ADMINISTRATIVE UPDATE OF THE WATER QUALITY CONTROL PLAN FOR THE LOS ANGELES REGION – CHAPTER 3: "WATER QUALITY OBJECTIVES"

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EXECUTIVE SUMMARY

The Water Quality Control Plan for the Los Angeles Region (Basin Plan) is the Regional Board's master water quality control planning document for the coastal watersheds of Los Angeles and Ventura Counties. The Basin Plan contains the region's water quality standards, which consist of beneficial uses, water quality objectives to protect those uses, and an anti-degradation policy along with a program of implementation, and non-regulatory descriptions of the region covered by the plan. The current Basin Plan was adopted by the Regional Board on June 13, 1994, and approved by the State Water Resources Control Board on November 17, 1994 and by the State Office of Administrative Law on February 23, 1995. Since then, there have been a number of Basin Plan amendments. While most of these amendments have been in effect for some time, they have not been physically integrated into the Basin Plan.

Recognizing the importance of a current planning document, an administrative update of the Basin Plan was identified as a priority project to be addressed during the 2008-2010 triennial review (Resolution No. R10-001). The administrative update is being conducted in phases, two of which have been completed to date – Chapter 2: "Beneficial Uses" and Chapter 7: "TMDLs".

The current phase involves the administrative update of Chapter 3 of the Basin Plan. Chapter 3 "Water Quality Objectives" contains regional water quality objectives for inland surface waters and ground waters. These objectives are the numeric and narrative thresholds necessary to protect beneficial uses or maintain high quality water, and can be region-wide or site-specific.

The proposed administrative updates to Chapter 3 of the Basin Plan include the incorporation of language from sixteen previously adopted amendments to the water quality objectives. These include:

- (i) four amendments to the ammonia objectives (Regional Board Resolution Nos. R02-011, R04-022, R05-014, and R07-005);
- (ii) four amendments to the bacteria objectives (Regional Board Resolution Nos. R01-018, R02-022, and R10-005, and State Board Resolution No. 2005-0015);
- (iii) four amendments to the region's mineral objectives (Regional Board Resolution Nos. R97-002, R03-015, R06-003, and R08-012);
- (iv) three amendments to the objectives for Floating Material and Solid, Suspended, or Settleable Materials (Regional Board Resolution Nos. R99-014, R01-014, and R07-012):. and
- (v) one amendment to include implementation provisions for copper in the Calleguas Creek Watershed (Regional Board Resolution No. R06-022); and one amendment concerning compliance schedules in NPDES permits (Regional Board A seventeenth amendment Regional Board Resolution No. R03-001) has since been superseded by State Water Resources Control Board Resolution No. 2008-0025)

The proposed updates also include revisions to Tables 3-5, 3-6, 3-7, and 3-8 containing the maximum contaminant levels (MCLs) for inorganic chemicals, fluoride, organic chemicals, and radioactive substances, respectively (established in Title 22 of the CCR). These revisions reflect the most current MCLs specified in Title 22 of the CCR, which is the source of these objectives.

Finally, Table 3-10, which lists site-specific water quality objectives for selected constituents for the region's ground waters, has been revised to reflect the recent administrative updates to the groundwater basins and sub-basins, in Chapter 2 of the Basin Plan.

This update to Chapter 3 of the Basin Plan is non-regulatory in nature and does not involve any new changes to water quality objectives for the surface and ground waters of the Los Angeles Region. Neither does it modify the application of these objectives or their implementation provisions. It is part of a multi-step plan to administratively update the entire Basin Plan. Any regulatory updates to Chapter 3 of the Basin Plan will be addressed in the future as separate Board actions.

I. PREVIOUSLY ADOPTED AMENDMENTS TO THE AMMONIA OBJECTIVES

Since the adoption of the Basin Plan in 1994, four amendments to the ammonia water quality objectives have been adopted:

Updating the Ammonia Objectives for Freshwater

In April 2002, the Regional Board adopted an amendment to the Basin Plan that updated the freshwater ammonia objectives for inland surface waters (including enclosed bays, estuaries and wetlands) with beneficial use designations for protection of aquatic life. This amendment included: (i) greater recognition of the temperature dependence of the chronic objective, especially at low temperatures, (ii) an Early Life Stage (ELS) chronic objective, and (iii) a 30-day averaging period for the chronic objective in place of the previous 4-day averaging period. The amendment was approved by the State Water Resources Control Board (State Board) in April 2003 and the Office of Administrative Law (OAL) and the US Environmental Protection Agency (EPA) in June 2003.

