

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

RESOLUTION NO. 2007-005
June 7, 2007

Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate Site-specific Objectives in Select Waterbodies in the Santa Clara, Los Angeles and San Gabriel River Watersheds

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

1. The Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) designates beneficial uses of the Region's waterbodies, establishes water quality objectives for the protection of these beneficial uses, and outlines a plan of implementation for maintaining and enhancing water quality.
2. On December 22, 1999, the US EPA published an update to its recommended criteria for ammonia in freshwaters (Federal Register, Vol. 64, No. 245, pp. 71974-71980).
3. The Regional Water Quality Control Board for the Los Angeles Region (Regional Board) adopted an amendment to the Basin Plan on April 25, 2002, replacing the previous water quality objectives for ammonia with updated objectives for ammonia in freshwaters along with corresponding implementation provisions, consistent with US EPA's recommended criteria above (Regional Board Resolution 2002-011).
4. In the "1999 Update of Ambient Water Quality Criteria for Ammonia", the US EPA provides for the determination and use of water-effect ratios (WERs) for ammonia (US EPA 1999). A WER is an appropriate measure of the toxicity of a material obtained in site water divided by the same measure of the toxicity of the same material obtained simultaneously in laboratory dilution water.
5. In its 2002 amendment to the Basin Plan, the Regional Board provided for the application of a site-specific objective (SSO) in a waterbody where a WER has been fully approved through the Basin Plan amendment process.
6. This amendment to the Basin Plan will incorporate site-specific 30-day average objectives for ammonia along with corresponding site-specific early life stage implementation provisions for select waterbody reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River watersheds. These site-specific 30-day average objectives and corresponding site-specific early life stage implementation provisions shall replace the previously applicable regional 30-day average objective for the affected waterbody reaches. This amendment will not change the regional one-hour average objective for these waterbodies.
7. A WER has a default value of 1.0 unless a study is conducted consistent with US EPA's WER guidance and adopted by the Regional Board, establishing the ratio that represents the difference between toxicity in laboratory test water and toxicity in a specific waterbody based

on ambient conditions. US EPA's guidance on the derivation of aquatic life criteria and WERs is established in "Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses" and "Interim Guidance on the Determination and Use of the Water-Effect Ratios for Metals" (US EPA, 1985, 1994).

8. The Regional Board's goal in adopting site-specific objectives in select waterbodies of the Santa Clara, Los Angeles, and San Gabriel River watersheds is to take into account site-specific conditions in these waterbodies that affect the toxicity of ammonia to aquatic life, while still being as protective of aquatic life as the EPA's recommended criteria are intended to be.

9. The adoption of site-specific objectives for ammonia is part of a comprehensive strategy for addressing nitrogen impairments in the Santa Clara and Los Angeles River watersheds, which includes development and implementation of Total Maximum Daily Loads and corresponding effluent and receiving water limitations in NPDES permits.

10. Implementation actions to achieve applicable site-specific objectives in these waterbodies must also result in compliance with downstream water quality objectives for ammonia and other nitrogen compounds.

11. Regional Board staff prepared a detailed technical document that analyzes and describes the specific necessity and rationale for the development of this amendment. The technical document entitled "Proposed Amendments to the Water Quality Control Plan - Los Angeles Region - to Incorporate Site-specific Ammonia Objectives for Select Inland Surface Waters in the San Gabriel River, Los Angeles River and Santa Clara River Watersheds" (Staff Report) is an integral part of this Regional Board action and was reviewed, considered, and accepted by the Regional Board before acting. Further, the technical document provides the detailed factual basis and analysis supporting the amendment. The Staff Report relies upon the scientific background and data collection and analysis documented in the Technical Report, "Ammonia Water-Effects Ratios and Site-Specific Objectives for Los Angeles County Waterbodies-Final Results," prepared by Larry Walker Associates, Inc. (LWA) on behalf of the County Sanitation Districts of Los Angeles County and the Cities of Los Angeles and Burbank. The technical report prepared by Larry Walker Associates, Inc. contains the scientific basis for the proposed Basin Plan amendment. The technical report is distinguished from the Regional Board's staff report in that it does not present the recommendations of Regional Board staff.

12. The SSO study, conducted in accordance with US EPA guidance, including "Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses" (1985), "Interim Guidance on the Determination and Use of the Water-Effect Ratios for Metals" (1994), and "1999 Update of Ambient Water Quality Criteria for Ammonia" (1999), demonstrated that the site-specific conditions in the select waterbodies of the San Gabriel River, Los Angeles River and Santa Clara River watersheds have been shown to reduce the toxicity of ammonia to aquatic life. Based on the above, the Regional Board finds it appropriate to adopt site-specific 30-day average objectives for these waterbodies at this time.

