## State of California California Regional Water Quality Control Board, Los Angeles Region

## RESOLUTION NO. R14-XXX October 9, 2014

Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate an Averaging Period for Chloride Water Quality Objectives in Reaches 4B, 5 and 6; Incorporate New Site Specific Objectives for Chloride in Reaches 5 and 6; and Revise the Total Maximum Daily Load for Chloride in the Upper Santa Clara River

## WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board), finds that:

- 1. The federal Clean Water Act (CWA) requires the Regional Water Board to establish water quality standards for each waterbody within its region. Water quality standards consist of beneficial uses, water quality objectives that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to protect high quality waters. Waterbodies that do not meet water quality standards are considered impaired.
- 2. Section 303(d)(1) of the CWA requires each state to identify the waters within its boundaries that do not meet water quality standards. Those waters are placed on the state's "303(d) List" or "Impaired Waters List." For each listed water, the state is required to establish the Total Maximum Daily Load (TMDL) of each pollutant impairing the water quality in that waterbody.
- 3. Reaches 5 and 6 of the Upper Santa Clara River (USCR) have appeared on the 303(d) List since 1998. Several beneficial uses of the USCR, including agricultural supply water (AGR), groundwater recharge (GWR), and rare, threatened, or endangered species habitat (RARE), are listed as impaired due to excessive chloride concentration in the waters of the USCR.
- 4. The major point sources that discharge chloride to the USCR are the Valencia and Saugus Water Reclamation Plants. The Santa Clarita Valley Sanitation District of Los Angeles County (SCVSD) owns and operates the Valencia Water Reclamation Plant (hereinafter Valencia WRP), a tertiary wastewater treatment plant located at 28185 The Old Road, Valencia, California. The Valencia WRP has a design capacity of 21.6 million gallons per day (mgd) and discharges tertiary-treated wastewater from Discharge Points 001 and 002 to the Santa Clara River, a water of the United States. SCVSD also owns and operates the Saugus Water Reclamation Plant (hereinafter, Saugus WRP), a tertiary wastewater treatment plant located at 26200 Springbrook Avenue, Santa Clarita, California. The Saugus WRP has a design capacity of 6.5 mgd and discharges tertiary-treated wastewater from Discharge Point 001 to the Santa Clara River.

- 5. In 1975, the Regional Water Board established water quality objectives for chloride in most of the region's waterbodies, including the Santa Clara River. For the Santa Clara River watershed, the numeric water quality objectives for surface waters for chloride were 90 mg/L for Reach 5 and 80 mg/L for Reach 6. In 1978, the Regional Water Board modified the water quality objectives for chloride from 90 mg/L and 80 mg/L for Reaches 5 and 6, respectively, to 100 mg/L for both reaches. A maximum concentration of 100 mg/L is the existing water quality objective for Reaches 5 and 6.
- 6. On October 24, 2002, as required by section 303(d) of the Clean Water Act, the Regional Water Board adopted Resolution No. 02-018, amending the Water Quality Control Plan for the Los Angeles Region (Basin Plan) to include a TMDL for chloride in the USCR (USCR Chloride TMDL). The TMDL source analysis determined that approximately 70 percent of the total chloride loading into the USCR was attributable to the Valencia and Saugus WRPs. The TMDL source analysis also showed that the water quality objectives could not be met with source control alone, and that some type of advanced treatment would be necessary to protect the beneficial uses. The TMDL assigned waste load allocations (WLAs) to the Valencia and Saugus WRPs, minor point sources, and municipal separate storm sewer system(s) (MS4), discharging to specified reaches of the Santa Clara River. For the WRPs, the final WLAs were equal to the chloride water quality objective of 100 mg/L. For the WRPs, the TMDL also included interim WLAs for chloride. These interim WLAs were included to provide the WRPs the necessary time to implement chloride source reduction, complete site-specific objective (SSO) studies, and make appropriate modifications or upgrades to the WRPs, as necessary, to meet the chloride water quality objectives.
- 7. On February 19, 2003, the State Water Resources Control Board (State Water Board) adopted State Water Board Resolution No. 2003-0014 (the "Remand Resolution"), remanding the USCR Chloride TMDL to the Regional Water Board due to concerns about the implementation plan and duration of the interim effluent limits. The Remand Resolution directed the Regional Water Board to consider a phased implementation schedule to allow SCVSD to complete special studies prior to planning and construction of advanced treatment facilities.
- 8. On July 10, 2003, in response to the Remand Resolution, the Regional Water Board adopted Resolution No. 03-008, readopting the USCR Chloride TMDL with a revised implementation plan. The revised TMDL implementation schedule extended the final compliance deadline for the two WRPs to achieve the final WLAs to 13 years after the TMDL effective date.
- 9. On May 6, 2004, the Regional Water Board adopted Resolution No. 04-004, which revised the USCR Chloride TMDL. The TMDL was approved by the State Water Board on July 22, 2004; the Office of Administrative Law (OAL) on November 15, 2004; and the United States Environmental Protection Agency (USEPA) on April 28, 2005. It became effective on May 4, 2005. In this action, the Regional Water Board revised the interim WLAs assigned to the WRPs and implementation plan. The revised implementation plan required the completion of several special studies to