These amendments are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution R02-011, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2002-011/2002-011_RB_BPA.pdf

<u>Updating the Ammonia Objectives for Inland Surface Waters Not Characteristic of</u> Freshwaters

In March 2004, the Regional Board adopted an amendment to the Basin Plan that updated the saltwater ammonia objectives for inland surface waters (including enclosed bays, estuaries and wetlands) with beneficial use designations for protection of aquatic life. With this amendment, both the acute and chronic objectives were adopted as fixed limits for unionized ammonia – no longer dependent on pH, temperature, and salinity. The amendment was approved by the State Board in June 2004, OAL in July 2004, and EPA in September 2004.

These amendments are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R04-022, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2004-022/2004-022 RB BPA.pdf

Revising Early Life Stage Implementation Provision of Ammonia Objectives
In December 2005, the Regional Board adopted an amendment to the Basin Plan that revised the Early Life Stage implementation provision of the freshwater ammonia objectives for inland surface waters (including enclosed bays, estuaries and wetlands) for protection of aquatic life. The amendment was approved by the State Board in June 2004, OAL in July 2004, and EPA in September 2004.

These amendments are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R05-014, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2005-014/2005-014 RB RSL.pdf

Adopting Site Specific Objectives for Ammonia in the San Gabriel, Los Angeles, and Santa Clara River Watersheds

In June 2007, the Regional Board adopted an amendment to the Basin Plan that incorporated site-specific objectives for select waterbodies in the Santa Clara, Los Angeles and San Gabriel River Watersheds. The amendment was approved by State Board in January 2008, OAL in May 2008, and EPA in March 2009. These amendments are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R07-005, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2007-005/2007-005_RB_BPA.pdf

II. Previously Adopted Amendments to the Bacteria Objectives

Since the adoption of the Basin Plan in 1994, four amendments to the bacteria water quality objectives have been adopted:

<u>Updating Bacteria Objectives for Waterbodies Designated for Water Contact Recreation</u> In October 2001, the Regional Board adopted an amendment to the Basin Plan that updated the bacteria objectives for water bodies designated for water contact recreation. These objectives were based on (i) U.S. EPA's 1986 criteria, and (ii) the bacteria standards contained in the California Code of Regulations, Title 17, section 7958 – adopted in 1999. The amendment was approved by State Board in July 2002 and by the Office of Administrative Law (OAL) and the US Environmental Protection Agency (EPA) in September 2002.

These amendments are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R01-018, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2001-018/2001-018 RB BPA.pdf.

Adopting Implementation Provisions for Bacteria Objectives

In December 2002, the Regional Board adopted an amendment to the Basin Plan that incorporated implementation provisions for bacteria objectives. These provisions allow for the use of a reference system/anti-degradation approach or natural source exclusion approach to address natural sources of bacteria that may cause or contribute to exceedances of the single sample bacteria objectives. The amendment was approved by State Board in March 2003, OAL in May 2003 and EPA in June 2003.

These provisions are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R02-022, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2002-022/2002-022_RB_BPA.pdf.

<u>Incorporation of Limited Water Contact (LREC-1) Beneficial Use and associated Water</u> Quality Objectives

In June 2003, the Regional Board rejected proposed amendments to the Basin Plan to modify the recreational beneficial uses of Reaches 1 and 2 of Ballona Creek – a watershed within the Santa Monica Bay Watershed Management Area. The Regional Board's action was later reviewed by the State Water Board. The State Board subsequently adopted the proposed amendments on its own motion through State Water Board Resolution No. 2005-0015, thereby adding a subcategory of water contact recreation (REC-1) to the Basin Plan.

This new beneficial use was applied to Reach 2 of Ballona Creek, and the swimming component of the potential REC-1 use was removed from both Reaches 1 and 2 of Ballona Creek. The amendment was approved by OAL in May 2005 and the EPA in February 2006.

These amendments are detailed in the Basin Plan amendment language in the attachment to State Water Board Resolution No. 2005-0015, which is available on the

Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2003-XXX/2000-XXX/2000-X

<u>Updating Bacteria Objectives for Freshwaters Designated for Water Contact Recreation</u> In July 2010, the Regional Board adopted an amendment to the Basin Plan that updated the bacteria objectives for freshwaters designated for water contact recreation, by removing the redundant fecal coliform objectives. The amendment was approved by State Board in July 2011, OAL in November 2011 and EPA in December 2011.

