

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

TIME SCHEDULE ORDER (TSO) NO. R4-2014-XXXX

**REQUIRING CAMROSA WATER DISTRICT
(CAMROSA WATER RECLAMATION FACILITY)
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN
ORDER NO. R4-2014-XXXX
(NPDES PERMIT NO. CA0059501)**

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

1. Camrosa Water District (hereafter CWD or Permittee) owns and operates the Camrosa Water Reclamation Facility (hereafter Camrosa WRF), a wastewater treatment plant located at 1900 S. Lewis Road, Camarillo, California.
2. The Camrosa WRF discharges tertiary-treated wastewater under waste discharge requirements contained in Order No. R4-2003-0156, adopted by this Regional Water Board on December 04, 2003. Order No. R4-2003-0156 serves as a permit under the National Pollutant Discharge Elimination System (NPDES No. CA0059501) and regulates the discharge of treated wastewater to Calleguas Creek, a water of the United States and the State of California, within the Calleguas Creek Watershed (CCW). Order No. R4-2003-0156 expired on November 10, 2008, but was administratively extended. On November 6, 2014, the Regional Water Board adopted Order No. R4-2014-XXXX, which renewed the waste discharge requirements and NPDES permit for the Camrosa WRF. Order No. R4-2014-XXXX becomes effective on January 1, 2015.
3. Eleven of the fourteen reaches of the CCW were identified on the 2002 and the 2006 Clean Water Act (CWA) section 303(d) Lists of water quality limited segments as impaired due to elevated levels of salts including boron, chloride, sulfate, or total dissolved solids (TDS). The reach to which CWD discharges remains on the most recent CWA section 303(d) List, *2010 California List of Water Quality Limited Segments (2010 303(d) List)*, which was approved by the United States Environmental Protection Agency (USEPA) on November 12, 2010. It is grouped under Category 4A of the 2010 303(d) List because the impairments are being addressed by a USEPA-approved TMDL. Salts primarily impact two beneficial uses: agricultural supply (AGR) and ground water recharge (GWR).
4. Order No. R4-2003-0156 prescribed the following final effluent limitations for total dissolved solids (TDS) and chloride:

Constituent	Units	Effluent Limitations	
		Monthly Average	Daily Maximum
Total dissolved solids (TDS)	mg/L	850	--
	lbs/day	10,633	--
Chloride	lbs/day	--	1500

The final effluent limitations for TDS were based upon Water Quality Objectives in the *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) for the protection of the AGR and GWR beneficial uses. The final effluent limitation for chloride was based upon the Waste Load Allocations (WLAs) promulgated by USEPA in 2002 in the *Calleguas Creek Chloride Total Maximum Daily Load*.

5. Also on December 04, 2003, concurrent with adoption of Order No. R4-2003-0156, this Regional Water Board adopted Time Schedule Order (TSO) No. R4-2003-0157, which prescribed the following interim effluent limitation for chloride for the Camrosa WRF:

Constituent	Units	Interim Effluent Limitations	
		Monthly Average	Daily Maximum
Chloride	mg/L	--	190

6. On January 02, 2004, the CWD filed a petition with the State Water Resources Control Board (State Water Board) seeking, in part, review of the chloride effluent limitations in Order No. R4-2003-0156 and TSO No. R4-2003-0157. CWD later requested that the State Water Board issue a stay of those limitations.
7. On July 06, 2004, CWD and this Regional Water Board entered into a stipulation entitled *Stipulation for Further Order Issuing Stay*, which stayed the final chloride effluent limitations in Order No. R4-2003-0156 and the chloride interim effluent limitations in TSO No. R4-2003-0157. On July 15, 2004, the State Water Board adopted Order WQO 2004-0011, which approved the July 06, 2004 stipulation and held the petition in abeyance for three years (until July 06, 2007). The State Water Board has continuously granted extensions of the abeyance; as a result, the petition has not been dismissed. Upon the effective date of Order No. R4-2014-XXXX, the stay for the chloride effluent limitations in Order No. R4-2003-0156 and TSO No. R4-2003-0157 automatically dissolves.
8. On October 4, 2007, the Regional Water Board adopted Resolution No. R4-2007-016, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Boron, Chloride, Sulfate, and TDS (Salts) for Calleguas Creek Watershed (Salts TMDL)*. The *Salts TMDL*, which became effective on December 2, 2008, contains the following interim and final WLAs for the Camrosa WRF:

Constituent	Interim Monthly Average WLA (mg/L)	Final WLA (lbs/day) ^{1,2}
TDS	N/A	850* Q - AF
Sulfate	N/A	250* Q - AF
Chloride	N/A	150* Q - AF
Boron	N/A	N/A

¹ AF represents the adjustment factor, which equals the difference between the minimum salts export requirement and the actual salts export.

