

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**  
**LOS ANGELES REGION**  
 January 27, 1997  
 Resolution No. 97-02

*Amendment to the Water Quality Control Plan to incorporate a  
 Policy for Addressing Levels of Chloride in Discharges of Wastewaters*

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

1. In 1975, the Regional Board established water quality objectives for chloride in most of the Region's waterbodies based on background concentrations of chloride, in accordance with the *Statement of Policy with Respect to Maintaining High Quality Water in California* (State Board Resolution No. 68-16, commonly known as the *State Antidegradation Policy*) and the federal *Antidegradation Policy* (as set forth in 40 CFR 131.12). Water quality objectives are the basis for limits in Waste Discharge Requirements that are prescribed by the Regional Board.
2. When water quality objectives for chloride were set in accordance with the *State Antidegradation Policy* and the federal *Antidegradation Policy*, the Regional Board assumed that chloride concentrations in imported waters would remain relatively low. Since 1975, however, chloride concentrations in supply waters imported into the Region have been increasing. During the late 1980s, drought in watersheds that are sources of imported supply waters made it difficult for many dischargers in the Los Angeles Region to comply with water quality limits for chloride.
3. In addition to relatively high chloride levels in supply waters, chloride levels in wastewaters in the Region can be affected by salt loading that occurs during beneficial use and treatment of supply waters and wastewaters. In some areas of the Region, a significant amount of loading may occur from the use of water softeners.
4. In 1990, the Regional Board adopted Resolution No. 90-04: *Effects of Drought-Induced Water Supply Changes and Water Conservation Measures on Compliance with Waste Discharge Requirements within the Los Angeles Region*. This resolution, commonly referred to as the *Drought Policy*, was intended to provide short-term and temporary relief to dischargers who were unable to comply with limits for chloride due to the effects of drought on chloride levels in supply waters imported into the Region.

For those dischargers who applied for relief under the Drought Policy, the Regional Board temporarily reset limits on concentrations of chloride at the lesser of: (i) 250 mg/L, or (ii) the chloride concentrations in supply waters plus 85 mg/L. An important condition of this relief was that dischargers demonstrate that high chloride concentrations in their discharges of wastewaters are due to increased salinity levels in supply waters imported into their service areas. Several dischargers provided data that confirm that supply waters imported into the Region are the cause of exceedances of chloride limits in discharges of wastewaters. However, many other dischargers have not yet adequately assessed the source(s) of relatively high levels of chloride in wastewaters and the extent to which exceedances are due to factors such as chloride in supply waters and/or significant chloride loading during beneficial use and treatment of supply waters and wastewaters.

November 15, 1996  
Revised January 10, 1997  
Revised January 14, 1997  
Revised January 27, 1997

5. The drought ended before the *Drought Policy* was due to expire in 1993. However, because water supply reservoirs still had high chloride concentrations in 1993 and because water suppliers estimated that it would take 12 to 18 months for complete replenishment of imported waters in reservoirs, the Regional Board renewed the *Drought Policy* in June 1993 and again in February 1995. The *Drought Policy* currently is due to expire on the earlier of February 27, 1997 or at that point in time when it has been determined that chloride levels in water supplies imported into the Region have returned to pre-drought conditions.
6. Chloride levels in supply waters imported into the Region and in reservoirs are no longer impacted by drought. However, chloride levels in supply waters imported into the Region are generally higher than they were before drought conditions in the late 1980. The higher levels of chloride in imported waters appear to be the result of intensifying demands for and utilization of water resources in watersheds that are the sources of supply waters. In addition, future droughts may affect levels of chloride in supply waters imported into the Region.
7. The Regional Board recognizes the shortage of water in the Region and the need to conserve supplies of fresh water for protection of beneficial uses. Accordingly, the Regional Board supports water reclamation, as described in State Board Resolution No 77-01: *Policy with Respect to Water Reclamation in California*. However, achievements in water conservation and reclamation can increase levels of chloride and other ionic constituents in reclaimed waters and wastewaters that are ultimately discharged to waterbodies in the Region.
8. In order to develop a long-term solution to the chloride compliance problems stemming from elevated levels of chloride in supply waters imported into the Region, the Regional Board has been working with a group of technical advisors, formerly known as the Chloride Subcommittee of the Surface Water Technical Review Committee. This group of technical advisors represents a variety of interests, including: water supply, reclamation, and wastewater management; environmental protection; and water softener industry interests. The group concurs with:
  - (a) an approach to permanently reset water quality objectives for chloride in certain surface waters, using levels of chloride in water supply plus a chloride loading factor.
  - (b) a need to assess long-term loading trends for chloride and other saline constituents.