Details of this amendment are provided in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R10-005, which is available on the Regional Board's website at

http://63.199.216.6/larwqcb_new/bpa/docs/R10-005/R10-005_RB_BPA.pdf

III. PREVIOUSLY ADOPTED AMENDMENTS TO THE MINERAL WATER QUALITY OBJECTIVES

Since the adoption of the Basin Plan in 1994, four amendments to the mineral water quality objectives have been adopted:

<u>Chloride Policy - Revising Chloride Objectives for Segments of the Los Angeles and San</u> <u>Gabriel Rivers</u>

In January 1997, as part of a policy for addressing levels of chloride in discharges of wastewater, the Regional Board adopted an amendment to the Basin Plan that revised the chloride objectives for certain segments of the Los Angeles River, Rio Hondo, and San Gabriel Rivers. The amendment was approved by State Board in October 1997, the Office of Administrative Law (OAL) in January 1998, and the US Environmental Protection Agency (EPA) in May 2000.

These revisions are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R97-002, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/97-02/97-02_RB_BPA.pdf
This amendment also included interim chloride limits for existing dischargers to certain waterbody segments in the Calleguas Creek and Santa Clara River Watersheds. However, the application periods of these interim limits expired in January 2001. Therefore, those interim limits will not be included in the Basin Plan as part of this update.

Revising Chloride Objective for the Lower Santa Clara River

In November 2003, the Regional Board adopted an amendment to the Basin Plan that revised the chloride objective for Reach 3 at Santa Paula in the Lower Santa Clara River. The amendment was approved by State Board in February 2004, OAL in May 2004 and EPA in June 2004.

These amendments are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R03-015, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2003-015/2003-015_RB_BPA.pdf

Variance Provision for the Groundwater Mineral Quality Objectives

In March 2006, the Regional Board adopted an amendment to the Basin Plan that incorporated a variance provision for the groundwater mineral quality objectives for coastal groundwater areas when specified criteria are met. The amendment was approved by State Board in May 2007 and OAL in August 2007. Approval by EPA was not necessary as this amendment pertained to groundwater.

Details of this amendment are contained in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R06-003, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2006-003/2006-003 RB_BPA.pdf

<u>Conditional Site-Specific Objectives for Chloride in the Upper Santa Clara River Watershed</u>

In December 2008, the Regional Board adopted an amendment to the Basin Plan that incorporated conditional site specific chloride objectives for Reaches 4B, 5, and 6 of the Santa Clara River, and the groundwater basins underlying these reaches. The amendment was approved by State Board in October 2009, OAL in January 2010, and EPA in April 2010.

Details of this amendment are provided in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R08-012, which is available on the Regional Board's website at http://63.199.216.6/larwqcb_new/bpa/docs/2008-012/2008-012_RB_BPA%20(SSO).pdf

IV. OTHER PREVIOUSLY ADOPTED AMENDMENTS

Since the adoption of the Basin Plan in 1994, the Regional Board has adopted other amendments to Chapter 3: "Water Quality Objectives" including language authorizing compliance schedules in NPDES permits, implementation provisions, specifically water-effect ratios, for copper in the Calleguas Creek Watershed, and revisions to the objectives for Floating Material, and Solid, Suspended, or Settleable Material:

Resolution No. 2003-001, Compliance Schedules in NPDES Permits
In January 2003, the Regional Board adopted Resolution No. 2003-001, an amendment to the Basin Plan that incorporated language authorizing compliance schedules in NPDES permits. This action was taken to address instances where immediate

NPDES permits. This action was taken to address instances where immediate compliance with permit-specified effluent limits, based on new or revised water quality standards, was deemed infeasible by the Regional Board. The amendment was approved by State Board in June 2003, OAL in August 2003, and EPA in February 2004.

On April 15, 2008, State Board adopted Resolution No. 2008-0025, which established a state-wide *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*. State Board Resolution No. 2008-0025 superseded all existing provisions authorizing compliance schedules in Basin Plans, including Regional Board Resolution No. 2003-001, except for existing compliance schedule provisions in TMDL implementation plans that are in effect as of the effective date of Resolution No. 2008-0025. As the Basin Plan amendment language in Regional Board Resolution No. 2003-001 has no regulatory effect, that language is not being included in the Basin Plan as part of this administrative update. An explanation to this effect is included in Chapter 3 as part of this administrative update. State Board Resolution No. 2008-0025 will be discussed in Chapter 5 of the Basin Plan, which will be administratively updated at a later date.