13. The scientific basis for the basin plan amendment was subjected to an independent, external peer review pursuant to the requirements of Health and Safety Code section 57004.

14. The public has had reasonable opportunity to participate in review of the amendment to the Basin Plan. A public workshop was held on May 3, 2006 at the Regional Board offices at 320 West 4th Street, Los Angeles, CA 90013. A notice of the workshop was sent to interested parties including cities and/or counties with jurisdiction in or bordering the affected watersheds. A draft of the proposed basin plan amendment was released for public comment on March 26, 2007. A Notice of Hearing / Notice of Filing was published in accordance with the requirements of Water Code section 13244. This notice was published in the Ventura County Star, San Gabriel Valley Tribune, Long Beach Press Telegram, and the LA Daily News. Regional Board staff responded to oral and written comments received from the public; and the Regional Board held a public hearing on June 7, 2007 to consider adoption of the amendment.

15. The basin planning process has been certified by the Resources Agency as an exempt regulatory program because its process adequately fulfills the purposes of the California Environmental Quality Act (CEQA). The Regional Board is therefore exempt from the requirement under CEQA to prepare an environmental impact report, negative declaration, or initial study (Public Resources Code, Section 21000 et seq.), and as such, the required substitute environmental documentation has been prepared. The detailed Staff Report, this resolution, and the Environmental Checklist, together with the responses to comments, serve as the substitute documents for this project. The project itself is the adoption of site-specific 30-day average objectives and corresponding site-specific early life stage implementation provisions for ammonia, which will replace the regional 30-day average objective for ammonia for the affected waterbody reaches. The regional one-hour average objective will remain the applicable one-hour objective for all freshwaters, including those covered by this amendment. A CEQA Scoping meeting was conducted on May 3, 2006 at the Regional Board offices at 320 West 4th Street, Los Angeles, CA 90013. A notice of the CEQA Scoping hearing was sent to interested parties including cities and/or counties with jurisdiction in or bordering the affected watersheds.

16. In preparing the accompanying CEQA substitute documents, the Regional Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends the substitute documents to serve as a tier 1 environmental review. Consistent with CEQA, the substitute documents do not engage in speculation or conjecture and only consider the reasonably foreseeable environmental impacts of the methods of compliance, the reasonably foreseeable feasible mitigation measures, and the reasonably foreseeable alternative means of compliance, which would avoid or eliminate the identified impacts. Nearly all of the compliance obligations will be undertaken by public agencies that will have their own obligations under CEQA. Project level impacts will need to be considered in any subsequent environmental analysis performed by other public agencies, pursuant to Public Resources Code section 21159.2. The Publicly-owned Treatment Works (POTWs) discharging to these waterbodies are expected to be the primary entities involved in compliance with the site-specific objectives. If approved, the site-specific objectives would be reflected in revised TMDL numeric targets and allocations and revised effluent and receiving water limitations for the affected POTWs and waterbody reaches, subject to antidegradation and antibacksliding requirements. Because the site-specific objectives are higher than the regional objectives, it is not foreseeable that this amendment would instigate new or different compliance measures other than those required to comply with the current objectives. Therefore, the additional economic cost of this amendment, if any, should be negligible and only entail the cost of additional monitoring.

17. Comments were received on the substitute environmental documentation and the CEQA checklist was revised in response to comments.

18. These modifications will not lower the water quality of the candidate waterbodies, relative to existing conditions because additional loadings of ammonia are not anticipated. Therefore, the modifications are consistent with the State's anti-degradation policy (State Board Resolution 68-16) and federal anti-degradation requirements.

19. Pursuant to section 711.4(d)(1) of the California Fish and Game Code, it is hereby determined that the proposed amendment will result in not more than a *de minimis* adverse effect on fish and wildlife.

20. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).

21. The Basin Plan amendment to incorporate site-specific 30-day average objectives and corresponding site-specific early life stage implementation provisions for ammonia, which will replace the regional 30-day average objective previously applicable to affected waterbodies, must be submitted for review and approval by the State Water Resources Control Board (State Board), the State Office of Administrative Law (OAL), and the United States Environmental Protection Agency (US EPA). The Basin Plan amendment will become effective upon approval by OAL and US EPA. A Notice of Decision will be filed.

22. Occasionally during its approval process, Regional Board staff, the SWRCB or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency. Under such circumstances, the Executive Officer should be authorized to make such changes, provided he informs the Board of any such changes.

