



PUBLIC WORKS
DEPARTMENT

CITY OF BURBANK

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Via Email: losangeles@waterboards.ca.gov

California Regional Water Quality Control Board
Los Angeles Region
ATTN: Shana Rapoport
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Subject: Proposed Amendments to the Nitrogen TMDL for the Los Angeles River

The City of Burbank (City) thanks the Los Angeles Regional Water Quality Control Board (Regional Water Board) for the opportunity to comment on the proposed amendment to the *Water Quality Control Plan for the Los Angeles Region* (Basin Plan) to revise the Total Maximum Daily Load (TMDL) for Nitrogen Compounds and Related Effects in the Los Angeles River (Nitrogen TMDL).

While we appreciate the effort to incorporate the currently effective Basin Plan ammonia water quality objectives into the TMDL, we have significant concerns with the proposed amendment. The City believes, along with the Regional Water Board, that we should be ***celebrating*** a great and historic example of water quality improvement through delisting the waterbody rather than modifying the TMDL. Through the installation and implementation of advanced nitrification/denitrification (N/DN) treatment facilities and process optimization by the three main Publicly Owned Treatment Works (POTWs) discharging to the Los Angeles (LA) River watershed, the quality of the water can now be demonstrated to be fully attaining the applicable water quality objectives for ammonia. The message from the Cities and the Regional Water Board (and USEPA) should be that ***the TMDL process worked and that the applicable water quality standards are now being attained***. Instead, the TMDL revision ignores the water quality improvement, ignores delisting the waterbody, and contains requirements that could place additional, unnecessary burdens on the cities of Burbank and Los Angeles. Approximately \$75 million dollars have been spent to construct these advanced treatment facilities to address ammonia, approximately \$6 million per year to operate those facilities, and the Cities are still required to meet the Basin Plan ammonia objective regardless of whether a TMDL is in place or not.

The City requests that the TMDL include a finding of non-impairment for ammonia and remove the ammonia wasteload allocations from the TMDL. The three POTWs in the watershed will continue facility operations to protect the LA River watershed from

watershed will continue facility operations to protect the LA River watershed from ammonia as the Basin Plan objective will still be in place and will still be incorporated into each POTWs' NPDES permits. However, should the Regional Water Board decide to maintain the ammonia TMDL, the Cities request the following modifications:

1. The Cities request the following language be removed from page 5 and 7 of the Draft Basin Plan Amendment (BPA):

“Regardless of the SSO and SSO-derived WLAs, for discharges with concentrations below site-specific water quality objectives, effluent limitations shall ensure that effluent concentrations do not exceed the level of water quality that can be reliably maintained by the facility’s applicable treatment technologies existing at the time of permit issuance, reissuance, or modification. Regional Water Board staff may consider recommendations from a Regional Water Board-led workgroup that will be charged with evaluating alternative methodologies for calculating effluent limitations for discharges with concentrations below site-specific water quality objectives. Permit compliance with anti-degradation and anti-backsliding requirements shall be documented in permit fact sheets.”

2. The Cities request the following modification to the monitoring program:

Revise the receiving water monitoring requirements on page 5 from weekly to monthly and replace the new monitoring requirements on page 9 of the Draft BPA with the following language:

Tillman, LA-Glendale, Burbank, and Whittier Narrows POTWs must conduct confirmatory receiving water monitoring to verify that water quality conditions are similar to those of the 2003 ammonia WER study period. Confirmatory monitoring will consist of the following:

1. On an annual basis, receiving water hardness and alkalinity will be evaluated and compared to conditions observed from 2000 through 2007.
2. Evaluation of all receiving water toxicity will be conducted to determine if waste discharged ammonia was a likely cause of any observed toxicity. If it is determined that observed receiving toxicity is caused by waste discharged ammonia and discharged ammonia levels were below the SSO adjusted ammonia water quality objective, the Discharger shall develop and submit a plan for reevaluating the SSO to the Executive Officer.
3. Compare downstream ammonia measurements with calculated objectives to ensure adequate protection of beneficial uses. If it is determined that downstream receiving water ammonia objectives are not being met, the Discharger shall evaluate if waste discharged ammonia concentrations below the SSO adjusted ammonia water quality objective are responsible for the downstream objective exceedances.

The attachment provides more detail to support these two primary comments and recommended revisions and information on other requested changes to the draft BPA.

The City has worked proactively with the Regional Water Board since 2000 on addressing ammonia in the LA River, including the construction of new treatment facilities and through the development of a site-specific objective. That site-specific objective was approved by the Regional Water Board over 5 years ago and by USEPA over 3 and a half years ago, making them the currently effective ammonia objectives for the LA River watershed. While the City has supported updating the Nitrogen TMDL to incorporate the current Basin Plan ammonia objectives, the City believes the critical changes listed above are necessary to make the draft BPA consistent with the intent of the Basin Plan ammonia objectives and avoid unnecessary requirements for the regulated community that has already achieved the Basin Plan objectives.

We hope to come to a resolution on these concerns.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Daniel Rynn', written in a cursive style.

Daniel Rynn, Assistant Public Works Director

City of Burbank Public Works

Cc: Joseph McDougall, Burbank City Attorney's Office

Attachment 1

Technical Comments on the Draft Revisions to the Nitrogen TMDL in the Los Angeles River

ISSUE NO. 1 & DISCUSSION:

TMDL's Failure to Consider that Waterbody Impairments No Longer Exist for Ammonia in the Los Angeles River

The TMDL as currently written does not acknowledge or discuss the full history of ammonia regulation in the Los Angeles Region or evaluate the continued need for the TMDL or ammonia wasteload allocations.

