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COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY, CALIFORNIA ASSOCIATION OF SANITATION AGENCIES, SOUTHERN CALIFORNIA ALLIANCE OF POTWs, and BAY AREA CLEAN WATER AGENCIES

BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of County Sanitation District No. 2 of Los Angeles County, California Association of Sanitation Agencies, Southern California Alliance of POTWs, and Bay Area Clean Water Agencies for Review of Action and Failure to Act by the California Regional Water Quality Control Board, Los Angeles Region, in Adopting Order Nos. R4-2014-0213 and R4-2014-0212 for the Whittier Narrows and Pomona Water Reclamation Plants.	**PETITION FOR REVIEW; PRELIMINARY POINTS AND AUTHORITIES IN SUPPORT OF PETITION FOR REVIEW; REQUEST FOR HEARING; REQUEST FOR STAY.** **[WATER CODE §§13320, 13321; 23 C.C.R. §2050 *et seq.*]**

In accordance with section 13320 of the Water Code, Petitioner County Sanitation District No. 2 of Los Angeles County (the "District") on behalf of the Joint Outfall System and its member districts,[1] Petitioner California Association of Sanitation Agencies ("CASA"), Petitioner Southern California Alliance of POTWs ("SCAP"), and Petitioner Bay Area Clean Water Agencies

[1] The Joint Outfall System ("JOS") is an integrated network of wastewater collection, treatment, and disposal facilities in Los Angeles County, which is constructed, maintained, and operated as one unit, and is jointly and is proportionally shared among the signatory parties to the amended Joint Outfall Agreement ("JOA") effective July 1, 1995. These parties include County Sanitation Districts Nos. 1, 2, 3, 5, 8, 15, 16,17, 18, 19, 21, 22, 23, 28, 29, and 34 of Los Angeles County, and South Bay Cities Sanitation District of Los Angeles County. Per the terms of the 1995 JOA, the District serves as the appointed agent for the JOS and files this petition on behalf of the JOS and its member districts. *See* Declaration of Philip L. Friess in Support of the District's Petition for Stay, attached as **Exhibit C**, at ¶ 1.

("BACWA") (collectively "Petitioners") hereby petition the State Water Resources Control Board ("State Board") to review the action and failure to act by the California Regional Water Quality Control Board, Los Angeles Region ("Regional Board") in adopting the District's National Pollutant Discharge Elimination System ("NPDES") Permits, Order No. R4-2014-0213 ("Whittier Narrows Permit") for the Whittier Narrows Water Reclamation Plant ("WRP") and Order No. R4-2014-0212 ("Pomona Permit") for the Pomona WRP ("Permits") on November 6, 2014. Copies of the Permits are attached as **Exhibit A** and **Exhibit B**, respectively.

A summary of the bases for this Petition and a preliminary statement of points and authorities are set forth in this Petition for Review in accordance with Title 23, California Code of Regulations ("C.C.R.") section 2050(a). The Petitioners reserve the right to file supplemental points and authorities in support of this Petition for Review once the administrative record becomes available.[2] The Petitioners also reserve the right to submit additional arguments and evidence responsive to the Regional Board's or other interested parties' responses to this Petition for Review, to be filed in accordance with 23 C.C.R. section 2050.6.

1. NAME, ADDRESS, PHONE NUMBER AND EMAIL OF THE PETITIONERS:

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[2] It is not possible to prepare a thorough memorandum or a memorandum that is entirely useful to the reviewer in the absence of the complete administrative record, which is not yet available.

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2. THE SPECIFIC ACTION OF THE REGIONAL BOARD WHICH THE STATE BOARD IS REQUESTED TO REVIEW:

The Petitioners seek review of the action and inaction of the Regional Board in connection with the adoption of the Permits. By adopting the Permits, the Regional Board failed to comply with the Porter-Cologne Water Quality Control Act (Cal. Water Code §§13000 *et seq.*) and its implementing regulations; failed to comply and/or acted inconsistently with the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California ("SIP"); acted inconsistently with the Water Quality Control Plan for the Los Angeles Region ("Basin Plan"); acted inconsistently with the mandates of the Clean Water Act ("CWA" 33 U.S.C. §§1251 *et seq.*) and its implementing regulations (40 Code of Federal Regulations ("C.F.R.") Parts 122, 123, 124, 130, 131, and 136); failed to comply with the Administrative Procedures Act ("APA"); acted inconsistently with precedential State Board orders, including one directly related to the Whittier Narrows WRP NPDES permit; failed to support the provisions of the Permits with proper findings, and included findings and requirements in the Permits that are not supported by the evidence.

3. THE DATE ON WHICH THE REGIONAL BOARD ACTED OR FAILED TO ACT:

The Regional Board adopted the Permits on November 6, 2014 in Los Angeles, California, and failed to make changes in the Permits requested by the Petitioners related to chronic toxicity.

4. STATEMENT OF THE REASONS THE ACTION OR INACTION WAS INAPPROPRIATE OR IMPROPER.

A. FACTUAL AND PROCEDURAL BACKGROUND:

1) Permitting History

a) Background Information about the WRPs

The District owns and operates the Whittier Narrows WRP, a tertiary treatment wastewater facility located at 301 North Rosemead Boulevard, El Monte, California. The Whittier Narrows WRP receives industrial, commercial, and residential wastewater from the Cities of Alhambra, Arcadia, Azusa, Bradbury, City of Industry, Duarte, El Monte, Glendale, Irwindale, La Canada Flintridge, Los Angeles, Monrovia, Monterey Park, Pasadena, Rosemead, San Gabriel, San Marino, Sierra Madre, South El Monte, South Pasadena, and Temple City. Treatment at the Whittier Narrows WRP consists of primary sedimentation, activated sludge biological treatment with nitrification and denitrification, secondary sedimentation with coagulation, inert media filtration, ultraviolet ("UV") disinfection, chlorination and de-chlorination.

The Whittier Narrows WRP discharges tertiary treated wastewater to the San Gabriel River, Rio Hondo River, and the Zone 1 Ditch. At the point of discharge, the San Gabriel River, Rio Hondo River, and the Zone 1 Ditch are unlined; however, the U.S. Army Corps of Engineers and Los Angeles County Flood Control District channelized and added concrete lining to downstream portions of the San Gabriel River and Rio Hondo to convey and control floodwaters and prevent sediment buildup at the mouth of the rivers. The Whittier Narrows WRP has a design capacity of 15.0 million gallons per day ("MGD") and serves an estimated population of 107,000 people. Essentially all of the recycled water produced at this facility, approximately 9,000 acre-feet per year ("AFY"), is beneficially reused, primarily for groundwater recharge and landscape irrigation. Exhibit C at ¶ 4.

The District also owns and operates the Pomona WRP, a tertiary treatment wastewater facility located at 295 Humane Way, Pomona, California. The Pomona WRP currently receives wastewater from the cities of Claremont, La Verne, Pomona, and portions of unincorporated of Los Angeles County. Treatment at the Pomona WRP consists of primary sedimentation, backwash

equalization, activated sludge treatment, secondary sedimentation, inert media filtration, chlorination, and de-chlorination. The Pomona WRP discharges tertiary-treated municipal and industrial wastewater to the South Fork San Jose Creek, a tributary to the San Gabriel River. The Pomona WRP has a design capacity of 15.0 MGD and serves an estimated population of 149,000. Essentially all of the recycled water produced at this facility, approximately 9,000 acre-feet per year ("AFY"), is beneficially reused, primarily for groundwater recharge and landscape irrigation. Exhibit C at ¶ 4.

Both the Whittier Narrows and Pomona WRPs are part of an integrated network of facilities, known as the Joint Outfall System ("JOS"). The JOS incorporates seven wastewater treatment plants, which are connected by more than 1,200 miles of interceptors and trunk sewers. The upstream treatment plants (Whittier Narrows, Pomona, La Cañada, Long Beach, Los Coyotes, and San Jose Creek WRPs) are connected to the Joint Water Pollution Control Plant ("JWPCP") located in Carson. This system allows for the diversion of influent flows into or around each upstream plant if so desired.

b) The 2002 Whittier Narrows Permit and Appeal

On August 29, 2002, the Regional Board issued the Whittier Narrows WRP NPDES permit (Order No. R4-2002-0142) ("2002 Permit") and an accompanying Time Schedule Order ("TSO") Order No. R4-2002-0143. The 2002 Permit included final effluent limits for chronic toxicity set as a daily maximum and monthly median based on Chronic Toxicity Units ("TUc") in a critical life stage test. *See* State Board, Water Quality Order ("WQO") 2003-0009 at pg. 11. The Regional Board found reasonable potential for chronic toxicity based on effluent data and the fact that one San Gabriel River reach did not attain water quality standards for toxicity. *Id.* The Regional Board also found that the District could not consistently comply with the limits and, for this reason, included an interim chronic toxicity limit of 3 TUc as a daily maximum in the TSO. *Id.*

On September 30, 2002, the District timely filed a Petition for Review with the State Board, contesting specific provisions contained in the 2002 Permit and TSO, including the numeric effluent limitations for chronic toxicity. On October 3, 2002, Mr. Bill Robinson also filed a Petition for Review contesting provisions contained in the 2002 Permit and TSO. These Petitions

for Review were consolidated and deemed complete by the State Board on October 23, 2002.

After responses to the Petitions were filed by various parties, the State Board issued a draft order on the Petitions on June 10, 2003. On July 16, 2003, the State Board issued a final order on the Petitions for Review (WQO 2003-0009). With respect to the chronic toxicity provisions in the 2002 Permit and TSO, the State Board concluded on page 11:

> The District objects to the fact that the chronic toxicity limits are expressed numerically. The District raised the same challenge to chronic toxicity limits included in permits and TSOs issued to the District for its Long Beach and Los Coyotes Water Reclamation Plants. In Order WQO 2003-[0008], which the Board has adopted today, the State Board decided to review these permits and TSOs on its own motion. In particular the Board desires more time to carefully consider this important issue. For this reason, the Board will not decide whether the chronic toxicity limits in the Whittier Narrows permit and TSO are appropriate at this time. Rather, the Board will review these limits on its own motion when it considers the same issue for the Long Beach and Los Coyotes permits and TSOs.