9. Order No. R4-2014-XXXX prescribes the following final effluent limitations for TDS and chloride based upon the *Salts TMDL*. The wet weather chloride average monthly effluent limitation is a new concentration-based effluent limit.

Parameter	Units	Final Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Total dissolved solids (dry weather ³)	lbs/day	10,633 ⁴	--	--
Total dissolved solids (wet weather ⁵)	mg/L	850	--	--
Chloride (dry weather ²)	lbs/day	1,876 ⁵	--	--
Chloride (wet weather ⁴)	mg/L	150	--	--

10. On August 25, 2014, CWD submitted a letter to the Regional Water Board requesting a TSO to provide higher interim effluent limitations for TDS and chloride. The CWD provided the following reasons to justify their request:
- CWD's current wastewater treatment processes are unable to treat dissolved salts, such as TDS and chloride.
 - The influent potable water has changed in composition as a result of the current drought conditions.

² Q represents the POTW flow at the time the water quality measurement is collected and a conversion factor to lbs/day based on the units of measurement for the flow.

³ Dry weather is defined in the *Salts TMDL* as the condition when the flows in the receiving water are below the 86th percentile flow, as explained in Part VII.O. of Order No. R4-2014-XXXX.

⁴ These final effluent limitations are consistent with the following *Salts TMDL* Waste Load Allocations: (850 x Q – AF) for TDS; and (150xQ – AF) for chloride, where:

Q represents the POTW effluent flow at the time the water quality measurement is collected and a conversion factor to lbs/day based on the units of measure for the flow.

AF represents the adjustment factor, which equals the difference between the minimum salts export requirement and the actual salts export. The minimum salts export requirement for Chloride = 1,060 lbs/day and for TDS = 7,920 lbs/day. The AF term is equal to zero since the Regional Water Board has not approved an AF for the facility. As a result, the AF term drops out of the equation, and the final effluent limitations are expressed as follows:

$$\text{Chloride, lbs/day} = 150 \times Q = 150 \times 1.5 \times 8.34 = 1,876$$

$$\text{TDS, lbs/day} = 850 \times Q = 850 \times 1.5 \times 8.34 = 10,633$$

⁵ Wet weather is defined in the *Salts TMDL* as the condition when the flows in the receiving water are greater than or equal to the 86th percentile flow, as explained in section VII.O of Order No. R4-2014-XXXX.

- c. CWD and other stakeholders within CCW have developed regional solution strategies to address the salt accumulation problem that is impairing surface waters, such as:
 - i. finding locations for brackish groundwater treatment facilities,
 - ii. constructing a regional salinity management pipeline also known as a “brine line”, and
 - iii. increasing recycled water usage.
 - d. CWD has completed the following projects:
 - i. Built the Round Mountain Desalter to treat groundwater for potable use.
 - ii. Created a connection between the Round Mountain Desalter and the Calleguas Regional Salinity Management Pipeline to remove salts from the watershed.
11. CWD expressed concern that the Camrosa WRF’s effluent concentrations may exceed the final effluent limitations for chloride and TDS due to the new supply of Colorado River water, which is higher in salt content than State Water Project water. CWD also requires additional time to operate the Round Mountain Desalter and assess the impact this project will have on the quality of the final effluent from the Camrosa WRF. CWD submitted the following supporting information as part of its request:
- a. Tabulated effluent water quality data for TDS and chloride from May 2009 through July 2014.
 - b. Water quality data for its blended potable water supply (consisting of local groundwater from wells and imported water from the Metropolitan Water District (MWD), the only sources of potable water available to CWD) that showed a gradual upward trend in the concentration of TDS and chloride.
 - c. Documentation that the imported water supply would change from 100% State Project water to 20% Colorado River water and 80% State Project water.
 - d. Additional final effluent data for TDS and chloride from May 2009 through July 2014.
 - e. Milestones and completion dates for capital improvement projects, operation, and monitoring, which will take longer than 30 days to install, put into operation, or complete including:
 - i. Covering the Camrosa WRF’s chlorine contact chamber to reduce chlorine demand due to ultraviolet (UV) degradation.
 - ii. Operation and maintenance of the Round Mountain Desalter.