In 1994, the Regional Water Board adopted ammonia water quality objectives in Tables 3-1 to 3-4 of the 1994 Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (1994 Basin Plan). At that time, the 1994 Basin Plan provided the following compliance schedule (emphasis added):

“Timing of compliance with this objective will be determined on a case-by-case basis. Discharges will have up to 8 years following the adoption of this plan by the Regional Water Board to (i) make the necessary adjustments/improvements to meet these objectives or (ii) to conduct studies leading to an approved site-specific objective for ammonia....”

Under these requirements, the cities of Los Angeles and Burbank (Cities) began planning, designing and installing N/DN facilities, while also pursuing a parallel path of developing and implementing site-specific objective (SSO) studies. In the end, both of these efforts were completed, , which were required under a consent decree. Subsequent to the completion of the studies, the Regional Water Board adopted the SSOs as the Basin Plan ammonia objectives.

The Draft Staff Report and TMDL do not recognize the discussion in the 1994 Basin Plan allowing for adoption of SSOs nor do they recognize that by adopting the SSOs into the Basin Plan, they are now the applicable ammonia water quality objectives for the LA River and Burbank Western Channel (BWC). It is important to acknowledge these facts in the TMDL documents as they inform significant policy concerns the City of Burbank (City) has with the TMDL revisions.

Given the SSO is now the applicable ammonia water quality objective, it should be utilized in a manner consistent with all other Basin Plan objectives during TMDL development. As a first step, in almost all TMDLs that have been developed in the Los Angeles Region, the Regional Water Board staff has evaluated the current status of the impairment. The City requests the same evaluation for this TMDL.

The Cities have invested \$75 million to build facilities and over \$6 million per year to operate those facilities to reduce the discharge of ammonia and other nitrogen compounds to the watershed. These improvements have resulted in the LA River and BWC consistently meeting the ammonia Basin Plan objectives since 2008. As presented in Table 1, there has not been a single exceedance of the ammonia Basin Plan objectives in the four years following all three POTWs implementing N/DN.

Table 1. Comparison of LA River Watershed Water Quality to Basin Plan Ammonia Objectives

Los Angeles River Reach/ Tributary	Number of Ammonia Samples (1/08 through 9/12)	Number of Exceedances (1/08 through 9/12)
1	29	0
3	403	0
4	201	0
Burbank Western Channel	71	0

The data summary presented in Table 1 would support delisting of ammonia in the LA River and BWC. A TMDL is not required where waters are not impaired. (*See* 40 C.F.R. §130.7(c)(1) stating TMDLs need only be established for “water quality limited segments.”) The Clean Water Act requires each State to identify waters within its boundaries for which the technology-based effluent limits required under sections 1311(b)(1)(A) and 1311(b)(1)(B) are not stringent enough to implement any water quality standard applicable to such waters. (33 U.S.C. §1313(d)(1)(A), CWA section 303(d)(1)(A).) This identification is known as the State’s “303(d) List.” For waters identified on a State’s 303(d) List, the State must then establish a TMDL for those pollutants suitable of such calculation. (33 U.S.C. §1313(d)(1)(C), CWA section 303(d)(1)(C).)

The State has no obligation to perform or maintain a TMDL for non-impaired waters. However, the State does have an express obligation to de-list waters that are no longer impaired. (Cal. Water Code §13193.3; State Water Resources Control Board (SWRCB), Water Quality Control Policy For Developing California’s Clean Water Act Section 303(d) List (303(d) List Policy) and Resolution No. 2004-0063 (Adopted September 2004).)

Under the State’s 303(d) List Policy, the State Water Resources Control Board has mandated that “[i]f objectives or standards have been revised and the site or water meets water quality standards, the water segment shall be removed from the section 303(d) list. The listing of a segment shall be reevaluated if the water quality standard has been

changed.” (See 303(d) List Policy at 11.¹) This reevaluation and delisting has not been done even though the SSOs were adopted into the Basin Plan over five (5) years ago.² This overdue reevaluation must be part of the Nutrient TMDL revision process.

SOLUTION TO ISSUE NO. 1:

Apply the Following Changes in the BPA

1. Insert More Comprehensive History of Ammonia Regulation

The Cities request that the Basin Plan Amendment (BPA) include a more complete history of ammonia regulation in the region. Section 1.1 of the August 31, 2012 Draft Staff Report³ - *History of the TMDL and Ammonia Water Quality Objectives* – should include a discussion of the 1994 Basin Plan Ammonia Objectives which explicitly allowed for the development of SSOs.⁴

2. Affirm Ammonia SSOs as the Applicable Water Quality Objectives

Section 1.1 of the Draft Staff Report needs to specifically recognize that the adopted and approved SSOs are the applicable water quality standards for ammonia in many locations in the LA River watershed and other local watersheds. As such, the last sentence of the third paragraph on page 3 of the Draft Staff Report should be modified as follows:

“These SSOs, in addition to the ammonia SSOs for the San Gabriel and Santa Clara River watersheds, were previously incorporated into the Basin Plan by resolution 2007-005, adopted by the Regional Water Board on June 7, 2007, and are the applicable water quality standards for ammonia.”