In WQO 2003-0013 adopted on September 16, 2003 for the 2002 Permit, the State Board concluded on pages 1-2 that:

> "[T]his issue is best addressed through a rulemaking in order to allow full public participation and deliberation. The Board intends to modify the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2000) to specifically address the issue. In the meantime, in WQO 2003-0012, the Board modified the District's permits for its Long Beach and Los Coyotes Water Reclamation Plants to replace the numeric chronic toxicity limits with narrative limits. The Board also added reopener provisions stating that the Regional Board may reopen the permits to include limits for specific pollutants causing toxicity or numeric chronic toxicity limits under certain circumstances. The Whittier Narrows permit contains similar chronic toxicity provisions; therefore, the Board will make the same changes to the Whittier Narrows permit."

That Order also deleted the numeric chronic toxicity limits and replaced them with a narrative effluent limitation reading: "There shall be no chronic toxicity in the effluent discharge;" added a new reopener provision, and revised the Monitoring and Reporting Program to substitute "the trigger in Effluent Limitation A.12.c" for "the limitation," where the trigger was set as an "exceedance of the 1 TUc effluent monthly median." WQO 2003-0013 at pgs. 2-3.

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c) 2009 Permits for Whittier Narrows and Pomona WRPs

The NPDES permit following the 2002 Permit for Whittier Narrows WRP was issued in 2009 (Order No. R4-2009-0077) as was the revised NPDES permit for the Pomona WRP (Order No. R4-2009-0076). The 2009 permit for the Whittier Narrows WRP contained the following language related to chronic toxicity:

> IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS
>
> A. Effluent Limitations – Discharge Points 001, 002, 003, and 004
>
> 4. Other Effluent Limitations Applicable to Discharge Points 001, 002, 003, and 004
>
> h. Chronic Toxicity Trigger and Requirements:
>
> a. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:
>
> TUc = 100/NOEC
>
> The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.
>
> b. There shall be no chronic toxicity in the effluent discharge.
>
> c. If the chronic toxicity of the effluent exceeds the monthly trigger median of 1.0 TUc, the Discharger shall immediately implement accelerated chronic toxicity testing according to Attachment E – MRP [Monitoring and Reporting Program], Section V.B.3. If any three out of the initial test and the six accelerated tests results exceed 1.0 TUc, the Discharger shall initiate a TIE [Toxicity Identification Evaluation] and implement the Initial Investigation TRE [Toxicity Reduction Evaluation] Workplan, as specified in Attachment E – MRP, Section V.D.
>
> d. The Discharger shall conduct chronic toxicity monitoring as specified in Attachment E – MRP.

The 2009 NPDES permit for the Pomona WRP contained the following language related to chronic toxicity:

> IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS
>
> A. Effluent Limitations – Discharge Point 001
>
> 1. Final Effluent Limitations – Discharge Point 001
>
> a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001 into South Fork San Jose Creek, with compliance measured at Monitoring Location EFF001, as described in the attached Monitoring and Reporting Program:
>
> i. Chronic Toxicity Trigger and Requirements:
>
> i. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:
>
> TUc = 100/NOEC

> The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.
>
> ii. There shall be no chronic toxicity in the effluent discharge.
>
> iii. If the chronic toxicity of the effluent exceeds the 1.0 TUc monthly median trigger, the Discharger shall immediately implement accelerated chronic toxicity testing according to Attachment E – MRP, Section V.B.3. If any three out of the initial test and the six accelerated test results exceed 1.0 TUc, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in Attachment E – MRP, Sections V.D and V.E.
>
> iv. The Discharger shall conduct chronic toxicity monitoring as specified in Attachment E – MRP.

The narrative chronic toxicity limits and language contained in both of these 2009 permits were not objected to by the U.S. Environmental Protection Agency ("USEPA"). In fact, in 2007, USEPA had written a comment letter on the draft Long Beach/Los Coyotes WRP permits, containing essentially identical toxicity provisions, stating that while it did not "believe that numerical WQBELs for chronic toxicity are 'infeasible' to calculate, such that BMPs may be substituted… [a]t minimum, the permits need to specify the WQBEL: 'There shall be no chronic toxicity in the effluent discharge.'" USEPA Letter from Douglas E. Eberhardt, Chief of Clean Water Act ("CWA") Standards and Permits Office to Deborah Smith, Regional Board (May 31, 2007). The District did not appeal either of these permits to the State Board and no one else appealed these permits.

2) <u>The 2014 Permits for Whittier Narrows and Pomona WRPs</u>

The regulatory construct of the pre-public notice draft permit for Whittier Narrows WRP was consistent with the requirements of State Board's precedential and binding WQO 2003-0013,[3] which revised the earlier 2002 Permit to remove and replace numeric chronic toxicity limits with: "There shall be no chronic toxicity in the effluent discharge."

Notwithstanding the fact that USEPA had allowed NPDES permits to be written in

[3] The pre-public notice draft Pomona WRP permit differed from the one for Whittier Narrows WRP permit in that it required use of a trigger based on a "Pass/Fail" approach using the Test of Significant Toxicity ("TST") approach instead of numeric chronic toxicity units (i.e., TUc) as the trigger.

California in this prescribed manner for eleven (11) years without any formal objection, on July 31, 2014, the USEPA Region IX filed an initial objection letter on two NPDES permits up for reissuance for the Whittier Narrows and Pomona WRPs. *See* USEPA Region IX, July 31, 2014 Letter from Jane Diamond, Director Water Division to Samuel Unger, Executive Officer, Regional Board ("Initial Objection Letter"). On September 4, 2014, USEPA issued a formal objection letter, which included the requirements that the Permits be issued with numeric and daily maximum effluent limitations for chronic toxicity and included many other recommendations related to toxicity. *See* USEPA Region IX, September 4, 2014 Letter from Jane Diamond, Director Water Division to Samuel Unger, Executive Officer, Regional Board ("Formal Objection Letter").

Instead of following State Board mandates, the Regional Board immediately modified the Permits in response to USEPA's objection to now include new numeric chronic toxicity limits. *See e.g.* Provision IV.A.1.a., Table 4, of the Whittier Narrows Permit as "Pass" as a Median Monthly Effluent Limitation (MMEL) and "Pass or %Effect <50" as a Maximum Daily Effluent Limitation (MDEL). These terms were defined in Provision VII.J. (i.e., Compliance Determination, Chronic Toxicity) of the Permits and are said to be determined based on the Test of Significant Toxicity ("TST") approach as described in a 2010 EPA guidance document (National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010). The modified permits also contained a number of recommendations made by USEPA regarding implementation provisions for the numeric toxicity limits, many of which the District found objectionable and contrary to law or guidance.

The District met with the Regional Board staff and tried to explain why the changes should not be made, but not all of the District's requested modifications were made, most notably with regard to numeric toxicity limits, utilization of a two-concentration test design that precludes evaluation of concentration-response relationships for chronic toxicity testing, continued compliance testing, and potential additional violations being incurred during the confirmation and diagnosis of the cause of a toxicity exceedance. After a several hour-long public hearing, the Permits for the Whittier Narrows and Pomona WRPs were ultimately adopted with only one

substantive change made to the toxicity requirements,[4] which was not requested or approved by the District.

B. LEGAL ARGUMENTS

1) The Chronic Toxicity Limits are Premature until the State Board Adopts its Promised Statewide Toxicity Policy.

The Petitioners disagree with the inclusion of the final numeric effluent limits for chronic toxicity in the Permits. *See* Permits at Section IV.A., Table 4 (and Section IV.B., Table 5 for Whittier Narrows WRP). As discussed above, on September 16, 2003, the State Board adopted two precedential orders, WQO 2003-0012, in response to petitions filed by the District and Santa Monica Baykeeper for the Los Coyotes and Long Beach WRP NPDES permits [SWRCB/OCC File Nos. A-1496 and A-1496(a)], and WQO 2003-0013, in response to a petition filed by the District and Bill Robinson on the 2002 version of the Whittier Narrows WRP permit [SWRCB/OCC File Nos. A-1509 and A-1509(a)]. In these 2003 precedential orders, the State Board found that the use of final numeric whole effluent toxicity ("WET") limitations in permits for Publicly Owned Treatment Works ("POTWs"), particularly those that discharge to inland surface waters, is an issue of statewide importance that should be addressed in a statewide plan or policy. In addition, the State Board instructed regional boards to replace any numeric chronic toxicity effluent limitations with the prescribed narrative chronic toxicity limitation until a statewide toxicity policy is adopted. The District's 2002 NPDES permit for Whittier Narrows WRP was modified to coincide with the requirements of WQO 2003-0013 and the District's subsequent NPDES permits for the Whittier Narrows WRP (Order Nos. R4-2003-0124 and R4-2009-0077) and Pomona WRP (Order Nos. R4-2004-0099 and R4-2009-0076) were issued with the toxicity trigger requirements prescribed in WQO 2003-0012 and WQO 2003-0013.

These Orders (WQO 2003-0012 and WQO 2003-0013) were precedential orders, required to be followed by all regional boards in the state until overturned or new regulations overturned or revised the decision. These precedential decisions were later upheld and followed in other,

[4] The change made related to consideration of the TRE in any enforcement action.

subsequent State Board orders, including WQO 2008-08 (City of Davis) and WQO 2012-0001 (City of Lodi). The 2012 Lodi order at page 22 recognized that "[t]he Board previously addressed this issue in a precedential decision" and "concluded that a numeric effluent limitation for chronic toxicity was not appropriate in the permit under review, but that the permit had to include a narrative effluent limitation for chronic toxicity." In the Lodi case, the State Board determined that because the discharge had the reasonable potential to cause or contribute to an excursion above the Basin Plan's narrative toxicity objective, the Central Valley Water Board, on remand, was ordered to "amend Order No. R5-2007-0113 to add an appropriate narrative chronic toxicity limitation." *See also* State Board WQO 2008-0008 at pgs. 5-7 (concluding that a numeric effluent limitation for chronic toxicity is not appropriate at this time).