Regional Board Resolution No. 2003-001 is available on the Regional Board's website at http://63.199.216.6/larwqcb new/bpa/docs/2003-001/2003-001 RB BPA.pdf
State Board Resolution No. 2008-0025 is available on the State Board's website at http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2008/rs2008/0025.pdf

<u>Site-specific Water Effects Ratios for Copper in Calleguas Creek Watershed</u>
In November 2006, the Regional Board adopted an amendment to the Basin Plan that incorporated Water Effect Ratios (WERs) to modify the CTR (California Toxics Rule) copper criteria in Lower Calleguas Creek and Mugu Lagoon located in the Calleguas Creek Watershed. The intent of the WER was to take into account site-specific conditions that alter the toxicity of copper to aquatic life while still being as protective of this beneficial use as the CTR criteria are intended to be. The amendment was approved by State Board in June 2007 and OAL in August 2007. Approval by EPA was not necessary as adjustment of these criteria is already authorized by the CTR (40 CFR section 131.38).

These amendments are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution No. R06-022, which is available on the Regional Board's website at http://63.199.216.6/larwqcb new/bpa/docs/2006-022/2006-022 RB_BPA.pdf

Revision of Objectives for "Floating Material" and "Solid, Suspended, or Settleable Materials"

The Regional Board adopted trash TMDLs for the San Gabriel River (East Fork), Ballona Creek and Wetlands, and the Los Angeles River Watershed in October 1999, September 2001, and August 2007; all of which were subsequently approved by the State Board, OAL, and EPA. These TMDLs contained language revising the objectives for "Floating Material" and "Solid, Suspended, or Settleable Materials" to include references to specific guidelines for trash TMDLs contained in Chapter 7 of the Basin Plan.

These amendments are detailed in the Basin Plan amendment language in the attachment to Regional Board Resolution Nos. R99-015, R01-014, R07-012, which are available on the Regional Board's website at:

http://63.199.216.6/larwqcb_new/bpa/docs/1999-015/1999-015_RB_BPA.pdf http://63.199.216.6/larwqcb_new/bpa/docs/2001-014/2001-014_RB_BPA.pdf http://63.199.216.6/larwqcb_new/bpa/docs/2007-012/2007-012_RB_BPA.pdf

V. UPDATING WATER QUALITY OBJECTIVE TABLES

Chemical Constituents - Title 22 Maximum Contaminant Levels (MCLs)

Per the 1994 Basin Plan, "Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the limits specified in the following provisions of Title 22 of the California Code of Regulations which are incorporated by reference into this plan: Table 64431-A of Section 64431 (Inorganic Chemicals), Table 64431-B of Section 64431 (Fluoride), and Table 64444-A of Section 64444 (Organic Chemicals). This incorporation by reference is prospective including future changes to the incorporated provisions as they take effect. (See Tables 3-5, 3-6, and 3-7)".

This update to Chapter 3 of the Basin Plan revises these tables to reflect the current provisions contained in the specified sections of Title 22 of the California Code of Regulations. The updates include new values for some of the constituents in Table 3-5 (Inorganic Chemicals), the inclusion of fluoride with a single objective in Table 3-5, and the deletion of Table 3-6 that previously contained a matrix of values for fluoride. The MCLs contained in Table 3-7 (Organic Chemicals) are also updated to reflect current Title 22 provisions.

Radioactive Substances - Title 22 Maximum Contaminant Levels

Per the 1994 Basin Plan, "Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of radionuclides in excess of the limits specified in Table 6 of Section 64443 (Radioactivity) of Title 22 of the California Code of Regulations which are incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as they take effect. (See Tables 3-9)".

This update to Chapter 3 of the Basin Plan revises Table 3-9 to reflect the current provisions for radioactivity contained in Title 22 of the California Code of Regulations. Provisions for these constituents are now contained in two tables: one for Radionuclides from Table 64442 in section 44442 of the current Title 22 and the other for Beta Particle and Photon Radioactivity from Table 6442 in section 6443 of the Title 22.