3. Confirm the Existence or Non-Existence of Ammonia Impairment and Modify TMDL WLAs Consistent with the Findings of the Analysis

Nowhere in the Draft Staff Report does the Regional Water Board confirm that any ammonia impairment exists based on the Basin Plan objectives. The TMDL should evaluate the current state of impairment in the waterbodies. If the conclusion matches the data evaluation included in this letter, the Cities request that the TMDL include a finding of non-impairment in the TMDL revision.

¹ EPA in its November 16, 2011 comments regarding the City of Los Angeles’ revised NPDES permits stated that “In 2009, EPA approved a site-specific objective (SSO) for ammonia that could result in less stringent permit limits than those based on current wasteload allocations in the Nitrogen TMDL. As a result, prior to permit implementation, the SSO must be incorporated into the Nitrogen TMDL to ensure that impaired receiving waters will achieve water quality standards for ammonia.” Thus, EPA has also acknowledged that the TMDL will need to be amended to include and implement the SSO.

² The City of Los Angeles’ Bureau of Sanitation specifically raised this issue in its comment letter on its August 4, 2011 tentative NPDES Permit for the LA-Glendale Water Reclamation Plant, stating “the Bureau has provided information that, using the new Basin Plan objectives, the Los Angeles River is no longer impaired for ammonia and should be delisted in 2012.”

³ Draft Staff Report: *Revision of the Total Maximum Daily Load for Nitrogen Compounds and Related Effects in the Los Angeles River*, August 31, 2012

⁴ For ease, language could be copied from pages 9-10 of the Final Staff Report for the 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 (July 2007).

Based on a finding of non-impairment, we request that the TMDL remove the ammonia targets and allocations or include the proposed ammonia targets, but remove the WLAs, consistent with other TMDLs that have been approved in the Los Angeles Region.⁵

ISSUE NO. 2 & DISCUSSION:

Performance-Based Limits for Ammonia are Not Applicable and Unnecessary

As discussed in the previous comment, the Cities do not feel WLAs for ammonia are necessary since the impairment has been removed due to the improvements in treatment processes. Furthermore, the Cities' NPDES permits will ensure that ammonia objectives will continue to be met regardless of whether a TMDL is in place or not. However, should the Regional Water Board continue to maintain WLAs, the Cities have significant concerns about the inclusion of effluent limits that are more stringent than the revised WLAs incorporating the Basin Plan ammonia objectives. No technical or legal basis exists for the provisions (noted below) in the Draft Staff Report and tentative resolution purporting to require limits more stringent than any calculated final effluent limits using the SSOs.

“...as will be discussed later, regardless of the WER, POTW effluent limitations must ensure that effluent concentrations do not exceed the level of water quality that can be reliably maintained by the facility's applicable treatment technologies.”⁶

“The effluent limitations for the Tillman, Burbank and LA-Glendale POTWs shall ensure that effluent concentrations do not exceed the level of water quality that can be reliably maintained by the facility's applicable treatment technologies existing at the time of permit issuance, reissuance, or modification.”⁷

“Regardless of the SSO and SSO-derived WLAs, for discharges with concentrations below site-specific water quality objectives, effluent limitations shall ensure that effluent concentrations do not exceed the level of water quality that can be reliably maintained by the facility's applicable treatment technologies existing at the time of permit issuance, reissuance, or modification. Regional Water Board staff may consider recommendations from a Regional Water Board-led workgroup that will be charged with evaluating alternative methodologies for calculating effluent limitations for discharges with concentrations below site-specific water quality objectives. Permit compliance with anti-degradation and anti-backsliding requirements shall be documented in permit fact sheets.”⁸

The Regional Board's Draft Staff Report and tentative resolutions are backwards of the Clean Water Act's permitting scheme where water quality-based effluent limits were intended to supplement the basic technology-based limits. *See accord* 33 U.S.C. §1311(b)(1)(B) and (C); 40 C.F.R. §131.2 (purpose of water quality standard is to “serve as the regulatory basis for the establishment of water-quality-based treatment controls

⁵ Calleguas Creek Watershed OC Pesticides, PCBs, and Siltation TMDL, Calleguas Creek Metals and Selenium TMDL, and the Los Angeles Lakes TMDLs.

⁶ Draft Staff Report at pp. 10

⁷ Draft staff Report at pp. 12-13

⁸ Tentative Resolution No. R12-XXX at pp. 5 and 7

and strategies beyond the technology-based levels of treatment required by sections 301(b) and 306 of the Act.”).

Except in the case of interim limits authorized by a compliance schedule,⁹ no authority exists for performance-based limits. The implementation provisions included in the Basin Plan amendments for ammonia criteria contain no such authority. Under the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries, also known as the State Implementation Plan (SIP), which does not directly apply to ammonia, the Regional Water Board can only “impose more restrictive water quality-based effluent limitations ... where necessary for the protection of beneficial uses or where otherwise required by law.” The Regional Water Board has not demonstrated that the more stringent limits being proposed are necessary to protect beneficial uses, or are required by law.