Thus, no less than four (4) precedential State Board orders, including an order directly applicable to the Whittier Narrows WRP, require that POTW permits contain a narrative chronic toxicity limit. All of these precedential orders direct conflictly with the requirements contained in the Permits that include numeric chronic toxicity limits as mandated by USEPA's Formal Objection Letter. The Petitioners merely asked the Regional Board to follow the State Board's binding precedent and include a narrative effluent limitation, consistent with the Basin Plan's narrative objective, along with a trigger for additional testing based on TUc.

This approach would also be consistent with the SIP, and with the Basin Plan, which states, in pertinent part, the following related to chronic toxicity:

> "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board." (Basin Plan at pg. 3-16 (emphasis added).)

Since the State Board has specified how compliance with chronic toxicity requirements must be determined until such time that a new statewide policy is adopted, and the Regional Board has not modified the Basin Plan to state another method, the Regional Board was bound by the

State Board's determination, set forth in WQO 2003-0013,[5] as well as by the language of the Basin Plan.[6] No changes in state or federal law warrant the modifications made in chronic toxicity requirements in the Permits.

Because the State Board has not yet adopted its anticipated statewide policy for chronic toxicity, the inclusion of new numeric chronic toxicity effluent limitations lacks adequate authority, violates State Board precedent and the Basin Plan's Toxicity Objective, and represents an abuse of discretion. For these reasons, the Petitioners respectfully request that the chronic toxicity limits as imposed be removed from the Permits as was done in 2003 and replaced with the narrative chronic toxicity limit and triggers contained in the previous 2009 permits.

2) <u>The Chronic Toxicity Requirements Improperly Require Use of an Unpromulgated Test Method</u>.

a) The Test of Significant Toxicity (TST) without inclusion of a concentration-response evaluation is not a properly promulgated Part 136 Method.

The Permits make it very clear that, for parameters where such methods exist, the monitoring must use only approved 40 C.F.R. Part 136 methods, properly promulgated by USEPA. *See e.g.,* Pomona Permit at MRP Section I.B, pg. E-2 ("Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136…."); pg. E-7, n. 2; pg. E-8, n. 6; pg. E-12 at para. V.A.3; pg. E-17, n. 21; pg. E-23 at para. X.B.4.; pg. F-60, Section VI.B.2.a.; pg. H-2 at para. A.4.a. While the language in USEPA's promulgated methods intend use of a multi-concentration test design for chronic toxicity, with consideration of the resulting concentration-response pattern in assessing the validity of the test, the Permits do not to allow this important concentration-response validation. *See* Permits, page 27, at Section VII.J (stating "the concentration-response relationship for the effluent and/or PMSDs [percent minimum significant differences] shall not be

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[5] The Permits do not even acknowledge the existence of WQO 2003-0013, and only discussed WQO 2003-0012. (*See* Whittier Narrows Permit at pg. F-52 and Pomona Permit at pg. F-48.)

[6] In fact, the State Board's requirement in WQO 2003-0013 to include an effluent limit requiring "no chronic toxicity <u>in the effluent discharge</u>" is actually ***more stringent*** than the Basin Plan's Toxicity objective, which only requires "no chronic toxicity <u>in ambient waters outside mixing zones</u>." (Basin Plan at pg. 3-17 (emphasis added).)

used to interpret the TST result reported as the effluent compliance monitoring result. While the Permittee can opt to monitor the chronic toxicity of the effluent using five or more effluent dilutions (including 100% effluent and negative control), only the TST result will be considered for compliance purposes.") This conflicts with promulgated freshwater chronic toxicity test methods.

The 40 C.F.R. Part 136 approved methods for freshwater chronic toxicity are listed in 40 C.F.R. section 136.3(a), Table 1A. These methods include Footnote 27, which mandates the use of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, EPA-821-R-02-012, Third Edition, October 2002 (EPA's "2002 Methods"). The 2002 Methods make it very clear in several places that a multi-concentration test design with dose-response evaluation is required.[7] Several examples are as follows:

> "The tests recommended for use in determining discharge permit compliance in the NPDES program are multi-concentration, or definitive, tests which provide (1) a point estimate of effluent toxicity in terms of an IC25, IC50, or LC50, or (2) a no-observed-effect-concentration (NOEC) defined in terms of mortality, growth, reproduction, and/or teratogenicity and obtained by hypothesis testing" (Section 8.10.1)
>
> "The concentration-response relationship generated for each multi-concentration test must be reviewed to ensure that calculated test results are interpreted appropriately" (Section 10.2.6.2)
>
> "Tables 1, 3, and 4 (labeled as 3)[8] - SUMMARY OF TEST CONDITIONS AND TEST ACCEPTABILITY CRITERIA WITH EFFLUENTS AND RECEIVING WATERS (TEST METHODS 1000.0, 1002.0, AND 1003.0):
>
Test concentrations:	Effluents:	5 and a control (<u>required minimum</u>)
	Receiving Water:	100% receiving water (or minimum of 5) and a control (recommended)"

[7] It could also be argued that using the TST, instead of the TUc and the NOEC method or the point estimate method actually specified and recommended in the Part 136 methods at 40 C.F.R. §136.3(a), Table 1A, footnote 27, is inconsistent with Part 136, which mandates the use of USEPA's 2002 Methods (EPA 821-R-02-013). The 2002 Methods do not mention the TST or provide that the TST may be used as an approved method. While the 2002 Rule acknowledged that "the statistical methods recommended in this manual are not the only possible methods of statistical analysis," the Rule's "recommended statistical methods described in the method manuals were selected because they are (1) applicable to most of the different toxicity test data sets for which they are recommended, (2) powerful statistical tests, (3) hopefully 'easily' understood by nonstatisticians, and (4) amenable to use without a computer, if necessary." 67 Fed. Reg. 69964.

[8] EPA-821-R-02-013. Tables 1, 3, and 4 (labeled as 3) on pages 76, 165, and 211 (emphasis added).

In 2010, the USEPA released a guidance document, *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*, EPA 833-R-10-003, 2010 ("TST Guidance Document") introducing the TST protocol for analysis of chronic toxicity testing data. This guidance document made it clear in numerous places that the intent of the guidance was to introduce a new method of analyzing data collected during a valid WET analysis, including a multiple concentration test design. Examples are provided below:

> "The TST approach does not result in changes to EPA's WET test methods promulgated at Title 40 of the Code of Federal Regulations Part 136." (page ii on the Disclaimer)
>
> "Once the WET test has been conducted ***(using multiple effluent concentrations and other requirements as specified in the WET test methods)***, the TST approach can be used to analyze valid WET test results to assess whether the effluent discharge is toxic." [Emphasis added] (page xi)
>
> "This document presents TST as a useful alternative data analysis approach for **valid** WET test data that may be used in addition to the approaches currently recommended in EPA's Technical Support Document (USEPA 1991) and EPA's WET test method manuals." (page 7)
>
> "The TST approach is an alternative statistical approach for analyzing and interpreting valid WET data; it is not an alternative approach to developing NPDES permit WET limitations. Using the TST approach does not result in any changes to EPA's WET test methods." (page 60)
>
> "Step 1: Conduct WET test following procedures in the appropriate EPA WET test method manual. This includes following all test requirements specified in the method (USEPA 1995 for chronic West Coast marine methods, USEPA 2002a for chronic freshwater WET methods, USEPA 2002b for chronic East Coast marine WET methods, and USEPA 2002c for acute freshwater and marine methods)." (Appendix B, page B-3)

In addition, USEPA made changes to approved WET test methods as recently as 2012 in the *Promulgated Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act: Analysis and Sampling Procedures:* Final Rule, 77 Fed. Reg. 29758-29846 (May 18, 2012), but did *not* incorporate an option for a two concentration test design that precludes application of a concentration-response evaluation ("two-concentration TST method"). If use of the two-concentration TST method was USEPA's intent in 2010 when the TST Guidance Document was released, such a change could and should have been made in 2012 when the methods were

updated by USEPA. *See id.*; *see also U.S. v. Riverside Bayview Homes* , 474 U.S. 121, 137 (U.S.S.C. 1985)(An action not to include modifications of which the entity was aware can be read as a presumption that the modifications were not intended to be included).

b) USEPA's Alternative Test Procedure Approval was Unlawful.

On March 17, 2014, USEPA issued an Alternative Test Procedure ("ATP") letter approving statewide use of the two-concentration TST method. *See* Letter from Eugenia McNaughton, US EPA Region 9 Quality Assurance Office Manager to Renee Spears, State Board Quality Assurance Officer, untitled, dated March 17, 2014 ("ATP Approval Letter"). This letter ignores the previous USEPA's requirements and recommendations described above. Even with the ATP approval, it would be difficult to see how USEPA could legally object to any permittee continuing to use the standard prescribed 2002 test methods (i.e., NOEC or IC25)[9] if these standard methods and the two-concentration TST method produce "acceptably equivalent" results as claimed in the ATP Approval Letter.

In its ATP Approval Letter, USEPA ostensibly granted the State a "Limited Use Alternative Test Procedure" under Part 136 (40 C.F.R. §136.5(a)). However, it is not clear that a State can be a valid requestor since rules contemplate that the request must first be sent *to* the State. (*Id.* at subd. (b).) For this and other reasons, the validity of the ATP approval is currently being litigated in federal court (*see SCAP and CVCWA v. USEPA,* Case No. 2:14-cv-01513 MCE-DAD, U.S. District Court, Eastern District (hearing scheduled for March 5, 2015)).

The legality of the ATP approval is questionable as this alternative test method was not submitted by a discharger or a laboratory, but rather by the State Board, after receiving the two-concentration TST method *from USEPA*. This act of self-dealing to avoid a full-blown public regulatory process thwarts the law and notions of good public policy. The ATP process was designed to "encourage organizations *external to EPA* to develop and submit for approval new analytical methods." *See Guide to Method Flexibility and Approval of EPA Water Methods*, USEPA Office of Water (Dec. 1996) at pg. 77 (emphasis added).

