

California Regional Water Quality Control Board
Santa Ana Region

September 16, 2010

ITEM: *10

SUBJECT: Amendment of Order No. R8-2007-0006, NPDES No. CA0105295, Waste Discharge and Producer/User Reclamation Requirements for the City of Rialto's Municipal Wastewater Treatment Plant – Order No. R8-2010-0034

DISCUSSION:

On March 2, 2007, the Regional Water Board adopted Order No. R8-2007-0006, NPDES No. CA0105295, prescribing Waste Discharge and Producer/User Reclamation Requirements for the City of Rialto's Municipal Wastewater Treatment Plant (RMWTP) for the discharge of tertiary treated wastewater to Reach 4 of the Santa Ana River and for the use of recycled water.

The RMWTP is owned by the City of Rialto and is operated by Veolia Water North America West, LLC, the City's contractor. The RMWTP treats approximately 12 million gallons per day of wastewater. Treatment includes preliminary, primary, secondary, and tertiary processes followed by disinfection using sodium hypochlorite and dechlorination using sodium bisulfite

Effluent Limitations and Discharge Specifications, Section IV.A.1.c.1 of Order No. R8-2007-0006, NPDES No. CA0105295, specifies, in part, the following:

- c. *TDS Limitations - The lower of the two total dissolved solids limits specified in 1) or 2), below, is the limit:*
- 1) *The 12-month flow weighted running average total dissolved solids concentration and mass emission rate shall not exceed 490 mg/l and 49,039 lbs/day¹, or*
 - 2) *The 12-month flow weighted running average total dissolved solids concentration shall not exceed the 12-month flow weighted average total dissolved solids concentration in the water supply by more than 250 mg/L²*

The limit specified in 1), above, is the lower of the two total dissolved solids (TDS) limits, and the City has routinely exceeded this limitation since shortly after the adoption of the order.

¹ Derived from 12 mgd x 8.34 x 490 mg/L.

² An exceedance of this limit shall not be considered a violation, provided it is due solely to chemical additions in the treatment process needed to meet waste discharge requirements or other valid regulatory requirements. TDS quality is used to evaluate the water supply mineral increment may be measured at influent or secondary effluent.

The Basin Plan recognizes that strict compliance with TDS limits may be difficult to achieve and it describes the regulatory approach the Regional Board uses to address such situations. Normally, the Board incorporates offset provisions in waste discharge requirements whereby Dischargers can implement an approved program to offset TDS discharges in excess of specified TDS limits, provided that the Discharger makes all reasonable efforts to improve the TDS quality of the water supply (and thereby, the wastewater). These offset provisions are normally included in waste discharge requirements where there is the possibility of violation. However, the offset provisions were not included in Order No. R8-2007-0006 based on monitoring data collected during the preceding five year period, which indicated that the City would be able to consistently comply with the TDS effluent limitations.

On September 15, 2009, the City of Rialto requested that Order No. R8-2007-0006, NPDES No. CA0105295, be amended to include the offset provisions that are specified in the Basin Plan. The City noted that their exceedances of the TDS limit were primarily due to the use of disinfection chemicals necessary to meet other limitations and provisions of the order.

This order will amend Order No. R-2007-0006 to include provisions that are consistent with the Basin Plan. The following shows the proposed changes to Order No. R8-2007-0006. Additions are **bold and highlighted**. Deletions are ~~stricken-out~~.