characterize the sources, fate, transport, and specific impacts of chloride in the USCR, including impacts to downstream reaches and underlying groundwater basins. The Board maintained the 13-year implementation schedule.

- 10. On August 3, 2006, the Regional Water Board revised the implementation schedule for the TMDL (Resolution No. 06-016). The revised TMDL accelerated the final compliance date for achieving the WLAs assigned to the two WRPs from 13 years to 11 years based on findings from special studies. The Board shortened the phase for the completion of special studies, but did not shorten the eight-year planning, design, and construction phase.
- 11. In 2007, the SCVSD completed the "Groundwater/Surface Water Interaction (GSWI) Model" special study. Stakeholders and an independent technical advisory panel reviewed and approved the GSWI study as an appropriate and adequate modeling tool. The GSWI study examined the feasibility of various implementation alternatives. The GSWI study indicated that beneficial uses can be protected through a combination of site-specific objectives for surface water and groundwater and reduction of chloride levels from the Valencia WRP effluent through advanced treatment.
- 12. As a result of the GSWI study, and the anticipated costs of complying with the 100 mg/l chloride water quality objectives, the SCVSD developed an alternate water resources management (AWRM) approach that could achieve attainment of sitespecific objectives for certain reaches of the Santa Clara River. AWRM consisted of development of site-specific objectives for chloride while protecting beneficial uses; chloride source reduction actions through the removal of self-regenerating water softeners; a switch from chlorine-based disinfection to ultraviolent disinfection at both WRPs; chloride load reduction through advanced treatment (microfiltration and reverse osmosis) of a portion of the Valencia WRP's effluent; supplemental water to enhance assimilative capacity of local groundwater or surface water; alternative water supply to protect salt-sensitive agricultural beneficial uses of the Santa Clara River during drought conditions; and expansion of recycled water uses within the Santa Clarita Valley. SCVSD had demonstrated to the Regional Water Board and stakeholders that the AWRM would address the chloride impairment in surface waters as well as the degradation of groundwater downstream as a much lower cost than other implementation scenarios that had been considered to achieve the USCR Chloride TMDL. As a result, the AWRM had broad stakeholder support and was seen as a cost-effective solution. Based on the significant water quality and water supply benefits in both Los Angeles and Ventura counties and the broad stakeholder support, Regional Water Board staff agreed to take the regulatory steps necessary to recommend conditional chloride site-specific objectives to the Board.
- 13. In November 2007, to initially support development of the AWRM, the Regional Water Board amended the Basin Plan to divide Reach 4 of the Santa Clara River into two separate reaches (Reaches 4A and 4B). The Board found that this action would allow the development of more geographically precise site-specific objectives for chloride.