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[9] *See* 67 Fed. Reg. 69955 (2002)("these methods, including the modifications in today's rule, are applicable for use in NPDES permits.").

Furthermore, USEPA acknowledges that it has no approved protocols for reviewing or approving a WET ATP. *Id.* at 93 ("EPA is developing a protocol for approval of new and modified (alternate) WET methods…."; *see also* USEPA website related to WET at: http://water.epa.gov/scitech/methods/cwa/atp/questions.cfm (last accessed 12/8/2014)("Note: The EPA does not have a protocol for toxicity testing under EPA's Whole Effluent Toxicity (WET) program."); USEPA's Answer at Docket No. 17, ¶28 in *SCAP and CVCWA v. USEPA,* Case No. 2:14-cv-01513 MCE-DAD, U.S. District Court, Eastern District ("EPA admits that it has issued protocols regarding the information needed to evaluate ATP applications for potential approval and does not currently have a protocol for approving ATPs for WET testing.").

Finally, authorizing an ATP for WET is contrary to federal regulations. "Method Modifications" are explicitly *prohibited* for "Method-Defined Analytes" by 40 C.F.R. section 136.6(b)(3), which states (with emphasis added): "(3) Restrictions. An analyst may not modify an approved Clean Water Act analytical method for a method-defined analyte." USEPA has previously declared that WET is a Method-Defined Analyte. *See* 67 Fed. Reg. 69965 ("toxicity is inherently defined by the measurement system (a 'method-defined analyte') and toxicity cannot be independently measured apart from a toxicity test."); *see also* Brief of Respondents USEPA, *et al.*, in *Edison Electric Institute, et al., v. USEPA*, Case No. No. 96-1062 (D.C.Cir. 2004) at 44-45 and 78 *citing* Response to Comments at 219-20, J.A. XX; 67 Fed. Reg. 69,965. ("Because toxicity is defined and measured by its effect on living organisms, whole effluent toxicity is considered a method-defined analyte (i.e., it cannot be measured independently from a toxicity test). Thus, WET test results cannot be independently confirmed by comparing the results to a known concentration of toxicity."). Thus, an ATP cannot lawfully allow an analyst to use modified methods for WET.

For these reasons, and the others provided herein, the Petitioners respectfully request the Permits be amended to explicitly and clearly specify use of the 2002 Methods including a multi-concentration test design with concentration-response evaluation.

c) Use of an ATP Cannot Be Mandated over Promulgated Methods.

Even assuming *arguendo* that the USEPA's ATP approval was proper, it is not clear that the District or any other Permittee can be *required* to use the two-concentration TST method since

the ATP Approval Letter clearly states that the two-concentration TST method is acceptably equivalent to NOEC or Lowest Observable Effect Concentration ("LOEC") hypothesis testing. USEPA Region IX, in the ATP Approval Letter, attempted to *mandate* use of the two-concentration TST method by stating that this ATP "will apply to all new or revised NPDES permits issued by the State Water Board and Regional Water Quality Control Boards and any EPA-issued California permits that include whole effluent toxicity provisions." *See* USEPA ATP Approval Letter from Eugenia McNaughton, Ph.D. to Renee Spears, State Board (March 17, 2014)(emphasis added). However, neither USEPA nor the Regional Board has the authority to impose the two-concentration TST method *until* either a Permittee, like the District, requests to use the ATP, *or* that method has been formally promulgated by USEPA as an approved method under Part 136. Analytical results obtained by using a non-promulgated method cannot be used for NPDES compliance determination purposes until that method has been incorporated into 40 C.F.R. Part 136.[10] Similarly, the particular number of dilutions in a dilution series cannot be mandated. 67 Fed. Reg. 69956 ("no one particular dilution series is required."). Thus, the two-concentration TST method should not have been prescribed in the Permits.

The Permits also contradict a June 18, 2010 USEPA Headquarters memo accompanying the TST Implementation Document, from James Hanlon, the Director of the USEPA Office of Wastewater Management, which stated: "The TST approach does not preclude the use of existing recommendations for assessing WET data provided in EPA's 1991 Water Quality-based Technical Support Document (TSD) which remain valid for use by EPA Regions and the States." Thus, all the two-concentration TST method can be used for is additional information, similar to the CEC monitoring (cited above) where samples are required using a non-promulgated method. However, the difference is that, for CECs, the extra data acquired using unpromulgated methods are *not* being used for compliance determination purposes whereas the chronic toxicity data under the two-concentration TST method *will* be used for compliance determination.

[10] *See accord* Pomona Permit at pg. F-54, and Whittier Narrows Permit at pg. F-60, in reference to Constituents of Emerging Concern ("CECs") ("Analysis under this section is for monitoring purposes only. Analytical results obtained for this study will not be used for compliance determination purposes, since the methods have not been incorporated into 40 CFR part 136.")

USEPA has since clarified its position, and expressly stated that its ATP letter does not constitute a mandate. In its opposition brief filed in the litigation challenging the ATP letter, the USEPA argued that "EPA's March 2014 Letter was not a mandate and the State's decision not to use the alternate test would not be a basis for objection, much less a 'veto,' by EPA." In addition, USEPA's brief stated that "EPA's approval of a limited use alternate test does not impose any obligation on the California Water Boards that issue NPDES permits, or on permit holders. By approving the limited use of this alternate test, the EPA did not 'mandate' the exclusive use of the two-concentration test, and it cannot require the California Water Boards to include this alternate test in NPDES permits issued by the State. The EPA simply approved the use in California of the two-concentration test as an alternate test to the five-concentration test. Ultimately, it is up to the California Water Boards that issue NPDES permits to decide which test(s) to require permit holders to use in reporting, not the EPA. After the EPA's March 2014 letter, the California Water Boards could still issue permits that require permit holders to use the five-concentration test, or that provide permit holders with a choice of which test to use." *See* USEPA's Opposition to Plaintiffs' Ex Parte Application for Temporary Restraining Order and Order to Show Cause Re: Motion for Preliminary Injunction in case of SCAP and CVCWA v. United States EPA, Federal District Court for the Eastern District of California, Case No. 2:14-cv-01513 MCE-DAD (filed June 30, 2014)(citations excluded).

Since USEPA has stated, as quoted above, that use of the new two-concentration TST method is not required and that permit holders can be provided with a choice of which test to use, the Petitioners request that the Permits be amended to make it clear that use of the two-concentration TST method is optional.

d) EPA Guidance Cannot Overrule Promulgated Regulations.

Page 7, footnote 10 and page F-47 of the Pomona Permit and page 7, footnote 4 and page F-51 of the Whittier Narrows Permit reference two USEPA guidance documents to attempt to justify the inclusion of numeric effluent limitations and implementation provisions for toxicity based on the two-concentration TST method:

- *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010) [TST Guidance Document], and
- *EPA Regions 8, 9 and 10 Toxicity Training Tool* (January 2010) ("Training Tool"), http://www2.epa.gov/region8/epa-regions-8-9-and-10-toxicity-training-tooljanuary-2010.

These documents cannot be used to justify the Permits' requirements because these guidance documents do not mandate use of the TST, particularly the use of the two-concentration TST method, or require the inclusion of any numeric effluent limitation for toxicity. Appendix D of the TST Guidance Document includes example permit language for either a trigger *or* an effluent limitation. The Training Tool also discusses both permit triggers and effluent limitations for toxicity. In the Training Tool, as in the federal regulations, effluent limitations are only needed in cases where there is reasonable potential and even if there is reasonable potential, effluent limitations for toxicity are not needed if chemical specific effluent limitations are included for the pollutants identified as causing the toxicity (Section 2.5, page 31).[11] As discussed below, nowhere in the law are numeric effluent limitations for chronic toxicity required.

As a result, the Regional Board can point to nothing in either of the guidance documents cited that *mandates* the use of numeric effluent limitations for toxicity. Additionally, the TST

[11] If State water quality standards contain only narrative water quality criteria for WET and the permit (i.e., fact sheet or statement of basis) documents that chemical specific water quality-based effluent limitations ("WQBELs") are sufficient to attain and maintain the narrative water quality criteria, then WQBELs for WET are not necessary. 40 C.F.R. §122.44(d)(1)(v); Exhibit C at ¶ 18. Arguably, under the terms of the Toxicity objective, effluent limits are only authorized pursuant to the terms of the SIP, or for the causative toxicant. *See accord* Basin Plan at pg. 3-17; *see also City of Los Angeles et al v. USEPA, et al,* Central District Court, Case No. CV 00-08919 R(RZx)(Dec.18, 2001)(holding "EPA improperly failed to ensure that the LA-RWQCB adopted a translator procedure to translate its narrative criteria did not satisfy 33 U.S.C. §1313(c)(2)(B). In addition, in reviewing the LA-RWQCB's narrative criteria relating to toxic pollutants, EPA improperly failed to ensure that the LA-RWQCB set forth sufficient "information identifying the method by which the State intends to regulate the point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria." 40 C.F.R. §131.11(a)(2).) On February 15, 2002, on remand from the federal court, USEPA issued a new approval document related to the Basin Plan's Toxicity objective finding that the adoption of the CTR made the need to use the Toxicity objective less necessary and, in instances where necessary, strongly relied upon the chronic toxicity control provisions in the SIP and the direction to the Basin Plan to "establish effluent limitations for specific toxicants which have been identified with the TIE procedures." Thus, in order to comply with the Basin Plan, the Regional Board must comply with the SIP and statewide orders interpreting those requirements, including WQO 2003-0013. Just because the Permits on page F-15 state the "Requirements of this Order implement the SIP" does not mean this statement is accurate.