THEREFORE, be it resolved that

1. Pursuant to sections 13240 and 13241 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to the Water Quality Control Plan for the Los Angeles Region as set forth in Attachment 1 hereto, to incorporate site-specific 30-day average objectives for ammonia and corresponding site-specific early life stage implementation provisions for select waterbodies in the Santa Clara, Los Angeles, and San Gabriel River watersheds (as identified in Table 3-X), which will replace the previously applicable regional 30-day average objective.

2. As part of its triennial review process, the Regional Board shall reconsider the continued appropriateness of the site-specific objectives.

3. The Regional Board directs staff to propose, as staff deems appropriate, additional monitoring and reporting requirements in subsequent Board actions for dischargers discharging to the affected waterbody reaches within the Santa Clara, Los Angeles, and San Gabriel River watersheds. These additional monitoring and reporting requirements may be necessary to (1) evaluate whether the site-specific objectives are as protective of beneficial uses as the regional objectives are intended to be, (2) ensure that downstream objectives are being achieved, and (3) support the Board's reconsideration of the site-specific objectives during the triennial review process. Staff should consider downstream objectives when

evaluating the need for additional monitoring and should propose, if necessary, additional monitoring stations to ensure that downstream objectives are being achieved. To the extent possible, additional monitoring and reporting requirements should be coordinated with any NPDES permit monitoring and reporting program and/or Executive Officer approved TMDL Monitoring Plan, if available. Proposed additional monitoring requirements should be made available for public review and comment.

4. The Regional Board directs staff when proposing permit requirements to consider downstream standards and ensure that any requirements to achieve applicable site-specific objectives also ensure that downstream standards will be achieved. These downstream standards include existing uses, including early life stages of fish in significant numbers, whether or not they are designated as present in the Basin Plan. Such standards shall be protected when adopting the permits. The mechanisms to do so may include alternative effluent limitations, depending upon the actual detection of the presence of early life stages of fish at times other than those designated in the Basin Plan, or such other mechanisms as will provide immediate relief and prompt implementation.

5. The Regional Board directs staff, when implementing the SSOs through TMDLs and permits, to ensure that beneficial uses, including early life stages of fish, are being protected. If impacts to beneficial uses due to ammonia are identified Regional Board directs staff to bring the SSOs to the Board for reconsideration.

6. The Regional Board hereby approves the final CEQA substitute environmental documentation prepared in accordance with Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187 and adopts the findings and determinations set forth therein.

7. The Executive Officer is directed to forward copies of the Basin Plan amendment to the SWRCB in accordance with the requirements of section 13245 of the California Water Code.

8. The Regional Board requests that the SWRCB approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to OAL and the US EPA.

9. If during their approval process Regional Board staff, the SWRCB or OAL determines 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 Board of any such changes.

10. The Executive Officer is authorized to sign a Certificate of Fee Exemption.

I, Deborah J. Smith, Interim 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 June 7, 2007.


Deborah J. Smith
Interim Executive Officer

6-28-07
Date

ATTACHMENT 1
BASIN PLAN AMENDMENT INCORPORATING SITE-SPECIFIC OBJECTIVES FOR AMMONIA

The following language will be revised / added to Chapter 3, Water Quality Objectives of the Basin Plan, under "Ammonia":

Delete existing paragraph and replace with new paragraph:

~~For water bodies where Ammonia Water Effects Ratios (WERs) have been fully approved through the Basin Plan Amendment process, the objective will be multiplied by the WER to determine the site-specific objective.~~

The water quality objectives for ammonia in freshwater may be revised to reflect local waterbody characteristics using one or more of US EPA's procedures for deriving site-specific objectives (SSOs), which include the water-effect ratio (WER) procedure, recalculation procedure, and resident species procedure. In order to establish SSOs for a waterbody, a study must be conducted that is consistent with US EPA guidelines on deriving aquatic life criteria and SSOs, and the resultant SSOs must be fully approved through the Basin Plan amendment process.

Add immediately before "IMPLEMENTATION":

For the following waterbodies, the 30-day average water quality objective for ammonia shall be calculated as set forth below. In addition, the highest four-day average within the 30-day period shall not exceed 2.5 times the 30-day average objective shown in Table 3-X "Site-specific 30-day Average Objectives for Ammonia by Waterbody Reach". The regional one-hour average objective for ammonia-N for freshwaters, specified in Table 3-1, remains the applicable one-hour objective for these waterbodies.

Notwithstanding the provisions below, regulatory actions, including but not limited to TMDLs and Waste Discharge Requirements, to achieve applicable site-specific objectives must ensure that downstream standards will also be achieved and downstream beneficial uses will also be protected as far as the discharges' impacts may be experienced.