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- iii. Monitoring salt exports as a result of the Round Mountain Desalter and the impact these exports have on the final effluent from the Camrosa WRF in time.
12. The concentrations of chloride and TDS in CWD's potable water supply have increased since the time that the *Salts TMDL* was developed. The Regional Water Board previously directed its staff to pursue alternatives with the Permittee to resolve salts issues while implementing the regional salinity management pipeline solution.
13. CWD's conditions are unique because:
- Its discharge is intermittent and the Camrosa WRF was not assigned interim WLAs in the *Salts TMDL*;
 - Its discharge is located a few miles upstream of a tidally-influenced reach of Calleguas Creek;
 - CWD worked effectively for many years to develop a regional solution to remedy salt impairments; and
 - The regional solution involves desalting groundwater and building a regional brine line that will resolve surface water impairments as well as improve groundwater quality in the watershed.
14. Section 13300 of the California Water Code (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."
15. Based on effluent monitoring data and potable water data, the Permittee is not able to consistently comply with the final effluent limitations for TDS and chloride in Order No. R4-2014-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.
16. Water Code section 13385, subdivisions (h) and (i), require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. Section 13385(j)(3) exempts violations of an effluent limitation from mandatory minimum penalties "where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, *if all of the [specified] requirements are met.*" (emphasis added).

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17. In accordance with CWC section 13385(j)(3)(B)(i), the Regional Water Board finds that: (a) the final wet weather chloride average monthly effluent limitation is a new concentration-based effluent limit in Order No. R4-2014-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.
18. In accordance with CWC section 13385(j)(3)(B)(iii), the Regional Water Board finds that: (a) unanticipated changes in the quality of the municipal or industrial water supply available to the Permittee are the cause of unavoidable changes in the composition of the waste discharge, (b) the changes in the composition of the waste discharge are the cause of the inability to comply with the final effluent limitations for TDS and chloride, (c) no alternative water supply is reasonably available to the Permittee, and (d) new or modified measures to control the composition of the waste discharge cannot be designed, installed, and put into operation within 30 calendar days.
19. Since the time schedule for completion of the actions necessary to bring the waste discharge into compliance exceeds one year from the effective date of this TSO, this TSO includes interim requirements and the dates for their achievement. The interim requirements include both interim effluent limitations for TDS and chloride and actions and milestones leading to compliance with the final effluent limitations for these pollutants. This TSO does not exceed five years.
20. This TSO establishes interim effluent limits for TDS and chloride, and requires the Permittee to undertake specific actions to put the Permittee on the path towards compliance with the final effluent limitations for TDS and chloride in Order No. R4-2014-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 TDS and chloride. The Permittee is on a path to compliance via the regional salinity management pipeline and associated facilities.
21. The interim monthly average effluent limits for TDS and chloride prescribed in this TSO are performance-based values. The ninety-fifth percentile derived from final effluent data, using MINITAB (the same statistical software used in the *Salts TMDL* development) was compared with the maximum concentrations expected with the increased salts concentration of the influent. The adjusted maximum values in the effluent were incorporated into this TSO since the Camrosa WRF may not be able to comply with the effluent limits based on the 95th percentile.
22. CWC section 13385(j)(3)(D) requires the Permittee to prepare and implement a Pollution Prevention Plan (PPP) pursuant to CWC section 13263.3. Therefore, a PPP will be necessary for TDS and chloride.
23. A TSO 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 limits for TDS and chloride. These capital improvement projects cannot be designed, installed, and put into operation within 30 calendar days. The temporary TDS and chloride

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exceedances allowed by this TSO are in the public interest given the significant environmental benefits associated with promptly achieving compliance with the final effluent limitations for these pollutants.