- 14. On December 11, 2008, the Regional Water Board amended the Basin Plan to incorporate conditional SSOs for chloride in Reaches 4B, 5, and 6 of the Santa Clara River and the groundwater basins underlying those reaches and revised the USCR Chloride TMDL accordingly in order to fully support the SCVSD's implementation of the AWRM (Resolution No. R4-2008-012). The TMDL's WLAs and implementation plan were based on the conditional SSOs for chloride or the default water quality objectives if the conditions of AWRM were not met. The Board determined that the conditional SSOs and conditional WLAs were protective of beneficial uses when the AWRM was fully implemented. The TMDL provided a tenyear schedule (by May 2015) for the WRPs to achieve the conditional SSOs for chloride. The conditional SSOs were conditioned on the SCVSD's full and ongoing implementation of the AWRM program; if the AWRM system was not built and operated by the SCVSD, the applicable water quality objectives for chloride in these reaches would be 100 mg/L as an instantaneous maximum, which is the water quality objective set forth in the current Basin Plan. Thus, the SCVSD had a choice whether to implement the AWRM or not.
- 15. The conditional SSOs and the revisions to the TMDL were approved by the State Water Board on October 20, 2009; the OAL on January 26, 2010; and the USEPA on April 6, 2010. They became effective on April 6, 2010.
- 16. On June 4, 2009, the Regional Water Board adopted Order No. R4-2009-0074, Waste Discharge Requirements for the Santa Clarita Valley Sanitation District of Los Angeles County, Valencia Water Reclamation Plant Discharge to the Santa Clara River. This Order became effective on July 24, 2009, and serves as National Pollutant Discharge Elimination System (NPDES) Permit No. CA0054216. To date, the conditional WLAs have not yet been incorporated into Order No. R4-2009-0074. The Order maintains final effluent limits for chloride of 100 mg/L. However, the permit incorporates the USCR Chloride TMDL Implementation Plan including interim effluent limits and implementation tasks.
- 17. On June 4, 2009, the Regional Water Board adopted Order No. R4-2009-0075 Waste Discharge Requirements for the Santa Clarita Valley Sanitation District of Los Angeles County, Saugus Water Reclamation Plant Discharge to the Santa Clara River. This Order became effective on July 24, 2009, and serves as National Pollutant Discharge Elimination System (NPDES) Permit No. CA0054313. To date, the conditional WLAs have not yet been incorporated into Order No. R4-2009-0075. The Order maintains final effluent limits for chloride of 100 mg/L. However, the permit incorporates the USCR Chloride TMDL Implementation Plan including interim effluent limits and implementation tasks.
- 18. Order No. R4-2009-0074, Provision VI.C.8 (page 41), and Order No. R4-2009-0075, Provision VI.C.8 (page 40), read: "The discharger shall comply with the applicable TMDL-related tasks, and future revisions thereto, in Attachment K of this Order." Task No. 17(a) of Attachment K for both Orders required that by May 4, 2011, SCVSD complete a Wastewater Facilities Plan and Programmatic Environmental Impact Report (EIR) for facilities to comply with final effluent limits for chloride.

- 19. Despite having fee authority sufficient to pay for the costs of AWRM, on two occasions between 2009 and 2011, the SCVSD Board of Directors declined to increase sewer service charge rates to fund the AWRM.
- 20. On May 2, 2011, SCVSD submitted a copy of a Notice of Exemption from the requirement to prepare an EIR or Negative Declaration. This Notice of Exemption did not meet the requirements of Task 17(a) because it did not constitute a programmatic EIR and it addressed actions to meet the conditional wasteload allocations (WLAs), not actions to meet the final effluent limits for chloride.
- 21. On May 2, 2011, SCVSD submitted a Wastewater Facilities Plan. The Wastewater Facilities Plan was inadequate because it was not a plan for actions to meet the final effluent limits for chloride of 100 mg/L. Additionally, the Wastewater Facilities Plan did not provide the facilities necessary to allow application of conditional WLAs.
- 22. On May 27, 2011, Regional Water Board staff issued a Notice of Violation (NOV) to SCVSD for failure to complete Task 17(a) from Attachment K of Order Nos. R4-2009-0074 and R4-2009-0075.
- 23. Following the NOV, Regional Water Board staff issued Administrative Civil Liability Complaint No. R4-2012-0160 recommending assessment of \$280,250 for SCVSD's failure to complete Task 17(a) in both Orders. The Regional Water Board staff and SCVSD entered into a settlement agreement on March 2013 resolving the Complaint, which was approved by the Regional Water Board. SCVSD agreed to pay \$225,000; of that amount, \$127,500 was paid into the State Water Board Cleanup and Abatement Account and \$97,500 was used to implement a supplemental environmental project (SEP). SCVSD also agreed to prepare a draft Facilities Plan and Environmental Impact Report (EIR) by April 30, 2013, and to consider for approval a final compliance Facilities Plan and an EIR by October 31, 2013.
- 24. On October 10, 2013, SCVSD released a final chloride compliance Facilities Plan and an EIR, in which they recommended the application of the fourth of four potential TMDL compliance alternatives. Alternative 4 was designated as a Phased AWRM and was derived from the original AWRM Program. Should Alternative 4 prove infeasible, the backup alternative recommended was Alternative 2, consisting of reverse osmosis (RO) facilities to attain the chloride objective of 100 mg/L with brine disposal via deep well injection.
- 25. On October 28, 2013, the SCVSD Board of Directors approved the final chloride compliance Facilities Plan and certified the EIR, and directed SCVSD staff to implement Alternative 2. On July 7, 2014, the SCVSD Board of Directors voted to fund Alternative 2 by increasing sewer service charge rates for homeowners and businesses.