1. Effluent Limitations and Discharge Specifications IV.A.1.c. will be modified as follows:

c. *TDS Limitations - The lower of the two total dissolved solids limits specified in 1) or 2), below, is the limit. :*

1) *The 12-month running average total dissolved solids concentration and mass emission rate shall not exceed 490 mg/l and 49,039 lbs/day³, **respectively unless:***

(a) ***The Discharger demonstrates to the satisfaction of the Regional Board's Executive Officer that:***

i. ***Discharges in excess of the TDS limits are due to the quality of water supply sources utilized in the Discharger's service area, and that all reasonable steps, as agreed upon by the Executive Officer, have been taken to ensure that the best quality supplies are obtained and utilized in the Discharger's service area; or***

³ Derived from 12 mgd x 8.34 x 490 mg/L.

ii. *Discharges in excess of the TDS limits are due solely to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the increases; and*

(b) *The Discharger implements a plan, with the approval of the Executive Officer, to offset discharges in excess of the TDS limits. See Section VI.C.6., below.*

2. Provision VI.C.6. will be added as follows:

6. ***Other Special Provisions –~~Not Applicable~~***

TDS Offset Program

By December 31, 2010, the Discharger shall submit a proposed offset program and schedule of implementation for approval by the Regional Board Executive Officer. The proposed offset program shall include a compliance schedule that assures that offsets required to comply with effluent limitations will be implemented (i.e., the requisite offset(s) will be provided) as soon as possible but no later than December 31, 2011. Upon approval, the Discharger shall implement the offset program according to the approved schedule. The offset program shall account for TDS discharges in excess of the numeric limits specified in this Order that occur since March 2, 2007 and thereafter. Should any of the proposed offset mechanisms be discontinued or prove to be inadequate to provide requisite offset(s), the Discharger shall, no later than 30 days of discontinuance of any of the proposed offset program or finding of its inadequacy, propose an alternative offset program for approval by the Executive Officer. The Discharger shall implement the alternative offset program upon approval by the Executive Officer.

3. Subsection E of Attachment E, Section IX. - Other Monitoring Requirements, will be added as follows:

E. TDS Offset Program Monitoring and Reporting

Every quarter, the Discharger shall report the total salt removal accomplished pursuant to the offset program to demonstrate whether offset requirements are being met. The Discharger shall report quarterly a running balance of salt discharges compared to TDS removal. If offset is not occurring during the quarterly monitoring period, the quarterly report shall so state and identify when the offset will be achieved.

RECOMMENDATION:

Adopt Order No. R8-2010-0034, as presented.

COMMENT SOLICITATION:

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5)
State Water Resources Control Board, Office of the Chief Counsel – David Rice
California Department of Public Health, San Bernardino – Heather Collins
Santa Ana River Dischargers Association - Ed Filadelfia
Santa Ana Watershed Project Authority – Celeste Cantu/Mark Norton
Orange County Water District - Nira Yamachika
Inland Empire Waterkeeper – Autumn DeWoody
Natural Resources Defense Council - David Beckman

California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2010-0034
Amending Order No. R8-2007-0006, NPDES No. CA0105295
Waste Discharge and Producer/User Reclamation Requirements
for
City of Rialto
Municipal Wastewater Treatment Plant

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter, Board), finds that:

1. On March 2, 2007, the Regional Water Board adopted Order No. R8-2007-0006, NPDES No. CA0105295, prescribing Waste Discharge and Producer/User Reclamation Requirements for the City of Rialto's Municipal Wastewater Treatment Plant for the discharge of tertiary treated wastewater to Reach 4 of the Santa Ana River and for the use of recycled water.
2. Since the adoption of Order No. R8-2007-0006, the City of Rialto has routinely exceeded the 12-month average total dissolved solids limit of 490 mg/l specified in Effluent Limitations and Discharge Specifications IV.A.1.c.1.
3. The Basin Plan recognizes that strict compliance with TDS limits may be difficult to achieve and it describes the regulatory approach the Regional Board uses to address such situations. Normally, the Board incorporates offset provisions in waste discharge requirements whereby Dischargers can implement an approved program to offset TDS discharges in excess of specified TDS limits, provided that the Discharger makes all reasonable efforts to improve the TDS quality of the water supply (and thereby, the wastewater). The Basin Plan also recognizes that compliance with nitrogen limits may be problematic in some situations and stipulates that offset provisions may also be applied to nitrogen discharges. These offset provisions are normally included in waste discharge requirements where there is the possibility of violation of TDS (and/or nitrogen) limitations. These offset provisions were not included in Order No. R8-2007-0006 since monitoring data collected over the preceding five-year period indicated that the City would be able to consistently comply with the TDS effluent limitations.
4. On September 15, 2009, the City of Rialto requested that Order No. R8-2007-0006, NPDES No. CA0105295, be amended to include the offset provisions that are specified in the Basin Plan. The City noted that their exceedances of the TDS limit were primarily due to the use of disinfection chemicals necessary to meet other limitations and provisions of the order.
5. It is appropriate to amend Order No. R8-2007-0006 to include TDS offset provisions that are specified in the Basin Plan.