Guidance Document is merely *guidance* that may be changed at any time as policies and directions change. Importantly, the disclaimer in that guidance document specifically notes that the document is not "a permit or a regulation itself." The TST Guidance Document also clearly states that:

> "The document does not and cannot impose any legally binding requirements on EPA, states, NPDES permittees, or laboratories conducting or using WET testing for permittees (or for states in evaluating ambient water quality). EPA could revise this document without public notice to reflect changes in EPA policy and guidance."[12]

The other document cited is merely part of a training tool that is not even published guidance.

Although USEPA often tries to regulate by guidance, federal courts have frowned upon this practice as aptly described in *Appalachian Power Co. v. EPA*, 208 F.3d. 1015, 1020 (D.C. Cir. 2000). The district court in the *Appalachian Power* case found fault in USEPA's regulating by setting aside the guidance in its entirety. (*Id.* at p. 1028.) "If an agency acts as if a document issued at headquarters is controlling in the field, if it treats the document in the same manner as it treats a legislative rule, if it bases enforcement actions on the policies or interpretations formulated in the document, if it leads private parties or State permitting authorities to believe that it will declare permits invalid unless they comply with the terms of the document, then the agency's document is for all practical purposes 'binding.'" (*Id.* at p. 1021 [*citations omitted*].)

More recent cases have reached the same conclusion in other instances when USEPA tried to impose its will through interpretive rules, such as the TST Guidance Document. *See NRDC v. U.S. EPA*, 643 F.3d 311 (D.C.Cir. 2011) (invalidating USEPA guidance setting forth air quality attainment alternatives). A key case related to "requirements" contained in USEPA letters related to water quality permitting prohibitions related to blending and mixing zones. In this case, the court found that USEPA not only lacked the statutory authority to impose the guidance regulations on blending, but also violated the APA, 5 U.S.C. §500 et seq., by implementing the guidance on both issues without first proceeding through the notice and comment procedures for agency rulemaking. *Iowa League of Cities v. U.S. EPA*, 711 F.3d 844, 878 (8th Cir. 2013). The case law is clear that USEPA must regulate through rules and not through informal guidance. Nor can the

[12] USEPA, National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document. EPA 833-R-10-004, June 2010.

Regional Board legally regulate by guidance, particularly where that guidance is contrary to law and statewide precedential orders (*e.g.*, State Board WQO 2003-0013).

3) Removal of the Concentration-Response Evaluation Reduces the Reliability of WET Tests.

WET tests measure how certain organisms respond to a particular water sample. As such, the measurements are impacted by a number of extraneous factors including organism health, ionic changes in water chemistry, presence/absence of trace elements in the water, seasonality, light levels, temperature, analyst handling, and many others. While variability in WET tests cannot be eliminated entirely, the 40 C.F.R. Part 136 promulgated methods and various USEPA guidance document procedures were intentionally developed and incorporated to address this variability and quantify data and result reliability, as well as to settle several lawsuits over the reliability and usefulness of these tests.[13]

In the legal challenge to the 2002 Methods, the court found that "[t]he ratified WET tests are not without their flaws" and cautioned that "[e]ven by EPA's calculations, WET tests will be wrong some of the time, *Edison Electric v. EPA,* 391 F.3d 1267, 1272-1274 (D.C. Cir. 2004). However, the court upheld those methods because USEPA had provided adequate safeguards within those methods to protect against the concerns raised by the plaintiffs. One of these safeguards was the requirement to use a multiple-concentration test that includes a concentration-response evaluation.[14] "EPA also offered an additional safeguard by designing the tests to give

[13] USEPA's first WET test methods were promulgated in 1995. 60 Fed. Reg. 53,529 (Oct.16, 1995). As a result of a legal challenge, these WET tests were modified pursuant to a settlement that required USEPA to re-promulgate chronic WET test methods for use in monitoring compliance with NPDES permit limitations after a formal national rulemaking process, in accordance with 40 C.F.R. Part 136. *See* 67 Fed. Reg. 69,952 (Nov. 19, 2002) ("2002 Methods"). The 2002 Methods specifically included two test methods, a hypothesis test based on the NOEC and a point estimate test based on the 25% Inhibition Concentration ("IC25"). The 2002 Methods constitute USEPA's formally promulgated 40 C.F.R. Part 136 WET methods.

[14] *Edison Electric,* 391 F. 3d at 1273 *citing* 67 Fed. Reg. at 69,957-58 (holding that "exposing multiple batches of organisms to the effluent at various concentrations, as well as to a 'control' sample of pure water, and then aggregating the effects on each batch" followed by a statistical analysis "to ensure that any observed differences between the organisms exposed to a given effluent concentration and those exposed to the control blanks most likely are not attributable to randomness - that they are statistically significant" will be a "safeguard [that] addresses petitioners' concerns.") The importance of the five-concentration test to meet test acceptability criteria was also recognized in an October 22, 2013 Memo from Robert Wood,

permittees the benefit of the doubt, limiting false positive rates to at most 5%, while allowing false negative rates up to 20%." *Edison Electric,* 391 F. 3d at 1272. These safeguards have been removed from the method with USEPA's approval of an ATP authorizing the two-concentration test method, which merely compares an effluent sample at the instream waste concentration ("IWC"), which is set at 100% effluent where there is no dilution credit, to a control blank using the TST statistical test, and starts with the presumption that that the sample is toxic at the IWC.

During the November 6, 2014 Regional Board adoption hearing, Regional Board staff and USEPA testified that multiple concentration testing and concentration-response evaluations are only conducted to interpret the NOEC, and that, therefore, use of such procedures for the TST does not have statistical or technical merit. However, USEPA's own guidance, which addresses concentration-response evaluations, states that an "evaluation of the concentration-response relationship generated for each sample is an important part of the data review process that should not be overlooked."[15] The same reference further concludes that "reviewing concentration-response relationships should be viewed as a component of a broader quality assurance and data review and reporting process." *Id.* This process includes data review, evaluation of test acceptability, evaluation of reference toxicant testing results, organism health evaluations, and test variability evaluation. The importance and need to conduct multiple concentration tests, including a concentration-response evaluation for chronic toxicity tests conducted using the TST statistic, was confirmed by USEPA Region IX in one of its recently issued NPDES permits. *See* General Permit No. CAG280000, Authorization to Discharge Under the National Pollutant Discharge Elimination System for Oil and Gas Exploration, Development, and Production Facilities (December 20, 2013), available at:

http://www.epa.gov/region9/water/npdes/pdf/ca/offshore/general-permit.pdf.

USEPA Headquarters, to Alexis Strauss, USEPA Region IX ("as stated in the promulgated CWA WET methods and re-iterated in the 'EPA's National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document,' these methods require a control plus five effluent concentrations under the methods' test acceptability criteria. As such, the promulgated methods do not allow for only two concentrations for use in NPDES permits.")(Emphasis added).

[15] USEPA, *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)*, EPA 821-B-00-004 (July 2000) at pg. 4-3.

This USEPA-issued general permit for oil and gas exploration required the use of the TST statistical method to analyze *multi-concentration* WET test results. *Id.* at pg. 15, Section II.B.2.d.2 ("This permit is subject to a determination of Pass or Fail from a multiple-effluent concentration chronic toxicity test at the IWC…"). In addition, USEPA specifically required the use of a multi-concentration test design with consideration of concentration-response before running the TST statistic. *Id.* Section II.B.2.d.6 on page 15 of this general permit stated the following:

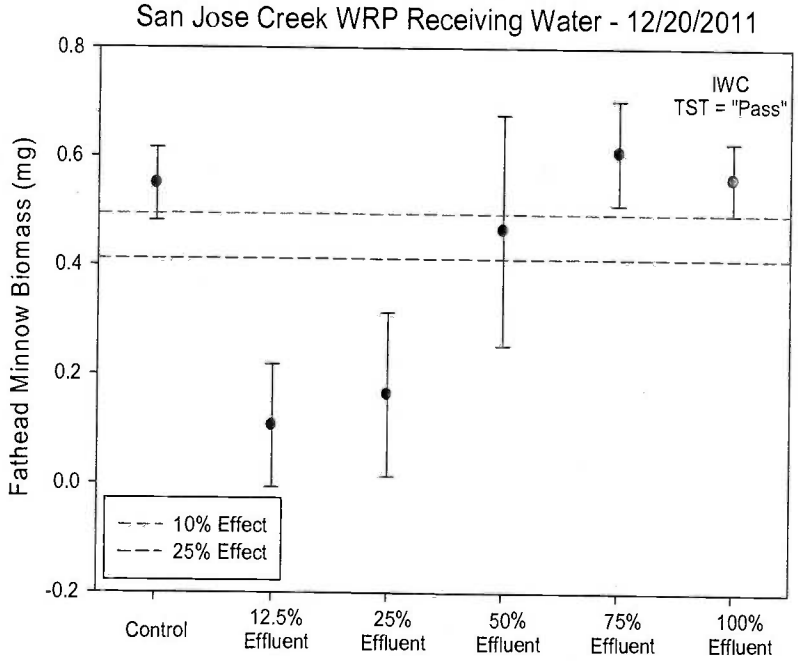
> "6) Following Paragraph 10.2.6.2 of the freshwater EPA WET test methods manual, all chronic toxicity test results from the **multi-concentration tests required by this permit shall be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships** in Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136) (EPA/82I/B-00-004, 2000)." (Emphasis added)"

In addition, it is the Petitioners' understanding that California is the only state for which the two-concentration TST method has been approved under the ATP (although, as previously mentioned, this approval has been challenged). This approval was issued in March 2014, although USEPA released the TST procedure in 2010. Therefore, in the other 49 states (and prior to March 2014 in California), a multi-concentration test design with consideration of concentration-response was a universal requirement. If use of a multi-concentration test design under these circumstances had no statistical or technical merit, then entities running the TST in these circumstances would have wasted time and money running the multi-concentration tests. If this was the case, then USEPA should have gone through a formal method promulgation process to allow the two concentration TST method to be used nationwide, rather than introducing a method that required steps to be performed with no statistical or technical merit.