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As described in "Implementation", "3. Selection of 30-day Average Objective – Early Life Stage Provision", below, these waterbodies are subject to site-specific ELS provisions as set forth in Table 3-X "Site-specific 30-day Average Objectives for Ammonia by Waterbody Reach", which incorporate seasonality of early life stages of fish.

Where deemed necessary, additional receiving water monitoring shall be required of dischargers subject to SSOs to ensure that the SSOs are as protective of beneficial uses as the regional objectives are intended to be and downstream standards are achieved. This additional monitoring shall be required through the discharger's NPDES permit monitoring and reporting program or other Board required monitoring programs. If monitoring indicates toxicity due to ammonia or a change in the waterbody that could impact the calculation or application of the SSOs, including either its chemical characteristics or the aquatic species present, including early life stages of fish, the Regional Board may reconsider the SSOs.

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Table 3-X. Site-Specific 30-day Average Objectives for Ammonia by Waterbody Reach

WATERBODY	30-DAY AVERAGE OBJECTIVE
Los Angeles River, Reach 5 (Sepulveda Basin)	ELS Present (from April 1 – September 30) $CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * \text{MIN}(2.85, 2.85 * 10^{0.028 * (25 - T)})$
	ELS Absent (from October 1 – March 31) $CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * 2.85 * 10^{0.028 * (25 - \text{Max}(T, 7))}$
Los Angeles River, Reach 4 (Sepulveda Dam to Riverside Drive)	ELS Absent (year round) $CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * 2.85 * 10^{0.028 * (25 - \text{Max}(T, 7))}$
Los Angeles River, Reach 3 (Riverside Drive to Figueroa Street)	ELS Present (from April 1 – September 30) $CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * \text{MIN}(2.85, 2.85 * 10^{0.028 * (25 - T)})$
	ELS Absent (from October 1 – March 31) $CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * 2.85 * 10^{0.028 * (25 - \text{Max}(T, 7))}$
Burbank Western Wash (Burbank Water Reclamation Plant to confluence with LA River)	ELS Absent (year round) $CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.92 * 2.03 * 10^{0.028 * (25 - \text{Max}(T, 7))}$
San Gabriel River, Reaches 2 and 3 (Confluence with San Jose Creek to Firestone Blvd.) (including all San Jose Creek WRP discharges)	ELS Present (from April 1 – September 30) $CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.89 * \text{MIN}(2.85, 2.37 * 10^{0.028 * (25 - T)})$
	ELS Absent (from October 1 – March 31) $CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.89 * 2.37 * 10^{0.028 * (25 - \text{Max}(T, 7))}$
San Gabriel River, Reach 1 (Firestone Blvd. to Willow St. or start of estuary)	ELS Absent (year round) $CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * 3.34 * 10^{0.028 * (25 - \text{Max}(T, 7))}$

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WATERBODY	30-DAY AVERAGE OBJECTIVE
Santa Clara River, Reach 6 (Bouquet Canyon Rd. Bridge to West Pier Hwy 99)	ELS Present (from February 1 – September 30)
	$CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * \text{MIN}(2.85, 3.24 * 10^{0.028 * (25 - T)})$
	ELS Absent (from October 1 – January 31)
	$CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * 3.24 * 10^{0.028 * (25 - \text{Max}(T, 7))}$
Santa Clara River, Reach 5 (West Pier Hwy 99 to Blue Cut gaging station)	ELS Present (from February 1 – September 30)
	$CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * \text{MIN}(2.85, 3.20 * 10^{0.028 * (25 - T)})$
	ELS Absent (from October 1 – January 31)
	$CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * 3.20 * 10^{0.028 * (25 - \text{Max}(T, 7))}$
San Jose Creek (Pomona WRP to confluence with San Gabriel River)	ELS Present (from April 1 – September 30)
	$CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.92 * \text{MIN}(2.85, 2.02 * 10^{0.028 * (25 - T)})$
	ELS Absent (from October 1 – March 31)
	$CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.92 * 2.02 * 10^{0.028 * (25 - \text{Max}(T, 7))}$
Rio Hondo (Upstream of Whittier Narrows Dam)	ELS Present (from April 1 – September 30)
	$CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * \text{MIN}(2.85, 3.04 * 10^{0.028 * (25 - T)})$
	ELS Absent (from October 1 – March 31)
	$CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * 3.04 * 10^{0.028 * (25 - \text{Max}(T, 7))}$
Coyote Creek (Long Beach WRP to confluence with San Gabriel River)	ELS Absent (year round)
	$CCC = \left(\frac{0.0676}{1 + 10^{7.688 - pH}} + \frac{2.912}{1 + 10^{pH - 7.688}} \right) * 0.854 * 2.96 * 10^{0.028 * (25 - \text{Max}(T, 7))}$