Issue 2A & Discussion:

Performance-based limits are not necessary for the protection of beneficial uses

When the SSOs were adopted, the Regional Water Board made findings that the “SSOs would provide the same level of protection for aquatic life in the affected waterbodies as the national 30-day average criterion is intended to.”¹⁰ The Regional Water Board also found that the adoption of the ammonia SSOs “would result in no adverse impact on wildlife.” (SWRCB Res. No. 2008-0004 at pg. 1, para.3.)¹¹ The Regional Water Board also made clear when responding to Heal the Bay’s comments in its May 14, 2007 Responsive Summary for the Ammonia SSOs that “[t]he proposed SSOs are based on a number of conservative assumptions”¹² and “the SSOs are not a ‘relaxing’ of the objective. The SSOs are derived to afford the same level of protection to aquatic life as the established regional objective...”

⁹ Interim limits are established when a discharger cannot consistently comply with a final calculated Water Quality Based Effluent Limit (WQBEL) and needs time to come into compliance. (See SWRCB Compliance Schedule Policy, Resolution No. 2008-0025 at pg. 6, para. 7.b.: “Numeric interim limitations for the pollutant must, at a minimum, be based on current treatment facility performance or on existing permit limitations, whichever is more stringent.”) Because compliance schedule are only needed where WQBELs cannot be feasibly attained immediately, interim limits are normally set higher than the calculated final WQBEL, but low enough to minimize adverse impacts while also providing the discharger time to achieve compliance. The opposite is being proposed here; the limits are being proposed to be set lower than the applicable ammonia standards or calculated WQBELs.

¹⁰ Final Staff at pp 11

¹¹ The Regional Water Board previously rejected the need to maintain existing ammonia objectives instead of adopting the SSOs acknowledging that such an action would have “resulted in an objective that is more stringent than the threshold necessary to protect aquatic life in these waterbodies.” (Final Staff Report for the 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 (July 2007) at pg.34, section XI.1.)

¹² See also Basin Plan Amendment – Revision to the Early Life Stage [ELS] Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters – Responsiveness Summary for August 2005 Public Notice at 7 noting that the assumption of ELS present without evaluation was a “conservative assumption” and “an environmentally cautious approach.”

The United States Environmental Protection Agency's (USEPA) approval¹³ of the ammonia SSOs also recognized that "portions of this amendment which establishes ammonia criteria [are] as protective as those currently applicable for these water bodies in the Los Angeles Region," and that "given available data and expert opinion, the SSOs are protective of aquatic life." Thus, there is no water quality need to require artificially and arbitrarily low performance-based limits to protect beneficial uses.

Issue 2B & Discussion:

Performance-based limits were not discussed or envisioned during adoption of the SSOs

Unlike most of the Basin Plan objectives, the ammonia objectives adopted by the Regional Water Board in 2007 established specific procedures for the calculation of effluent limitations. These calculation procedures were not modified or qualified when the SSOs were adopted. Given that the Basin Plan included implementation procedures for the ammonia objectives, if there was concern or a projected need to establish performance-based effluent limitations to implement the SSOs, they would have been adopted into the Basin Plan during the SSO adoption. However, there is no indication in the administrative record of the SSO BPA that a different effluent calculation procedure was needed for the SSOs or that the adopted procedures should be set aside for potentially lower effluent limitations based on treatment process performance.

During the public review process of the SSOs no commenter identified any concerns regarding the use of the effluent limitation calculation procedure even though it was clearly acknowledged in the Final Staff Report that N/DN facilities could achieve lower ammonia effluent concentrations.¹⁴ In particular, neither USEPA nor Heal the Bay (the only non-discharger submitted comments) identified any concern with the proposed SSOs being higher than the ammonia effluent concentrations that could be achieved with optimal N/DN performance concentrations. In their approval letter USEPA found that the SSOs met their guidance and commended the work of the Regional Water Board.

"EPA finds that Regional Water Board staff made appropriate use of the EPA's 1985 Guidelines for Deriving Numerical Water National Quality Criteria for the Protection of Aquatic Organisms and Their Uses, EPA's 1994 Interim Guidance on the Determination of Use of Water-Effect Ratios for Metals, and EPA's 1999 Update of Ambient Water Quality Criteria for Ammonia (EPA-822-R-99-014 December 1999) in reaching their conclusions regarding the use of WERs and calculations of the SSOs in the Regional Water Board's jurisdiction. The LARWQCB's Staff Report adequately demonstrates that, given available data and expert opinion, the SSOs are protective of aquatic life."¹⁵

"EPA commends the Los Angeles Regional Water Board staff for its work on the site specific ammonia amendment."¹⁶

¹³ USEPA March 30, 2009 approval letter at pp.2

¹⁴ "Again, the level of ammonia discharged from the POTW can on occasion be between 2-3 mg/L due to operational variations; thus the SSOs provide needed relief to the POTWs to enable them to meet ammonia permit limits." Final Staff Report at pp. 31

¹⁵ USEPA March 30, 2009 approval letter at pp. 2

¹⁶ USEPA March 30, 2009 approval letter at pp. 3

The only comments regarding N/DN raised during the comment period were submitted by the City of Burbank and the City of Los Angeles, Bureau of Sanitation; both requested acknowledgement of the need for the SSO even when N/DN was in place. As a result of this comment, the Regional Water Board added section VIII B to the SSO BPA Final Staff Report to discuss the need for the SSOs in conjunction with N/DN implementation.

Issue 2C & Discussion:

Performance-based limits are counter to the purpose and intent of the SSOs

As previously noted, the Regional Water Board acknowledged the need to develop and include ammonia SSOs in the Basin Plan to support operation of treatment plants with N/DN through the addition of section VIII B to the SSO BPA Final Staff Report. In this section of the Final Staff Report, the Regional Water Board staff acknowledged the need for the SSOs due to the complexities of the disinfection treatment process and the variability associated with the biological N/DN processes.