Overall, conducting multiple concentration WET tests and evaluating the concentration-response relationship represents one of the more critical and significant method-defined procedures for addressing toxicity test variability, and validating data. The concept of a concentration-response relationship, also known as a dose-response relationship, has been described by toxicologists as "the most fundamental and pervasive one in toxicology."[16] This concept assumes that a causal

[16] Casarett, L.J. and J. Doull, Toxicology: the basic science of poisons, Macmillan Publishing Co., New York (1975).

relationship exists between the concentration of a pollutant in a sample and the measured organism response. In other words, the concept assumes that increasing organism response or effect is due to increasing pollutant/toxicant concentrations. Evaluation of the concentration-response relationship provides the empirical evidence that supports this assumption. Thus, evaluating concentration-response information is critical to associating any observed response to "toxicity." If an effect is caused by "toxicity," higher concentrations should logically exhibit the same or greater effects and lower concentrations should exhibit the same or lower effects. The only way this can be evaluated is by conducting multiple concentration tests. Anomalies in this expected or assumed concentration-response curve reduces confidence in the test's ability to accurately estimate "toxicity" or, more specifically, the test's ability to estimate effects associated with pollutants or toxicants. In fact, the USEPA determined that application of a relatively simple concentration-response evaluation procedure to chronic toxicity tests run using the NOEC hypothesis test analysis reduced the false positive rate among non-toxic blank samples from over 14% to less than 5%.[17] Although more challenging to quantify, evaluation of the concentration-response relationship is also expected to significantly reduce the false negative error rate as well (see example below).



[17] USEPA, *Guidelines Establishing Test Procedures for the Analysis of Pollutants; Whole Effluent Toxicity Test Methods; Final Rule*, 67 Federal Register 69,963 (November 19, 2002).

In the absence of multi-concentration testing and a dose-response evaluation, the results depicted above would have been identified as an unqualified "Pass" using the USEPA TST protocol. However, pending the findings of additional data evaluations, this test that otherwise would have been declared "non-toxic" or "Pass," will likely be identified as "inconclusive" and repeated after conducting a concentration-response relationship evaluation.

For these reasons, 40 C.F.R. Part 136 promulgated chronic toxicity testing protocols concluded that test review, including evaluation of the concentration-response relationship, is vital to ensure that all test results are reported accurately.[18] In addition to being necessary for accurate result interpretation, the USEPA method manual (EPA 821-R-02-013) also directly requires that multiple concentration testing be conducted for all NPDES effluent compliance determination tests. The method manual further requires that an evaluation of the concentration-response relationship be conducted and strongly recommends against the use of two concentration (control and IWC) test designs for NPDES testing. Furthermore, the USEPA's TST Guidance Document also recognizes that toxicity tests should be conducted following these same requirements, and furthermore specifically references conducting multiple concentration testing before application of the two-concentration TST statistical procedure. In other guidance, USEPA has explained that:

> "The agency is concerned that single concentration, pass/fail, toxicity tests do not provide sufficient concentration-response information on effluent toxicity to determine compliance. It is the Agency's policy that all effluent toxicity tests include a minimum of five effluent concentrations and a control."[19]

Therefore, in order to maintain the procedural safeguards guaranteed by the 2002 Methods and *Edison* case, the Petitioners request that the Permits be modified to accurately reflect allowable and required 40 C.F.R. Part 136 protocol evaluation procedures that includes the ability conduct and utilize the results from multiple concentration tests and an appropriate concentration response relationship evaluation. Specific changes to implement this request were included in the District's October 10, 2014 comment letter and are incorporated by reference herein.

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[18] USEPA, *Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms*, Fourth Ed., EPA-821-R-02-013 (October 2002) at Section 10.2., pg. 49.

4) **The Regional Board Improperly Included Daily Maximum Effluent Limitations for Chronic Toxicity.**

Assuming for the sake of argument that any chronic toxicity limit other than that prescribed in WQO 2003-0013 is justified, federal law authorizes only monthly and weekly average effluent limitations for POTWs without a demonstration that these effluent limitations are "impracticable."[20] *See* 40 C.F.R. §122.45(d)(2)("For continuous discharges all permit effluent limitations, standards and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as: (2) Average weekly and average monthly limitations for POTWs"). As described above, the proposed permit includes a Maximum Daily Effluent Limit ("MDEL") for chronic toxicity, which is more stringent than required by federal law and has not been adequately justified. Therefore, this limitation is contrary to law.[21]

USEPA's analysis in its Initial Objection Letter was inaccurate. In this letter, USEPA stated, "…the [pre-notice draft] permits do not include the necessary daily and monthly WQBELs

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[19] *See* USEPA, *Whole Effluent Toxicity: Guidelines Establishing Test Procedures for the Analysis of Pollutants - Supplementary Information Document* (SID) at pg. 28 (Oct. 2, 1995).

[20] The term "impracticable" is not defined in federal law, but should be deemed equivalent to "infeasible" as included in the SIP at Appendix 1-3, which is defined as "not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." This term is generally defined by the Merriam Webster Dictionary as "not practicable: incapable of being performed or accomplished by the means employed or at command." Similarly, the Oxford Press Dictionary defines "impracticable" as "impossible in practice to do or carry out."

[21] California courts have already held that daily limits are not allowed for POTWs unless demonstrated with adequate supporting evidence to be impracticable and these decisions are binding on the Water Boards since not appealed. (*See City of Burbank v. State Water Resources Control Board,* 35 Cal. 4th 613, 623, n.6 (2005) (The Supreme Court held: "Unchallenged on appeal and thus not affected by our decision are the trial court's rulings that… (2) the administrative record failed to support the specific effluent limitations; (3) the permits improperly imposed daily maximum limits rather than weekly or monthly averages;…)(emphasis added).) Another recent decision upheld the need for weekly, as opposed to daily limits, because the guidance cited by the Regional Board (similar to that set forth in the Whittier Narrows Permit on pg. F-48 and Pomona Permit at pg. F-44: "As stated by USEPA in its long standing guidance") cannot be used to overrule the express terms of the regulations. *See California Sportfishing Protection Alliance (CSPA) v. Cal. Regional Water Quality Control Board, Central Valley Region,* Sacramento Superior Court, Case No. 34-2013-80001358-CU-WM-GDS, Ruling on Submitted Matter: Petition for Peremptory Writ of Mandate (Aug. 18, 2014)(Holding "To the extent that the applicable law does not represent a reasonable approach to establishing effluent limitations, the law may need to be changed, Until it is changed, however, that law unequivocally requires the establishment of a weekly limitation. Respondent [Regional] Board was obligated to do what the law required…") Thus, reliance on USEPA's Technical Support Document guidance was overturned, and the permit was remanded.

for chronic WET. Therefore, the permits do not meet 40 CFR 122.45(d) or 40 CFR 122.44(d)(i)." The State Board has already determined that numeric limits are not feasible or appropriate in the context of chronic toxicity (*e.g.*, are impracticable) and, therefore, numeric weekly and monthly (or daily) limits are not required and that remains the rule until a new Toxicity Policy determines otherwise in a precedential order or formal rulemaking. The State Board requires a narrative effluent limitation to be imposed instead, stating that "there shall be no chronic toxicity in the effluent discharge." Thus, this limit complies with 40 C.F.R. Section 122.45(d).

In addition, a daily maximum limit for chronic toxicity is unnecessary to protect aquatic life because chronic toxicity, by definition, is neither "highly toxic" nor "short-term."[22] Chronic toxicity testing is meant to assess *long-term* impacts to biological communities of organisms in the ambient receiving waters, not the impact of a single day's or week's discharge. *See* Pomona Permit at pg. F-59 and Whittier Narrows Permit at pg. F-50 "chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth." (emphasis added); *see also* Pomona Permit at pg. F-46; Whittier Narrows Permit at pg. F-64, para. C.

Furthermore, use of a daily maximum chronic toxicity limit to protect against a short duration event capable of exceeding the Basin Plan's narrative water quality objective for Toxicity makes no sense when a single freshwater chronic test itself typically consists of three (3) or more discrete samples collected over an exposure period of four (4) to eight (8) days, depending on the test organism. *See* 67 Fed. Reg. 69953 (2002 Final WET Rule)("short term methods for estimating chronic toxicity use longer durations of exposure (*up to nine days*) to ascertain the adverse effects of an effluent or receiving water on survival, growth and/or reproduction of the organisms.") (emphasis added). Therefore, the use of a short term average or daily maximum limit for chronic WET is itself impracticable and a chronic toxicity limit (as is recognized for other long-term chronic objectives[23]) should be expressed only in narrative form of "There shall be no chronic

[22] While these terms may apply to *acute* toxicity, they do not describe chronic toxicity. The Permits determined that no reasonable potential existed for acute toxicity and the acute toxicity limits were removed. *See* Pomona Permit at pg. F-47; Whittier Narrows Permit at pg. F-51 (All acute toxicity testing results from the same period did not exceed any acute toxicity requirements.).

[23] Chronic toxicity can be compared to other chronic water quality criteria, such as the Criteria Continuous Concentration ("CCC") under the California Toxics Rule and National Toxics Rule, which is defined as "the

toxicity in the effluent discharge," interpreted as a monthly average, or a median monthly if the monthly average is demonstrated to be impracticable. *See accord In the Matter of the Own Motion Review of City of Woodland*, Order WQO 2004-0010, 2004 WL 1444973, *10 (June 17, 2004) ("Implementing the limits as instantaneous maxima appears to be incorrect because the criteria guidance value, as previously stated, is intended to protect against chronic effects." The limits were to be applied as monthly averages instead); WQO 2003-0012; and USEPA Letter to Regional Board on Long Beach/Los Coyotes WRP Permits at pg. 4 (May 31, 2007)("At minimum, the permits need to specify the WQBEL: 'There shall be no chronic toxicity in the effluent discharge.'").)