<u>Updating Table Containing Select Groundwater Mineral Water Quality Objectives</u>
Table 3-10 contains site-specific mineral objectives for the Los Angeles Region's groundwater basins. In November 201,1 the Regional Board adopted revisions to groundwater basins based on the 2003 Bulletin 118 update resulting in changes to some of the groupings and nomenclature of the basins and sub-basins as they appear in the 1994 Basin Plan. This administrative update includes revisions to the groundwater basins and sub-basins contained in Table 3-10 to be consistent with these changes. The water quality objectives remain the same.

VI. REFERENCES

California Regional Water Quality Control Board, Los Angeles Region. 1997. Regional Board Resolution No. R97-002: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters".

California Regional Water Quality Control Board, Los Angeles Region. 1999. Regional Board Resolution No. R99-015: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Incorporate a Total Maximum Daily Load (TMDL) for the East Fork San Gabriel River".

California Regional Water Quality Control Board, Los Angeles Region. 2001. Regional Board Resolution No. R01-014: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Incorporate a Total Maximum Daily Load for Trash in Ballona Creek and Wetland."

California Regional Water Quality Control Board, Los Angeles Region. 2001. Regional Board Resolution No. R01-018: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Update Bacteria Objectives for Water Bodies Designated for Water Contact Recreation".

California Regional Water Quality Control Board, Los Angeles Region. 2002. Regional Board Resolution No. R02-011: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for the Protection of "Aquatic Life".

California Regional Water Quality Control Board, Los Angeles Region. 2002. Regional Board Resolution No. R02-022: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Incorporate Implementation Provisions for the Region's Bacteria Objectives and to Incorporate a Wet Weather Total Maximum Daily Load for Bacteria at Santa Monica Bay Beaches".

California Regional Water Quality Control Board, Los Angeles Region. 2003. Regional Board Resolution No. R03-001: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Incorporate Language Authorizing Compliance Schedules in NPDES Permits".

California Regional Water Quality Control Board, Los Angeles Region. 2003. Regional Board Resolution No. R03-015: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Update the Chloride Objectives for Reach 3 at Santa Paula in the Lower Santa Clara River".

California Regional Water Quality Control Board, Los Angeles Region. 2004. Regional Board Resolution No. R04-022: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life".

California Regional Water Quality Control Board, Los Angeles Region. 2005. Regional Board Resolution No. R05-014: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including Enclosed Bays, Estuaries and Wetlands) for Protection of Aquatic Life".

California Regional Water Quality Control Board, Los Angeles Region. 2006. Regional Board Resolution No. R06-003: "Basin Plan Amendment to Incorporate a Variance Provision for the Groundwater Mineral Quality Objectives from Coastal Groundwater Areas with High Concentrations of Naturally Occurring Minerals".

California Regional Water Quality Control Board, Los Angeles Region. 2006. Regional Board Resolution No. R06--022: "Amendment to the Water Quality Control Plan to Incorporate Water Effects Ratios (WERs) for Copper in Lower Calleguas Creek and Mugu Lagoon in the Calleguas Creek Watershed, Ventura County."

California Regional Water Quality Control Board, Los Angeles Region. 2007. Regional Board Resolution No. R07-012: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Incorporate a Total Maximum Daily Load Trash in the Los Angeles River Watershed."

California Regional Water Quality Control Board, Los Angeles Region. 2008. Regional Board Resolution No. R08-012: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Adopt Site Specific Chloride Objectives and to Revise the Upper Santa Clara River Chloride TMDL".

California Regional Water Quality Control Board, Los Angeles Region. 2010. Regional Board Resolution No. R10-005: "Amendment to the Water Quality Control Plan of the Los Angeles Region to Update the Bacteria Objectives for Freshwaters Designated for Water Contact Recreation by Removing the Fecal Coliform Objective".

California State Water Quality Control Board (State Board). 2005. ORDER WQO 2005-004. In the Matter of Own Motion Review of Failure to Modify Recreational Use Standards for Ballona Creek by the California Regional Water Quality Control Board, Los Angeles Region. SWRCB/OCC FILE A-1622.

California State Water Quality Control Board (State Board). 2005. Resolution No. 2005-0015. "Amendment to the Water Quality Control Plan for the the Los Angeles Region to Remove the Potential REC-1 Use Associated with the Swimmable Goal as Expressed in the Federal Clean Water Act Section 101(a)(2) for "Ballona Creek", Replace the Potential Beneficial Use for "Ballona Creek to Estuary" with an Existing Limited REC-1 Use, and Add Bacteria Objectives to Protect the New Limited REC-1 Use".