“Disinfecting treated wastewater with chlorine has become very complicated in terms of complying with more restrictive discharge requirements for not only ammonia but also for other disinfection by-products. In general, POTW operators attempt to remove all the ammonia in the secondary treated wastewater during N/DN and then add a small measured amount back in just prior to the disinfection process. The amount of ammonia added back to the secondary effluent averages approximately 1.5 mg/L.¹⁷

Further complicating the process are diurnal variations in influent flows to the wastewater treatment plants and ammonia concentrations, natural variability in the biological N/DN treatment process, and variations in influent organic loadings. For example, the flows in wastewater treatment plants fluctuate with weather conditions, time of day, and day of the week. Also, the influent ammonia concentrations will vary depending on time of day, with peak influent ammonia concentrations occurring around early to mid-morning. Lastly, since the N/DN process is a biological process, it too is subject to performance variability as a result of climatic conditions that can result in a less robust biological process during cold weather events. Individually, each of these variations in influent conditions and biological process performance, along with the disinfection process issues described earlier, may result in only minor or insignificant increases in treated effluent ammonia concentrations. However, in combination, all these factors result in typical concentrations of ammonia in the final treated effluent between 1-2 mg/L, with occasional increases that can approach 3 mg/L. Thus, there are times that the final treated effluent ammonia concentrations, from the best performing and optimally operated wastewater treatment facilities, can be in the 2-3 mg/L range.¹⁸

¹⁷ Final Staff Report at pp. 30

¹⁸ Final Staff Report at pp. 30-31

As shown by this discussion in the Final Staff Report, Regional Water Board staff supported the need for SSOs to account for the variability and complexities of the treatment process. Although ammonia can be completely removed at times during the N/DN process, other permit and treatment requirements combined with the biological variability result in some discharge of ammonia. As a result, the concept of a performance-based limit for the treatment process for ammonia does not make sense. Furthermore, performance based limits are counter to the stated intent of the SSOs allowing the treatment plants to optimize their processes to address all constituents of concern, not just ammonia. It is essential for the treatment plant operators to be able to balance all the variables to match the end effluent quality to meet all water quality requirements as efficiently as possible. Maximizing the treatment process to focus on the removal of ammonia could potentially result in not meeting the effluent limitations of other water quality parameters (i.e., trihalomethanes [THMs]). The need for this flexibility was recognized by the Regional Water Board:

“... thus, the SSOs provide needed relief to the POTWs to enable them to meet ammonia permit limits.”¹⁹

Applying the SSOs without performance-based requirements will not result in the modification of treatment processes or the discharge of ammonia at levels that will cause beneficial use impacts. As noted in the Implementation section of the July 2007 Final Staff Report:

“While the SSOs will allow for slightly increased concentrations of ammonia in some local waterbodies, the POTWs that currently do not operate in N/DN will still need to upgrade their facilities and other POTWs that are operating with N/DN will continue to operate in N/DN. Because the SSOs are refined objectives that are higher than the objectives in the Basin Plan, this amendment should not cause any expenditures to upgrade facilities beyond N/DN.”²⁰

Additionally, setting effluent limitations based on the optimal performance of N/DN could result in additional costs and requirements for the treatment plants that were not addressed during the SSO adoption. If performance-based limits were contemplated during the adoption of the SSOs, the SSO Final Staff Report would have needed to consider those additional costs beyond N/DN. However, as shown by the statement above, no additional treatment beyond N/DN was envisioned.

Finally, the August 12, 2012 Draft Staff Report for the TMDL revision provides no justification for the use of performance based limits in lieu of the adopted SSOs. The draft staff report does not demonstrate a change in the regulatory requirements or treatment processes since the SSO adoption that would necessitate consideration of performance-based limits. Given the substantial information in the administrative record for the adoption of the SSOs with the express intent to optimize N/DN treatment processes with other treatment processes and that the SSOs are protective of beneficial

¹⁹ Final Staff Report at pp. 31

²⁰ Final Staff Report at pp. 31-32

uses, significant justification would be needed in the Draft Staff Report to warrant the completely alternate approach of including performance based limits in the TMDL.

Issue 2D & Discussion:

Performance-based limits have not been utilized to incorporate the SSOs into other POTW permits

The ammonia SSOs have already been incorporated into three POTW permits in the San Gabriel River Watershed without consideration of performance-based limits. The SSOs were incorporated into the Whittier Narrows Water Reclamation Plant (WRP), Pomona WRP, and San Jose Creek WRP NPDES permits in 2009 consistent with the implementation procedures outlined in the Basin Plan.

“On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005, Amendments to the Water Quality Control Plan-Los Angeles Region-To Incorporate Site-Specific Objectives for Select Inland Surface Waters in the San Gabriel River, Los Angeles River and Santa Clara River Watersheds. This amendment to the Basin Plan incorporates 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. The State Water Board, OAL, and USEPA approved this Basin Plan amendment on January 15, 2008, May 12, 2008, and March 30, 2009, respectively. It is expected that Resolution No. 2007-005 will go into effect prior to the May 7 and 8, 2009, Board hearing date. Therefore, ammonia effluent limitations, incorporating the 30-day average SSO in the ammonia translation procedures, have been included in the effluent limitations table.”²¹

In addition, the Whittier Narrows WRP has effluent locations that discharge into the Los Angeles River watershed. The 2009 Whittier Narrows WRP permit recognizes the SSO cannot be incorporated for that discharge point until the Los Angeles River TMDL is revised. However, the Fact Sheet contains a discussion of the envisioned calculation of the effluent limits for the Whittier Narrows WRP after the TMDL revision.