Contrary to USEPA regulations and guidance and State Board orders (which prescribe a narrative toxicity limit), the Permits each include an MDEL for chronic toxicity that would result in an effluent limit and corresponding permit violation as a result of a single sample exceedance. Single sample violations for chronic toxicity analyses are inappropriate due to the variability and uncertainty inherent in testing biological organisms for non-lethal endpoints.[24]

The preamble to the 2002 WET Rule says "EPA policy states that 'EPA does not recommend that the initial response to a single exceedance of a WET limit, causing no known harm, be a formal enforcement action with a civil penalty.'" 67 Fed. Reg. 69968 *citing* EPA memo entitled *National Policy Regarding Whole Effluent Toxicity Enforcement* (1995a) (emphasis added). The appropriate response to a chronic toxicity test indicating the presence of toxicity is *not* to declare a violation, but to investigate the cause, starting with follow-up testing to confirm the initial result. *See accord* 67 Fed. Reg. 69,968 (USEPA policy suggests additional testing is an

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highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects." 40 C.F. R. §131.38(b)(1), note d; 40 C.F.R. §131.36(b)(1), note d. These criteria are not imposed as daily maximum limits in NPDES permits.

[24] "Single measurements on effluent involve some uncertainties about the true concentration or toxicity related to the representativeness of the sample... Like all analytical measurements, WET measurements (NOEC, EC25, LC50) are inexact." USEPA, *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications under the NPDES System*, EPA 833-R-00-003 at p. 6-2 (June 2000). Reliance upon a single test is also highly problematic and impracticable given that toxicity tests often inaccurately identify non-toxic samples as toxic. Further, the results from a single effluent test provide no indication of actual chronic aquatic toxicity in the ambient receiving waters outside a mixing zone, as proscribed by the Basin Plan's Toxicity objective.

appropriate initial response to a single WET exceedance); Basin Plan at 3-17 (recommending a TIE to identify cause of toxicity prior to imposing effluent limitation to implement the narrative Toxicity objective); SIP at pgs. 30-31(requires TRE, and the failure to conduct required toxicity tests or a TRE results in establishment of chronic toxicity limits in the permit). The proposed Whittier Narrows WRP permit was initially set up to appropriately include this investigation process and should be revised back to the original proposal mirroring the requirements in this permit since 2003.

Where effluent limitations are authorized, federal regulations provide that for discharges from POTWs, all permit effluent limits shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. 40 C.F.R. §122.45(d)(2); *see also* State Board WQO 2002-12 at 20-21. Nevertheless, the Regional Board included daily maximum limitations for chronic toxicity in the Permits, without making the requisite determination of impracticability, or without evidence to support its findings of impracticability (where made).[25] *See* Permits at Effluent Limitations and Discharge Requirements Sections I.A.1., Table 4 and I.B.1, Table 5 (imposing daily maximum effluent limitations for chronic toxicity). Without a valid and supported impracticability analysis, daily maximum limits are unlawful. *See accord* Statement of Decision,

[25] Although there is a cursory and general finding of impracticability, these findings are not specific to toxicity and are unsupported by evidence in the record to demonstrate impracticability. Orders not supported by the findings or findings not supported by the evidence constitute an abuse of discretion. *See* 40 C.F.R. §124.8(b)(4); *Topanga Association for a Scenic Community v. County of Los Angeles,* 11 Cal.3d 506, 515; *California Edison v. SWRCB*, 116 Cal. App. 751, 761 (4th Dt. 1981); *see also In the Matter of the Petition of City and County of San Francisco, et al.,* State Board Order No. WQ-95-4 at 10 (Sept. 21, 1995). The Regional Board must make findings based on evidence in the record and may not merely tick off statutory requirements and make claims without supporting evidence. *See City of Carmel-by-the-Sea v. Bd. of Supervisors*, 71 Cal.App.3d 84, 93 (1977) (holding that written findings of fact were insufficient as a matter of law because they were merely a recitation of the statutory language). In addition, the Regional Board may not rely on speculation in reaching a decision. Rather, it must be clear from the record that the Regional Board actually relied upon solid evidence to support its findings, and that this clearly identified and cited evidence supports the agency's findings and ultimate conclusion. Further, the Regional Board must adequately demonstrate a rational connection between the evidence, the choices made, and the purposes of the enabling statute. *See California Hotel & Motel Ass'n v. Industrial Welfare Comm.*, 25 Cal.3d 200, 212 (1979). The level of detail that must be included in the Regional Board's consideration must clearly demonstrate the "analytical route" contemplated under *Topanga*. *See Department of Corrections v. State Personnel Board,* 59 Cal.App.4th 131, 151 (1997). It is insufficient for the Regional Board to simply cite to unsubstantiated findings of impracticability without proof. Without evidence to support the findings, the daily limits are unlawful.

City of Los Angeles v. State Water Resources Control Board, Los Angeles County Superior Court Case No. BS 060957 (April 4, 2001) and Statement of Decision, *City of Burbank v. State Water Resources Control Board*, Los Angeles County Superior Court Case No. BS 060960 (April 4, 2001).[26]

Therefore, the Regional Board's inclusion of daily maximum effluent limitations for chronic toxicity in the Permits violated 40 C.F.R. §122.45(d)(2), as there were either no findings of impracticability made by the Regional Board, or any findings made were not supported by evidence. The Regional Board proceeded without, or in excess of, its jurisdiction and committed a prejudicial abuse of discretion by not proceeding in a manner required by federal and state law. For these reasons, and given the precedent set in WQO 2002-0012, the State Board remove all daily maximum effluent limitations from the Permits.

The Permits should be modified to return to the prescribed narrative limitation with numeric triggers, and the Petitioners at a minimum request the removal of the daily maximum effluent limitation for chronic toxicity because this limit is impracticable, unlawful, and inappropriate.[27]

5) <u>USEPA's Objections Were Misplaced and Should Not Have Resulted in Permit Revisions</u>.

a) The Pre-Public Notice Draft Permit Contained a Valid and Enforceable Chronic Toxicity Effluent Limitation.

In its Formal Objection Letter, USEPA expressed concern "that the proposed chronic toxicity effluent 'limit' in the pre-notice draft permits is a 'trigger' for further investigation rather

[26] The State Board and Regional Board did not appeal the Superior Court's decisions in the *City of Los Angeles* and *City of Burbank* with respect to the inclusion of daily maximum effluent limitations for POTWs. Thus, the Superior Court's decision stands. *See City of Burbank,* 35 Cal.4th 613, 623, n.6. ("Unchallenged on appeal and thus not affected by our decision are the trial court's rulings that . . . the permits improperly imposed daily maximum limits rather than weekly or monthly averages…").

[27] Alternatively, the State Board could transform the daily limits for chronic toxicity into a weekly average limitation in order to comply with 40 C.F.R. §122.45(d)(2) and the recent ruling in the 2014 *CSPA* case discussed in footnote 21. However, that limit may also be impracticable so the reinsertion of the narrative effluent limitation is preferred.

than an actual WQBEL." This concern is unfounded because the trigger is not the effluent limit.[28] The pre-notice draft permits, as recognized in USEPA's Formal Objection Letter, contained narrative effluent limitations for chronic toxicity, which state: "There shall be no chronic toxicity in the effluent discharge." Narrative limits meet the statutory requirements for being an "effluent limitation" as it is a restriction on the discharge from a point source.[29]

The Formal Objection Letter also states that the triggers and required additional actions in the NPDES permits do not meet the definition of "effluent limitation" under the CWA because they do not establish a "restriction" on the "quantity, rate, or concentration" of pollutants in the effluent. In WQO 2003-0012 at p. 10, the State Board cited a letter from USEPA, dated June 25, 2003. This letter described the conditions under which USEPA would consider a narrative effluent limit valid, described in WQO 2003-0012 as follows:

> "US EPA has also stated that if a narrative effluent limitation is used, the permits must also contain (1) numeric benchmarks for triggering accelerated monitoring, (2) rigorous toxicity reduction evaluation (TRE)/toxicity investigation evaluation (TIE) conditions, and (3) a reopener to establish numeric effluent limitations for either chronic toxicity or the chemical(s) causing toxicity."

Because all of these elements were present in the pre-notice draft permits, USEPA should have found the permits to be acceptable. Regarding the question as to whether TIE/TRE requirements are "rigorous" and establishing a restriction on concentration, the Whittier Narrows WRP pre-notice draft permit required preparation and approval of an initial TRE Workplan at the time of permit issuance. Furthermore, if the results of the implementation of this initial TRE workplan indicated a need to continue the TIE/TRE, the District would have had 15 days to submit a detailed TRE workplan to the Regional Board including:

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[28] In addition, EPA guidance acknowledges the use of triggers for additional monitoring to confirm the presence of toxicity. "EPA recommends that regulatory authorities evaluate the merits of a step-wise approach to address toxicity. This approach can determine the magnitude and frequency of toxicity and appropriate follow-up actions for test results that indicate exceedances of a monitoring trigger or permit limit." USEPA, *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications under the NPDES System*, EPA 833-R-00-003 at p. 7-4 (June 2000); 65 Fed. Reg. 44528-9 (July 18, 2000) ("EPA recommends that NPDES permitting authorities implement the statistical approach as described in the TSD to evaluate effluent and to derived WET limits or monitoring triggers.")

[29] 33 U.S.C. §1362(11); 40 C.F.R. §122.2. However, it is not clear whether these definitions actually apply to toxicity, since it is not a constituent or "pollutant," but instead an effect.

"a. Future actions to investigate and identify the cause of toxicity;
b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
c. A schedule for these actions."

The Pomona WRP pre-notice draft permit contained similar provisions.

Furthermore, the State Board has held that the "addition of an enforceable narrative effluent limitation for chronic toxicity, along with the existing TRE/TIE requirements and the reopener for a numeric effluent limitation for chronic toxicity, if necessary, will ensure that the requirements to perform a TRE/TIE and to implement it to eliminate toxicity are clear and enforceable. We also expect that where the TRE/TIE indicates a pollutant is causing the toxicity, the Regional Board will reopen the permit to include numeric effluent limitations for that constituent." WQO 2003-0012 at p. 10 *citing* letter from USEPA, dated June 25, 2003 (describing the requirements for narrative effluent limitations). This narrative limit is consistent with State Board precedent that has been in place for over 11 years without objection from EPA. Nothing has changed in the law to warrant an objection at this time.