- 26. In order to reduce costs of SCVSD's proposed project (Alternative 2), SCVSD staff requested a TMDL schedule extension, new site specific objectives and WLAs to eliminate the need for an RO product water pipeline to the Saugus WRP from the Valencia WRP, and a revision of the chloride water quality objectives in Reaches 4B, 5, and 6 of the USCR to include a 3-month averaging period.
- 27. This amendment to the Basin Plan is being taken at the request of the SCVSD and will revise the existing water quality objectives for chloride in Reaches 4B, 5, and 6 to include a 3-month averaging period, add conditional site-specific objectives and corresponding conditional WLAs for chloride of 150 mg/L based on a 3-month rolling average for Reach 6 and Reach 5 above the Valencia WRP outfall, and extend the TMDL implementation schedule for achieving these WLAs by four years.
- 28. The project to implement this amendment is different than the AWRM, and is instead based on the construction of a reverse osmosis facility at the Valencia WRP at the cost of approximately \$100 million, which is less than the cost of AWRM. The project will take approximately 4 years to complete and sewage rates will increase by about \$2 per month for about four years and then cap out at approximately \$8 per month per household. Even with the increased sewer rates recently adopted by the SCVSD, Santa Clarita's sewage rate is well below the statewide and local averages, and this project will not raise the rates about these averages.
- 29. Regional Water Board staff has prepared a detailed technical document that analyzes and describes the specific necessity and rationale for these revisions to the chloride water quality objective and USCR Chloride TMDL. The technical document entitled "Chloride TMDL Reconsideration, Water Quality Objectives, and Conditional Site Specific Objectives for Chloride" is an integral part of this Regional Water Board action and was reviewed, considered, and accepted by the Regional Water Board before acting.
- 30. On October 9, 2014, prior to the Regional Water Board's action on this resolution, a public hearing was conducted on the adoption of revisions to the water quality objectives for chloride, establishment of conditional SSOs for chloride, and the revisions to the USCR Chloride TMDL. Notice of the hearing was published in accordance with the requirements of Water Code Section 13244. The notice was published in the Los Angeles Times, the Santa Clarita Signal, and the Ventura County Star on August 1, 2014.
- 31. The public has had reasonable opportunity to participate in review of the amendments to the Basin Plan. A draft of the revisions to the chloride water quality objectives, conditional SSOs for chloride, and the revisions to the USCR Chloride TMDL was released for public comment on August 4, 2014; a Notice of Hearing was published and circulated 45 days preceding Regional Water Board action; Regional Water Board staff responded to oral and written comments received from the public; and the Regional Water Board held a public hearing on October 9, 2014 to consider adoption of this resolution.