“On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005, Amendments to the Water Quality Control Plan-Los Angeles Region-To Incorporate Site-Specific Objectives for Select Inland Surface Waters in the San Gabriel River, Los Angeles River and Santa Clara River Watersheds. 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. Upon the effective date of Resolution No. 2007-005, the ammonia limits, incorporating the 30-day average SSO in the ammonia translation procedures, will become operative. As part of its triennial review process, the Regional Board shall reconsider the

²¹ Waste Discharge Requirements for the Whittier Narrows WRP Fact Sheet page F-30. Similar language is included in the Waste Discharge Requirements for the Pomona WRP Fact Sheet page F-27 and the Waste Discharge Requirements for the San Jose Creek WRP Fact Sheet page F-41.

continued appropriateness of the site-specific objectives. However, the SSO-derived ammonia effluent limitations for discharges to Discharge Points 002, 003, and 004 to Rio Hondo, thence to Los Angeles River will have to wait for the revision to the Los Angeles River Nutrient Compounds TMDL. The application of the SSO is not considered backsliding under Exception (2) of Section 402(o)(2) of the Clean Water Act 40 CFR 122.44. The SSO 30-day average objective is determined using the following formulas below:”

“Using the Discharger’s monitoring data in the formula above, the resulting SSO 30-Day Average Objectives for the San Gabriel River is equal to 3.4 mg/L and 4.2 mg/L with ELS Present and ELS Absent, respectively.”²²

The Whittier Narrows WRP has already been assigned ammonia effluent limits consistent with the SSO for some discharge points and the Fact Sheet for the permit envisioned that a similar process would be utilized to set ammonia effluent limitations once the Los Angeles River TMDL was revised. The Fact Sheet does not include any discussion of the need to include performance-based limits to incorporate the SSO. Therefore, the inclusion of performance-based effluent limits for the Whittier Narrows WRP would result in the treatment plant having to meet different requirements for ammonia for the discharge points to the Los Angeles River. As discussed above, the Draft TMDL Staff Report does not include any justification to demonstrate that performance-based effluent limits are necessary when they were not considered during the adoption of their current (2009) permit. The staff report also does not provide justification why they would be necessary for one portion of the discharge when other discharge locations have effluent limitations using the SSO without consideration of performance-based limits. Note that the language in the Whittier Narrows permit was developed by Regional Water Board staff in conjunction with USEPA staff who did not object to the permit language.

Issue 2E & Discussion:

Performance-based limits are not justified for anti-degradation reasons

The ammonia Basin Plan objectives were set at a level of water quality necessary to protect and maintain the existing uses of the Los Angeles River. (See previous discussion; see also 40 C.F.R. §131.12(a)(1).) The ammonia Basin Plan objectives have been found to “be consistent with the State Antidegradation Policy (State Water Board Resolution No. 68-16) and federal antidegradation requirements” as well as being “part of a comprehensive strategy for addressing nitrogen impairments in the Santa Clara and Los Angeles River watersheds, which includes development and implementation of a Total Maximum Daily Load and corresponding effluent and receiving water limitations in National Pollutant Discharge Elimination System permits.” (SWRCB Resolution No. 2008-0004 at pg. 1, para. 3, and at pg. 2, para. 6.) Further, USEPA determined in its March 30, 2009 approval letter that the SSOs were “subject to EPA’s approval authority under Section 303(c) [including] those addressing antidegradation” and approved the SSO Basin Plan Amendment “[p]ursuant to CWA section 303(c) and the implementing federal regulations at 40 CFR 131.” Thus, the State Water Board has found that the

²² Waste Discharge Requirements for the Whittier Narrows WRP Fact Sheet page F-33 and F-34.

SSOs meet the State's Antidegradation Policy requirements, and EPA has found that the SSOs meet the federal antidegradation requirements at 40 C.F.R. §131.12. Therefore, there is no reason to impose performance-based effluent limits below the SSOs for anti-degradation reasons.

Such performance-based limits merely punish good performance since a POTW discharging at or just below the SSO-based limit would not be subject to a more stringent limit. Performance-based limits also unnecessarily place the Cities in enforcement jeopardy for arbitrarily set limits below the scientifically derived level of protection necessary for protection of beneficial uses. Thus, the Cities could be subject to enforcement actions or Mandatory Minimum Penalties that they would not be otherwise subjected had the limits been correctly based on the applicable water quality objectives.

Issue 2F & Discussion:

Antibacksliding exceptions apply to the current POTW limits

Section 402(o) of the CWA sets forth the general rule prohibiting backsliding from effluent limitations contained in previously issued permits that were based on §§402(a)(1)(B), 301(b)(1)(C), 303(d), or 303(e).²³ The main thrust of §402(o) is to bar permit holders from “backsliding” or weakening effluent limits contained in an NPDES permit except under very limited circumstances. (33 U.S.C. §1342(o)(2), CWA §402(o)(2).) Thus, permits issued with these types of limitations may not be reissued, renewed, or modified to contain less stringent effluent limitations than the previous permit *unless* the proposed new limitations comply with either the antidegradation rule contained in §303(d)(4), or the permit falls into one of the statutory exceptions to this general ban on backsliding.²³ This is contrary to the finding in the Draft Staff Report at pg. 14, Section 5, which states “If a POTW can demonstrate this exception [antibacksliding], then it must comply with State and federal anti-degradation requirements,” and which must be modified to be consistent with the law.