24. Pursuant to CWC section 13385(j)(3), full compliance with the requirements of this TSO exempts the Permittee from mandatory minimum penalties only for violations of the final effluent limitations for TDS and chloride in Order No. R4-2014-XXXX that occur after the effective date of this TSO.
25. This TSO concerns an existing facility and does not significantly alter the status with respect to the facility. This TSO is also being taken for the protection of the environment. Therefore, issuance of this TSO is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et.seq.) in accordance with sections 15301 and 15321(a)(2) of Title 14 of the California Code of Regulations.
26. The Regional Water Board has notified the Permittee and interested agencies and persons of its intent to issue this TSO concerning compliance with waste discharge requirements. The Regional Water Board, in a public hearing, heard and considered all testimony pertinent to this matter.
27. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and CCR, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the Regional Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to CWC section 13300, Camrosa Water District, as owner and operator of the Camrosa WRF, shall comply with the requirements listed below to ensure its discharges comply with the final effluent limitations for TDS and chloride contained in Order No. R4-2014-XXXX:

1. From January 1, 2015 to December 31, 2019, the Permittee shall comply with the following interim effluent limits for TDS and chloride, which apply year round:

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Constituent	Units	Effluent Limitations	
		Monthly Average	Daily Maximum
TDS	mg/L	980 ⁷	--
	lbs/day ⁶	12,259	--
Chloride	mg/L	251 ⁷	--
	lbs/day ⁶	3,140	--

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.

- The Permittee shall complete the following actions and milestones, including capital improvement and monitoring projects, according to the schedule proposed by CWD in its letter dated August 25, 2014 as follows:

Item	Completion Date
Continue to achieve 100% recycled water use <u>recycle up to 100% final effluent.</u>	Ongoing
Divert flow from the Conejo Creek for irrigation with the development of a diversion structure.	Ongoing
Improve water supply through operation and maintenance of the Round Mountain Desalter with its connection to the Calleguas Regional Salinity Management Pipeline	Startup: September 2014 Operation and Maintenance: Ongoing
Cover the chlorine contact chamber and optimize dosing	September 2016
Evaluate the effectiveness of the Round Mountain Desalter with its connection to the Calleguas Regional Salinity Management Pipeline in exporting salts from the watershed and reducing salts concentrations in the effluent	Annually

- The Permittee shall achieve full compliance with the final effluent limitations for TDS and chloride in Order No. R4-2014-XXXX as soon as possible, but no later than January 1, 2020.
- The Permittee shall submit a Pollution Prevention Plan (PPP) work plan, with the time schedule for implementation, for approval of the Executive Officer no later than February 06, 2015, pursuant to CWC section 13263.3.

⁶ The mass emission rates are based on the existing plant design flow rate of 1.5 million gallons per day (mgd), and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = mass emission rate (lbs/day). During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

⁷ This interim effluent limitation is based on the maximum effluent concentration (MEC) from ~~May 2009 through July 2014~~2013 and the average import before and after the imported water quality change.

5. The Permittee shall submit annual progress reports of efforts taken by the Permittee towards achieving compliance with the final effluent limits for TDS and chloride in Order No. R4-2014-XXXX. The reports shall summarize the progress to date, activities conducted during that quarter, and the activities planned for the upcoming quarters. The reports shall also state whether or not CWD was in compliance with the interim effluent limitations for TDS and chloride during the reporting period. The report shall also specify the potable water supply chloride and TDS concentration. Each annual report shall be received by the Regional Water Board by April 15 of each year. The first progress report shall be received by the Regional Water Board by April 15, 2016, and will cover the months of January 2015 through December 2015.
6. All technical and monitoring reports required under this TSO are required pursuant to CWC section 13267 and 13383. The Regional Water Board needs the required information in order to determine compliance with this TSO and Order No. R4-2014-XXXX. The Regional Water Board believes that the burdens, including the costs, of these reports bear a reasonable relationship to the needs for the reports and the benefits to be obtained from the reports.
7. Any person signing a document submitted under this TSO shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
8. If the Permittee fails to comply with any provision of this TSO, the Regional Water Board may take any further action authorized by law. The Executive Officer, or his/her delegee, is authorized to take appropriate enforcement action pursuant, but not limited to, CWC sections 13350 and 13385. The Regional Water Board may also refer any violations to the Attorney General for judicial enforcement, including injunction and civil monetary remedies.
9. All other provisions of NPDES Order No. R4-2014-XXXX not in conflict with this TSO are in full force and effect.
10. The Regional Water Board may reopen this TSO at its discretion or at the request of the Permittee, if warranted. Lack of progress towards compliance with this TSO may be cause for the Regional Water Board to modify the conditions of this TSO.
11. This TSO becomes effective on January 1, 2015. This TSO expires on December 31, 2019.

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I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on November 06, 2014.

Samuel Unger, P.E.
Executive Officer

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