6. In accordance with Water Code Section 13389, amending the waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.
7. The Board has notified the discharger and other interested agencies and persons of its intent to amend waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.
8. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. R8-2007-0006 be amended as follows:

1. Effluent Limitations and Discharge Specifications IV.A.1.c. is replaced with the following:
 - "c. TDS Limitations - The lower of the two total dissolved solids (TDS) limits specified in (1) or (2), below, is the limit.
 - (1) The 12-month flow weighted running average TDS constituent concentration and mass emission rate shall not exceed 490 mg/L and 49,039 lbs/day⁶, respectively, unless:
 - (a) The Discharger demonstrates to the satisfaction of the Regional Board's Executive Officer that:
 - i. Discharges in excess of the TDS limits are due to the quality of water supply sources utilized in the Discharger's service area, and that all reasonable steps, as agreed upon by the Executive Officer, have been taken to ensure that the best quality supplies are obtained and utilized in the Discharger's service area; or
 - ii. Discharges in excess of the TDS limits are due solely to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the increases; and
 - (b) The Discharger implements a plan, with the approval of the Executive Officer, to offset discharges in excess of the TDS limits. See Section VI.C.6., below.

⁶ Derived from 12 mgd x 8.34 x 490 mg/L.

(2) The 12-month flow weighted running average TDS concentration shall not exceed the 12-month flow weighted running average TDS concentration in the water supply by more than 250 mg/L⁷."

2. Provision VI.C.6. is added, as follows:

"6. Other Special Provisions

TDS Offset Program

By December 31, 2010, the Discharger shall submit a proposed offset program and schedule of implementation for approval by the Regional Board Executive Officer. The proposed offset program shall include a compliance schedule that assures that offsets required to comply with effluent limitations will be implemented (i.e., the requisite offset(s) will be provided) as soon as possible, but no later than December 31, 2011. Upon approval, the Discharger shall implement the offset program according to the approved schedule. The offset program shall account for TDS discharges in excess of the numeric limits specified in this Order that occur since March 2, 2007, and thereafter. Should any of the proposed offset mechanisms be discontinued or prove to be inadequate to provide requisite offset(s), the Discharger shall, no later than 30 days of discontinuance of any of the proposed offset program or finding of its inadequacy, propose an alternative offset program for approval by the Executive Officer. The Discharger shall implement the alternative offset program upon approval by the Executive Officer."

3. Subsection E of Attachment E, Section IX. - Other Monitoring Requirements, is added as follows:

E. TDS Offset Program Monitoring and Reporting

Every quarter, the Discharger shall report the total salt removal accomplished pursuant to the offset program to demonstrate whether offset requirements are being met. The Discharger shall report quarterly a running balance of salt discharges compared to TDS removal. If offset is not occurring during the quarterly monitoring period, the quarterly report shall so state and identify when the offset will be achieved.

4. These amendments shall become effective upon the adoption of this Order.

⁷ An exceedance of this limit shall not be considered a violation, provided it is due solely to chemical additions in the treatment process needed to meet waste discharge requirements or other valid regulatory requirements. TDS quality is used to evaluate the water supply mineral increment may be measured at influent or secondary effluent.

5. All other conditions and requirements of Order No. R8-2007-0006 shall remain unchanged.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that the forgoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 16, 2010.

TENTATIVE

Kurt V. Berchtold, Executive Officer