Nevertheless, the Cities meet both the antidegradation requirements, and the antibacksliding requirements.

- *Backsliding Under the Antidegradation Rule*

Under the exceptions to the antibacksliding rule contained in §402(o), the first way a discharger may relax the effluent limitations contained in its NPDES permit is to demonstrate compliance with an antidegradation rule found in CWA §303(d)(4). The Act's antidegradation rule is two-pronged depending on whether or not applicable water quality standards have been met in the receiving waters.

²³ 33 U.S.C. §1342(o)(1), (o)(2), CWA §402(o)(1), (o)(2). EPA guidance states that §§402(o)(2) and 303(d)(4) of the CWA “constitute independent exceptions to the prohibition against relaxation of permit limits. If either is met, relaxation is permissible.” *U.S. EPA, Technical Support Document for Water Quality-Based Toxics Control* 113 (1991) [hereinafter *Technical Support Document*](emphasis added). Thus, according to EPA, dischargers must only meet the requirements of one of these statutory provisions in order to relax their permit limits. See U.S. EPA Region IX Memorandum, *Antibacksliding—Effect on Water Quality-Based Effluent Limitations 1* (Aug. 8, 1994); see also *American Iron & Steel Inst. v. EPA*, 115 F.3d 979, 993 n.6, 27 ELR 21241, 21246 n.6 (D.C. Cir.1997) (citing 58 Fed. Reg. 20802, 20837 (Apr. 16, 1993) (“§402(o) allows relaxation of water quality-based limits if the requirements of either §402(o)(2) or §303(d)(4) are met.”)).

Where the applicable water quality standard has not yet been attained, §303(d)(4)(A) provides that any effluent limitation based on a TMDL or other WLA may be relaxed if the cumulative effect of all revised effluent limitations based on the TMDL or WLA will assure the attainment of the applicable water quality standard. This could be used in the current situation since the standards are already being attained.

Alternatively, if the water quality standard is being attained, then effluent limitations may be revised only if such revision is subject to and consistent with the state's antidegradation policy. (33 U.S.C. §1313(d)(4)(B), CWA §303(d)(4)(B).) As stated above, the revised standards, and thus effluent limitations to meet those standards have been found to be consistent with the state and federal antidegradation policies. (SWRCB Resolution No. 2008-0004 at pg. 1, para. 3, and at pg. 2, para. 6.)

Thus, the Cities' permits meet the antidegradation requirements and more stringent performance-based limits are not required.

- *Backsliding Under the Statutory Exceptions to the Antibacksliding Rule*

The general prohibition against backsliding found in §402(o)(1) of the Act contains several exceptions. Specifically, under §402(o)(2), a permit may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant if *any* of the statutory exceptions contains in section 402(o)(2)(A)-(E) are met. (33 U.S.C. §1342(o)(2), CWA §402(o)(2).)

Either of the first two exceptions would apply in this instance. Under section 402(o)(2)(A), backsliding would be allowed since "material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. Also, under section 402(o)(2)(B)(i), backsliding would be allowed since "information is available which was not available at the time of permit issuance ...which would have justified the application of a less stringent effluent limitation at the time of permit issuance." As acknowledged by the Draft Staff Report at pg. 14, Section 5, "the WER based SSOs provide new information and therefore the POTWs may meet the backsliding exception under CWA section 402(o)(2)." (*See also* SWRCB Order No. WQO 2003-0012 at pgs. 15-17.)

Thus, under the antibacksliding rules, less stringent limits, up to the water quality standard are authorized.²⁴ (33 U.S.C. §1342(o)(3), CWA §402(o)(3).) Arbitrarily ratcheting back relaxed effluent limits to limits based on performance, rather than water quality, would be contrary to the existence of and need for these statutory exceptions.

SOLUTIONS TO ISSUES NOs. 2A THRU 2F

There are three proposed solutions for issues 2A thru 2F.

²⁴ Performance-based limits are not authorized under this section of the CWA unless the discharger has been unable to meet the limits in its last permit despite the installation of advanced treatment, and then the discharger may be given less stringent limits that reflect the effluent concentration actually being achieved by the discharger as long as this revised limit is not less stringent than the applicable effluent limitation guidelines (however, such guidelines do not exist for POTWs for ammonia). (33 U.S.C. §1342(o)(2)(E), CWA §402(o)(2)(E).)

1. Delete the following language from page 5 and 7 of the Draft Basin Plan Amendment:

“Regardless of the SSO and SSO-derived WLAs, for discharges with concentrations below site-specific water quality objectives, effluent limitations shall ensure that effluent concentrations do not exceed the level of water quality that can be reliably maintained by the facility’s applicable treatment technologies existing at the time of permit issuance, reissuance, or modification. Regional Water Board staff may consider recommendations from a Regional Water Board-led workgroup that will be charged with evaluating alternative methodologies for calculating effluent limitations for discharges with concentrations below site-specific water quality objectives. Permit compliance with anti-degradation and anti-backsliding requirements shall be documented in permit fact sheets.”