Furthermore, due to concerns expressed about the potential for future adverse impacts to agricultural resources in Ventura County, the Regional Board proposes to work with a local group of agencies, municipalities, representatives of the agricultural community, and other interested parties in order to clarify chloride objectives needed to protect waters used for irrigation in the Santa Clara River and Calleguas Creek watersheds. In addition, this local group concurs with the need to undertake assessments of significant sources of chloride loading and—contingent upon results—identify methods that could control chloride loading and the costs and effectiveness of the various loading control methods.

9. The Secretary of Resources has certified the basin planning process exempt from certain requirements under the California Environmental Quality Act (CEQA), including preparation an initial study, a negative declaration and environmental impact report (Title 14, California Code of Regulations, Section 15251). As per this certification, an amendment to the *Basin Plan* is considered 'functionally equivalent' to an initial study, negative declaration, and environmental impact report.

Any regulatory program of the Regional Board certified as functionally equivalent, however, must satisfy the documentation requirements of Title 23, California Code of Regulations, Section 377(a), which requires an environmental checklist with a description of the proposed activity, and a determination with respect to significant environmental impacts. On November 15, 1996, the Regional Board distributed information regarding a proposed amendment to the *Basin Plan* to incorporate a *Policy for Addressing Levels of Chloride in Discharges of Wastewaters (Chloride Policy)*. This information included an environmental checklist, a description of the proposed amendment to the *Basin Plan*, and a determination that the proposed amendment could not have a significant effect on the environment.

10. The public has had reasonable opportunity to participate in review of the amendment to the *Basin Plan*. Efforts to solicit public review and comment include: public notification, more than 45 days preceding Board action; public workshops, held on December 2, 1996, December 3, 1996, and January 6, 1997; responses from the Regional Board to oral and written comments received from the public, and a public hearing held on January 27, 1997.
11. In amending the *Basin Plan*, the Regional Board considered factors set forth in section 13241 of the Porter-Cologne Water Quality Control Act (California Water Code, Division 1, Chapter 2, Article 3, et seq., plus others).
12. The amendment is consistent with the State *Antidegradation Policy* (State Board Resolution No. 88-16), 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 CFR 131.12).
13. Revision of water quality objectives for chloride is subject to approval by the State Water Resources Control Board, the State Office of Administrative Law, and the US Environmental Protection Agency.

THEREFORE, BE IT RESOLVED THAT:

1. Water quality objectives for chloride for certain surface waters will be revised as specified below.

Waterbody	New Objective
Los Angeles River—between Sepulveda Flood Control Basin and Figueroa Street (including Burbank Western Channel only)	190 mg/L
Los Angeles River—between Figueroa Street and estuary (including Rio Hondo below Santa Ana Freeway only)	190 mg/L
Rio Hondo—between Whittier Narrows Flood Control Basin and Santa Ana Fwy	180 mg/L
San Gabriel River—between Valley Blvd. and Firestone Blvd. (including Whittier Narrows Flood Control Basin, and San Jose Creek downstream of 71 Fwy only)	180 mg/L

These new objectives are set at the lower of (i) levels needed to protect beneficial uses, or (ii) chloride levels in supply waters imported into the Region plus a chloride loading factor of 85 mg/L. The levels at which the new water quality objectives have been set are expected to accommodate fluctuations in chloride concentrations that may be due to future drought. Although the new water quality objectives do not match background levels of chloride, they nevertheless are expected to be fully protective of drinking water and freshwater aquatic life.

2. Due to concerns expressed about the potential for future adverse impacts to agricultural resources in Ventura County, water quality objectives for chloride in the Santa Clara River and Calleguas Creek watersheds will not be revised at this time. To address compliance problems with chloride limits based on existing water quality objectives, the Regional Board hereby grants variances (interim relief) to existing dischargers identified on Attachment A. The Executive Officer is directed to notify these dischargers that they are subject to surface water interim limits specified below.

