg/L	50
2,3,7,8-TCDD (Dioxin)	µg/L	0.00003
Thiobencarb	µg/L	70
Toxaphene	µg/L	3

[18] The MCL is for either a single isomer or the sum of the isomers.

TABLE A2 – Concentrations of Secondary MCLs		
Constituents	**Units**	**Monthly Average**
Copper	µg/L	1000
Foaming agents (MBAS)	µg/L	500
Iron	µg/L	300
Manganese	µg/L	50
Silver	µg/L	100
Zinc	µg/L	5000

TABLE A3 – Disinfection Byproducts MCLs		
Constituents	**Units**	**Monthly Average**
Total Trihalomethanes (TTHMs)* • Bromodichloromethane • Bromoform • Chloroform • Dibromochloromethane	µg/L	80
Haloacetic acid (five) (HAA5) • Monochloroacetic acid • Dichloroacetic acid • Trichloroacetic acid • Monobromoacetic acid • Dibromoacetic acid	µg/L	60
Bromate	µg/L	10
Chlorite	µg/L	1000

TABLE A4 – Radionuclide MCLs		
Constituent	**Units**	**Monthly Average**
Gross Alpha particle activity (excluding radon and uranium)	pCi/L	15
Gross Beta particle activity (excluding radon and uranium)	mrem/yr	4
Radium-226 + Radium-228	pCi/L	5
Strontium-90	pCi/L	8
Tritium	pCi/L	20,000
Uranium	pCi/L	20

ATTACHMENT B - STANDARD PROVISIONS

APPLICABLE TO WASTE DISCHARGE REQUIREMENTS

1. DUTY TO COMPLY

The Permittee must comply with all conditions of these waste discharge requirements. A responsible party has been designated in the Order for this project, and is legally bound to maintain the monitoring program and permit. Violations may result in enforcement actions, including Regional Water Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Water Board. [California Water Code (CWC) Sections 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350].

2. GENERAL PROHIBITION

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the CWC. [Health and Safety Code (H&SC) Section 5411, CWC Section 13263].

3. AVAILABILITY

A copy of these waste discharge requirements shall be maintained at the discharge facility and be available at all times to operating personnel. [CWC Section 13263].

4. CHANGE IN OWNERSHIP

The Permittee must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new permittee. The notice must include a written agreement between the existing and new permittee containing a specific date for the transfer of this Order's responsibility and coverage between the current permittee and the new permittee. This agreement shall include an acknowledgement that the existing permittee is liable for violation up to the transfer date and that the new permittee is liable from the transfer date on. [CWC Sections 13267 and 13263].

5. CHANGE IN DISCHARGE

In the event of a material change in the character, location, or volume of a discharge, the Permittee shall file with this Regional Water Board a new Report of Waste Discharge. [CWC Section 13260 (c)]. A material change includes, but is not limited to, the following:

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

b. Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.

c. Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.

d. Increase in flow beyond that specified in the waste discharge requirements.

e. Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CCR Title 23 Section 2210].

6. REVISION

These waste discharge requirements are subject to review and revision by the Regional Water Board. [CCR Section 13263].

7. TERMINATION

Where the Permittee 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 Regional Water Board, it shall promptly submit such facts or information. [CWC Sections 13260 and13267].

8. VESTED RIGHTS

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

9. SEVERABILITY

Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected. [CWC Section 921].

10. OPERATION AND MAINTENANCE

The Permittee 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 Permittee 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 auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order. [CWC Section 13263(f)].

11. HAZARDOUS RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Water Board or the appropriate Regional 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 discharge is in violation of a prohibition in the applicable Water Quality Control plan. [CWC Section 13271(a)].

12. PETROLEUM RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any water of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or

other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This provision does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan. [CWC Section 13272].

13. ENTRY AND INSPECTION

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

a. Enter upon the Permittee's processes 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 California Water Code, any substances or parameters at any location. [CWC Section 13267].

14. MONITORING PROGRAM AND DEVICES

The Permittee shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted. [CWC Section 13267].

All monitoring instruments and devices used by the discharge to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the Permittee shall submit to the Executive Officer a written statement, signed by a registered professional engineer, certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

Unless otherwise permitted by the Regional Water Board Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The regional Board Executive Officer may allow use of an uncertified laboratory under exceptional circumstances, such as when the closest laboratory to the monitoring location is outside the State boundaries and therefore not subject to certification. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" [40 CFR Part 136] promulgated by the U.S. Environmental Protection Agency. [CCR Title 23, Section 2230].

15. TREATMENT FAILURE

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

16. DISCHARGE TO NAVIGABLE WATERS

Any person discharging or proposing to discharge to navigable waters from a point source (except for discharge of dredged or fill material subject to section 404 of the Clean Water Act and discharge subject to general National Pollutant Discharge Elimination System (NPDES) permit) must file an NPDES permit application with the Regional Water Board. [CCR Title 2 Section 22357].

17. ENDANGERMENT TO HEALTH AND ENVIRONMENT

The Permittee shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Officer within 24 hours:

a. Any bypass from any portion of the treatment facility;

b. Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances; and,

c. Any treatment plant upset which causes the effluent limitation of this order to be exceeded. [CWC Sections 13263 and 13267].

18. MAINTENANCE OF RECORDS

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

Records of monitoring information shall include:

a. The date, exact place, an time of sampling or measurements;

b. The individual(s) who performed the sampling or measurements;

c. The date(s) analyses were performed;

d. The individual(s) who performed the analyses;

e. The analytical techniques or method used; and

f. The results of such analyses.

19. SIGNATORY REQUIREMENT

a. All application reports or information to be submitted to the Executive Officer shall be signed and certified as follows:

i. For a corporation – by a principle executive officer or at least the level of vice president;

ii. For a partnership or sole proprietorship – by a general partner or the proprietor, respectively; And,

iii. For a municipality, state, federal or other public agency – by either a principal executive officer or ranking elected official.

b. A duly authorized representative of a person designated in paragraph (a) of this provision may sign documents if:

i. The authorization is made in writing by a person described in paragraph (a) of this provision;

ii. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and,

iii. The written authorization is submitted to the Executive Officer.

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.[CWC Sections 13263, 13267, and 13268]."

20. OPERATOR CERTIFICATION

Supervisors and operators of municipal wastewater treatment plants and privately owned facilities regulated by the PUC, used in the treatment or reclamation of sewage and industrial waste shall possess a certificate of appropriate grade in accordance with Title 23, California Code of Regulation Section 3680. State Water Boards may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment plant operator, the State Water Board may approve use of water treatment plant operator of appropriate grade certified by the State Department of Health Services where reclamation is involved.

Each plant shall be operated and maintained in accordance with the operation and maintenance manual prepared by the municipality through Clean Water Grant Program. [CWC Title 23, Section 2233(d)].

ADDITIONAL PROVISIONS APPLICABLE TO PUBLICLY OWNED TREATMENT WORKS' ADEQUATE CAPACITY

21. Whenever a publicly owned wastewater treatment plant will reach capacity within four years the Permittee shall notify the Regional Water Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The Permittee must demonstrate that adequate steps are being taken to address the capacity problem. The Permittee shall submit a technical report to the Regional Water Board showing flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Water Board, or within 120 days after receipt of notification from the Regional Water Board, of a finding that the treatment plant will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Water Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Water Board itself. [CCR Title 23, Section 2232].