- 32. In amending the Basin Plan, the Regional Water Board considered the factors set forth in sections 13240, 13241, and 13242 of the Water Code.
- 33. These amendments are consistent with the State Antidegradation Policy (State Water Board Resolution No. 68-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Antidegradation Policy (40 C.F.R. § 131.12).
- 34. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Water Boards' basin planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) (Public Resources Code § 21000 *et seq.*) requirements for preparing environmental documents. (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782.)
- 35. The Regional Water Board previously prepared substitute environmental documentation for the conditional SSOs and revision of the USCR Chloride TMDL (Resolution No. R08-012), which was filed with the Resources Agency on March 22, 2006. That documentation contained the required environmental documentation under the State Water Board's CEQA regulations (23 Cal. Code Regs § 3777). The project itself was the establishment of conditional SSOs and revision of the TMDL to allow for implementation of AWRM. In preparing the previous substitute environmental documents, the Regional Board considered the requirements of Public Resources Code section 21159 and California Code of Regulations, Title 14, section 15187, and intended those documents to serve as a tier 1 environmental review. The previous substitute environmental documents contained significant environmental analysis and numerous findings related to the reasonably foreseeable methods of compliance, the impacts of the methods of compliance, feasible mitigation measures, and alternative means of compliance.
- 36. This action does not alter the environmental analysis that was previously prepared for Resolution R08-012 because the addition of an averaging period to the chloride water quality objectives, USCR Chloride TMDL revisions, and proposed conditional SSOs will not result in any additional implementation actions other than those previously analyzed for Resolution R08-012, or different effects upon the environment. The reasonably foreseeable implementation actions for this resolution are the same as for AWRM, with the exception of salt export facilities and supplemental water. Thus, this action will result in fewer implementation actions and less potential impacts to the environment. As such, this amendment is consistent with the prior CEQA documentation.
- 37. Further, consistent with California Code of Regulations, title 14, section 15162, the Regional Board has determined that no subsequent environmental documents shall be prepared because this action does not involve new significant environmental effects, a

substantial increase in the severity of previously identified significant effects, or mitigation measures or alternatives that are considerably different from those analyzed in the previous substitute environmental documentation.

- 38. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code section 11353, subdivision (b). Federal regulations require that states adopt water quality standards and that TMDLs be incorporated into the water quality management plan for impaired waterbodies. The Regional Water Board's Basin Plan is the Regional Water Board's component of the water quality management plan, and the Basin Plan is how the Regional Water Board takes quasi-legislative, planning actions. Moreover, the TMDL is a program of implementation for existing water quality objectives, and is, therefore, appropriately a component of the Basin Plan under Water Code section 13242. The necessity of revising the water quality objectives for Reaches 4B, 5, and 6 with 3-month averaging periods, establishing conditional SSOs for chloride in Reaches 5 above the Valencia WRP outfall 001 and Reach 6 of the USCR equal to 150 mg/L (as a 3-month average), and revising the USCR Chloride TMDL to reflect these water quality objectives and conditional SSOs and to extend the implementation schedule is established in Table 7-6.1 of the Basin Plan and staff report.
- 39. This Basin Plan amendment must be submitted for review and approval by the State Water Board, OAL, and USEPA. The Basin Plan amendment will become effective upon approval by OAL and USEPA. Once effective, a Notice of Decision will be filed with the Resources Agency.
- 40. If during its approval process, Regional Water Board staff, the State Water Board or State Water Board staff, or OAL determine that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Regional Water Board of any such changes.
- 41. As provided in more detail in the staff report, this action to revise the chloride water quality objectives from an instantaneous maximum to a three-month rolling average, as well as the establishment of new conditional SSOs and revisions of the USCR Chloride TMDL is not an unfunded state mandate.

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THEREFORE, be it resolved that pursuant to sections 13240, 13241, and 13242 of the Water Code, the Regional Water Board hereby amends the Basin Plan as follows:

- 1. Pursuant to Sections 13240, 13241, and 13242 of the California Water Code, the Regional Water Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to Chapter 3 of the Basin Plan, as set forth in Attachment A hereto, to add an averaging period to the chloride water quality objectives to Reaches 4B, 5, and 6 of the USCR and to incorporate conditional SSOs for chloride in Reaches 5 and 6 of the USCR, and the amendment to Chapter 7 of the Basin Plan, as set forth in Attachment B hereto, to revise the USCR Chloride TMDL.
- 2. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Water Board in accordance with the requirements of section 13245 of the Water Code.
- 3. The Regional Water Board requests that the State Water Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the Water Code and forward the approved amendment and record to OAL and finally, for review and approval pursuant to CWA section 303(d), and section 303(c) as appropriate, to the U.S. EPA.
- 4. If during its approval process, Regional Water Board staff, the State Water Board or State Water Board staff, or OAL determine that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Regional Water Board of any such changes.
- 5. The Executive Officer is authorized to request a "No Effect Determination" from the Department of Fish and Wildlife, and/or transmit payment of the applicable fee as may be required to the Department of Fish and Wildlife.
- I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on October 9, 2014.

Samuel Unger Executive Officer