2. On page 5 and 7 of the Draft Basin Plan Amendment, add the underlined language to the starred paragraph:

* It would be consistent with the findings and assumptions of this TMDL to calculate total ammonia WLAs based on the most recent three years of data when incorporating WLAs into permits. In applying this approach, 90th percentile pH data shall be used to establish one-hour average WLAs and the 50th percentile of pH and temperature data shall be used to establish 30-day average WLAs. The procedure for translation of objectives into effluent limits specified in Chapter 3 of this Basin Plan, as amended by Resolution R02-011 and R04-022, as utilized to calculate ammonia effluent limitations for the 2009 Waste Discharge Requirements for the Pomona and San Jose Creek WRPs shall be used to translate WLAs into permit effluent limitations.

3. Delete the following language from page 10, 12 and 13 of the Draft Staff Report:

“...as will be discussed later, regardless of the WER, POTW effluent limitations must ensure that effluent concentrations do not exceed the level of water quality that can be reliably maintained by the facility’s applicable treatment technologies.”

“The effluent limitations for the Tillman, Burbank and LA-Glendale POTWs shall ensure that effluent concentrations do not exceed the level of water quality that can be reliably maintained by the facility’s applicable treatment technologies existing at the time of permit issuance, reissuance, or modification.”

ISSUE NO. 3 & DISCUSSION:

Establish Receiving Water Monitoring Consistent with Past Decisions

As part of the adoption of the ammonia SSO, provisions were included in the Basin Plan to require collection of monitoring data that will allow evaluation by the POTWs and the Regional Water Board to ensure the SSO remained protective of the beneficial uses. In the 2009 renewals of the NPDES permits for the San Jose Creek and Whittier Narrows Water Reclamation Plants, the Los Angeles County Sanitation Districts (Districts) and Regional Water Board staff developed receiving water monitoring requirements to

address the Basin Plan requirement. The requirement was included as a special provision of both permits, differing only in the receiving water stations cited as follows:

c. Ammonia Receiving Water Monitoring Requirements

The Discharger shall delineate the pH and temperature of the ambient receiving water conditions for stations RSW-002A, RSW-003A, and RSW-005A within 100 feet downstream from the point of discharge. A workplan describing the pH and temperature fluctuation study shall be submitted to the Executive Officer for approval within 60 days from the date of adoption of this permit. Detailed monitoring requirements are contained in Section VII.A.2 of the MRP.²⁵

The monitoring program was considered by the Regional Water Board on June 4, 2009 and was adopted with no opposition²⁶. This receiving water monitoring program was determined to be appropriate for the ongoing assurance that the SSOs remain relevant and protective of the beneficial uses. Since the permit adoption, the Districts have been conducting the monitoring and submitting reports to Regional Water Board staff. These reports have been accepted and no information has been provided that this monitoring program is not meeting the Basin Plan requirements.

The Draft Staff Report for the TMDL provides no justification for the monitoring requirements included to meet the Basin Plan requirements for the SSO. There is no discussion of the reasoning for the requirements or acknowledgement of the existing monitoring program being conducted by the Districts in the San Gabriel River to meet the same requirements.

As there is already an established monitoring protocol to meet the Basin Plan requirements for confirming the SSOs, the Cities request this existing monitoring program replace the proposed monitoring requirements in the TMDL.

SOLUTION TO ISSUE NO. 3

The City's recommendation to resolve issue No. 3 is to replace the new monitoring requirements on page 9 of the Draft Basin Plan Amendment with the following language:

Tillman, LA-Glendale, Burbank, and Whittier Narrows POTWs must conduct confirmatory receiving water monitoring to verify that water quality conditions are similar to those of the 2003 ammonia WER study period. Confirmatory monitoring will consist of the following:

1. On an annual basis, receiving water hardness and alkalinity will be evaluated and compared to conditions observed from 2000 through 2007.
2. Evaluation of all receiving water toxicity will be conducted to determine if waste discharged ammonia was a likely cause of any observed toxicity. If it is

²⁵ Order No. R4-2009-0077, Waste Discharge Requirements for the Joint Outfall System Whittier Narrows Water Reclamation Plant, at pp. 32. See similar provision In Waste Discharge Requirements for Joint Outfall System San Jose Creek Water Reclamation Plant Discharge To San Gabriel River Via Discharge Outfall Nos. 001, 001a, 001b, And 003 And San Jose Creek Via Discharge Outfall No. 002 at pp. 35

²⁶ Staff Presentation NPDES Renewals Narrows Water Reclamation Plant (Item 16) and San Jose Creek Water Reclamation Plant (Item 18).

determined that observed receiving toxicity is caused by waste discharged ammonia and discharged ammonia levels were below the SSO adjusted ammonia water quality objective, the Discharger shall develop and submit a plan for reevaluating the SSO to the Executive Officer.

3. Compare downstream ammonia measurements with calculated objectives to ensure adequate protection of beneficial uses. If it is determined that downstream receiving water ammonia objectives are not being met, the Discharger shall evaluate if waste discharged ammonia concentrations below the SSO adjusted ammonia water quality objective are responsible for the downstream objective exceedances.

Additionally, corresponding revisions to the Draft Staff Report to discuss and support the proposed revision to the Draft Basin Plan Amendment are requested.