Waterbody Segments for which Existing Dischargers Are Subject to Interim Chloride Limits	Interim Chloride Limit
Santa Clara River—between Bouquet Canyon Road Bridge and West Pier Highway 99	190 mg/L
Santa Clara River—between West Pier Highway 99 and Blue Cut gaging station	190 mg/L
Santa Clara River—between Blue Cut gaging station and A Street (Fillmore)	190 mg/L
Arroyo Simi and tributaries—upstream Madera Road	160 mg/L
Arroyo Simi—downstream Madera Road, Arroyo Las Posas, and tributaries	190 mg/L
Calleguas Creek and tributaries—between Potrero Road and Arroyo Las Posas (including Conejo Creek, Arroyo Conejo, and Arroyo Santa Rosa)	190 mg/L

The variance period for interim relief will extend for three years following final approval of the amendment. During this period, the Regional Board expects that the local group of agencies, municipalities, representatives of the agricultural community, and other interested parties which have commented upon this policy will work together to: (i) clarify water quality objectives needed to protect waters used for irrigation in the Santa Clara River and Calleguas Creek

watersheds, (ii) assess significant sources of chloride loading, and (iii) contingent upon results of the chloride loading assessment, identify cost-effective ways that could protect beneficial uses of waters in the Santa Clara and Calleguas Creek watersheds. Should these issues not be resolved within the three-year variance period, the Regional Board intends to renew the variance.

At the end of the variance period, the Regional Board may reconsider revisions to water quality objectives for chloride in the Santa Clara River and Calleguas Creek watersheds. Future revisions of water quality objectives will consider chloride levels in supply waters (including fluctuations that may be due to future drought conditions), reasonable loading factors during beneficial use and treatment of supply waters and wastewaters, methods that could control chloride loading, and the associated costs and effectiveness of the various loading control methods.

3. To address the need to continue and, as appropriate, improve tracking and assessment of salinity loading throughout the Region, publicly-owned treatment works (POTWs) shall be required, as part of their NPDES permits, to monitor and assess salinity concentrations derived from: (i) source waters, (ii) loading that occurs during beneficial use of supply waters, and (iii) loading that occurs during treatment and disinfection of supply waters and wastewaters. Furthermore, those POTWs not already monitoring and assessing chloride loading from industrial sources shall expand their pre-treatment programs to include such assessments.

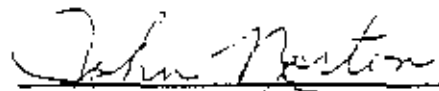
Monitoring data and assessments shall be reported by the POTWs to the Regional Board on an annual basis; the content and format of these reports shall be subject to approval by the Executive Officer of the Regional Board.

4. To address water quality problems from water softening processes throughout the Region, the Regional Board recommends that water suppliers, POTWs, and representatives of the water softener industry undertake educational campaigns, targeting residential, commercial, and industrial water consumers, on issues relating to water hardness, water quality problems associated with water softeners, and types of water softeners (encouraging the use of those types of softeners that pose less of a threat to water quality).
5. To address chloride loading that occurs during treatment and disinfection of supply waters and wastewaters, the Regional Board encourages shifts to less chlorine-intensive processes to achieve treatment and disinfection of supply waters and wastewaters, to the extent that such shifts are cost-effective and consistent with water quality and reclamation objectives.
6. Contingent upon the success of the salinity loading measures set forth in paragraphs (2) through (5) immediately above, the Regional Board may consider other salinity control measures at a later date. Such measures may include—but are not limited to—salt loading fees, bans or restrictions on inefficient water and/or "self-regenerating" types of softeners, regulatory controls of agricultural discharges, and expansion of POTW pretreatment programs to include salinity loading controls from commercial discharges.
7. Water quality objectives for chloride will not be changed for the headwaters of the Region's major stream systems. Furthermore, due to concerns over degradation of ground waters stored in the Region's basins, water quality objectives for chloride in ground waters will not be changed. In accordance with the State *Antidegradation Policy*, water quality objectives currently in effect will continue to protect the naturally-high quality of such surface and ground waters.

8. Resolution No. 90-04: *Effects of Drought-Induced Water Supply Changes and Water Conservation Measures on Compliance with Waste Discharge Requirements within the Los Angeles Region (Drought Policy)*, which was intended to provide short-term and temporary relief to dischargers who were unable to comply with limits for chloride due to the effects of drought on chloride levels in supply waters, is hereby rescinded with the adoption of this resolution.

While this resolution and amendment to the *Basin Plan* are under review by the State Water Resources Control Board, Office of Administrative Law, and the US Environmental Protection Agency, the Regional Board will evaluate compliance consistent with provisions set forth in this resolution.

I, John Norton, Acting 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 January 27, 1997.

  
John Norton  
Acting Executive Officer

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