USEPA itself blessed this approach for the District's permits in 2007, stating:

> "We are pleased that the proposed language, in part, contains the following elements to successful implementation of WET testing in NPDES permits: (1) effluent limits, if reasonable potential for WET is demonstrated; (2) protective numeric benchmarks for triggering immediate accelerated monitoring when elevated levels of toxicity are reported; and (3) toxicity reduction evaluation/toxicity identification conditions which direct the permittee to identify and correct the cause of toxicity when elevated levels of toxicity are repeatedly reported. This approach is consistent with regulations governing reasonable potential for toxicity objectives for WET at 40 C.F.R. 122.44(d)(1); Section 4 of the SIP; EPA's national guidance for water quality-based permitting in the TSD; and regional EPA guidance for implementing WET in *Regions 9 and 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs* (Denton and Narvaez, 1996)."

USEPA Region IX Letter to Deborah Smith, Interim Executive Officer, Regional Board re: Long Beach WRP and Los Coyotes WRP (May 31, 2007) at pgs. 3-4. Why the narrative effluent limit/numeric monitoring trigger approach previously authorized and stated to be compliant with law, regulations, and guidance now no longer complies is unclear. No relevant changes have

occurred in the law and the Regional Board remains obliged to follow State Water Board precedent applicable to all NPDES permits for POTWs.

b) The Proposed Narrative Effluent Limits and Supplemental Numeric Triggers are Consistent with Binding State Board Precedent.

As discussed above, the State Board has held that the use of final numeric effluent limitations in permits for POTWs that discharge to inland surface waters is an issue of statewide importance that should be addressed in the SIP. In addition, the State Board replaced the numeric chronic toxicity effluent limitations with narrative chronic toxicity limitations until the SIP is modified. Thus, the numeric limits were deleted and replaced with: "There shall be no chronic toxicity in the effluent discharge." This was consistent with the language in the District's previous permits and the pre-public notice draft permits[30] and has been in all non-ocean discharging POTW permits statewide for over eleven years without objection by USEPA until now. As previously stated, since the federal rules have not changed to justify this objection, USEPA's objections to these Permits were not appropriate.

Moreover, because the SIP has not yet been modified, the 2003 precedential orders (WQO 2003-0012 and WQO 2003-0013) are still in effect. As such, the inclusion of new numeric

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[30] The District suggested one change to the pre-public notice draft approach for the draft Whittier Narrows WRP permit, namely moving the language stating that "There shall be no chronic toxicity in the effluent discharge" from the section on "Chronic Toxicity Trigger and Requirements," to the "Effluent Limitations" section. Then the trigger language could have been made a part of the "Compliance Determination" outlining the steps needed to confirm compliance with the narrative effluent limitation. This would be consistent with WQO 2008-0008 at pages 6-7, which stated:

> "In Order WQO 2003-012, we stated that, pending adoption of a policy, it was not appropriate to include final numeric effluent limitations for chronic toxicity in NPDES permits for publicly owned treatment works, but that permits must contain the following:
> 1. A narrative limit such as: "There shall be no chronic toxicity in the effluent discharge;"
> 2. Numeric benchmarks for triggering accelerated monitoring;
> 3. Rigorous toxicity reduction evaluation/toxicity investigation evaluation conditions; and
> 4. A reopener to establish numeric effluent limitations for either chronic toxicity or the chemical(s) causing toxicity."

Since the District's pre-public notice draft permit for the Whittier Narrows WRP contained these four items, USEPA had no valid basis to object since this has been the State's policy and procedure for such limits since 2003. The Regional Board should have corrected the Permits to make them consistent with the originally proposed language and just made this one suggested change.

("Pass/Fail") chronic toxicity effluent limitations without authority to do so (especially when based on the ATP approval that is currently being challenged in federal court in *SCAP v. USEPA,* Eastern District Court, Case No. CV-01513-MCE-DAD) would violate State Board precedent and represent an abuse of discretion. Most all other recent permits referenced in the USEPA's Final Objection letter or discussed in the Fact Sheets to the Permits have all been appealed to the State Board for reasons similar to those raised here.[31] Further, the State Board has already confirmed the continuing validity of the 2003 precedential orders in at least two other more recent cases. *See* WQO 2012-0001 (City of Lodi); WQO 2008-0008 (City of Davis). Thus, there are at least four precedential State Board orders mandating a narrative chronic toxicity limit, all of which are being violated by the Permits' numeric chronic toxicity limits.

c) USEPA's Statements Regarding the Need for Numeric Limits are Mistaken.

USEPA claims that "[e]ven if the requirements related to the aim of 'no chronic toxicity' were expressed as a valid narrative WQBEL for WET, the Los Angeles Regional Water Quality Control Board (L.A. Regional Water Board) has failed to justify how such a narrative requirement would achieve water quality standards, as would be the case with a numeric limit." USEPA's Initial Objection Letter at pg. 4, section B. The Toxicity objective regulating chronic toxicity, as stated above is: "[t]here shall be no chronic toxicity in ambient waters, outside mixing zones." Basin Plan at pg. 3-17 (emphasis added). The narrative effluent limit stating "[t]here shall be no chronic toxicity in the effluent discharge" (emphasis added) is ***more stringent*** than the objective, because it applies to the discharge itself and, therefore, will be protective of the ambient water even within any mixing zone. Thus, USEPA's allegations that the narrative limit will not meet the objective or "is not as stringent as necessary for the discharge" are incorrect.

Further, the inclusion of numeric limits does not necessarily mean that water quality

[31] USEPA also referenced permits issued in Arizona, which are not precedential for California as state rules and policies differ between the states. USEPA further references permits for POTWs not governed by WQO 2003-0012 in which toxicity limits are expressed numerically. These permits are apparently those for POTWs with ocean outfalls, which are covered under the California Ocean Plan. The California Ocean Plan specifically requires numeric toxicity effluent limitations when there is reasonable potential. However, due to the high dilution factors applied to ocean discharges, along with the use of different species to conduct the toxicity testing, the issues relating to toxicity control are fundamentally different than for discharges to inland waters.

standards will be achieved in the receiving waters given other inputs to those waters; numeric limits just generally make for an easier comparison to a numeric objective. In this case, where no chronic toxicity is allowed in the receiving waters or in the effluent discharge, that comparison is just as simple.

To the extent USEPA was stating in its objection that numeric limits are required, case law and other binding precedent hold that the opposite is true. State and federal courts have resoundingly rejected any suggestion that effluent limitations are required to be numeric. *Citizen Coal Council v. USEPA*, 447 F.3d 879, 895-96 (6th Cir. 2006). The definition of "effluent limitation" in the CWA refers to "any restriction," and may include a "schedule of compliance" 33 U.S.C. §1362(11); 40 C.F.R. §122.2; *Natural Resources Defense Council v. USEPA,* 673 F.2d 400, 403 (D.C. Cir. 1982)(The CWA "defines 'effluent limitation' as 'any restriction' on the amounts of pollutants discharged, not just a numerical restriction."); *Waterkeeper Alliance, Inc. v. USEPA,* 399 F.3d 486, 502 (2d Cir. 2005)("site specific BMPs [best management practices] are effluent limitations under the CWA."). The term "schedule of compliance" means a "schedule of remedial measures," including an enforceable sequence of interim requirements leading to compliance with an effluent limitation or standard (33 U.S.C. §1362(17); 40 C.F.R §122.2.). *See accord* Statement of Decision Granting Writ of Mandate, *City of Tracy v. SWRCB,* Sacramento Superior Court Case No. 34-2009-80000392 (2010) at p. 41 (case is binding on the Water Boards since not appealed). Thus, an effluent limitation could consist entirely of remedial measures, such as triggers to additional monitoring, a TIE/TRE, and the addition of chemical-specific effluent limitations, as set forth in the current permit construct under WQO 2003-0012 and WQO 2008-0008.

In addition, in the *Communities for a Better Environment* case, the First Appellate District Court of Appeal specifically rejected the argument that the federal regulations mandate numeric WQBELs. Instead, the Court found that Congress intended a "flexible approach" including alternative effluent control strategies. *Communities for a Better Environment ("CBE") v State Water Resources Control Bd.* (2003) 109 Cal. App 4th 1089, 1105; *Communities for a Better Environment v State Water Resources Control Bd.* (2005) 132 Cal. App 4th 1313, 1318; *see also*

Divers' Environmental Conservation Organization v SWRCB (2006) 145 Cal.App.4th 246, 262 (following *Communities for a Better Environment.*) Thus, numeric effluent limitations are not required or necessary to meet the requirements of the federal CWA. *CBE, supra*, 109 Cal.App.4th at p. 1093. Indeed, federal regulations expressly permit non-numeric effluent limitations - such as narrative limitations, source control and other best management practices. 40 C.F.R. §122.44(d)(1)(i) and (v)(discussing "Limitations" and "effluent limits for whole effluent toxicity" without using the word "numeric")[32]; 40 C.F.R. §122.44(k)(3); *see also* State Board WQO 2006-0012, p. 16 ("programs of prohibitions, source control measures, and BMPs constitute effluent limitations and can be written to achieve compliance with water quality standards.")

These decisions overrule any justification made by USEPA or the Regional Board for numeric effluent limitations for WET. As these cases proclaim, numeric effluent limitations are not required by any law or regulation. Moreover, numeric limits are particularly inappropriate for WET because of the inherent inaccuracies of biological testing and the likelihood of inaccurate test results that puts the permittee in compliance jeopardy for false failures, creating a violation even when the effluent is not truly "toxic."

d) Binding Case Law Rejects USEPA's Interpretations.

USEPA's Formal Objection Letter at page 4 states that "WQO 2003-0012 misinterprets 40 CFR 122.44(k)(3) – which provides that effluent limits may be other than numeric – because the WQO ignores the need to show the infeasibility of numeric WQBELs.... Absent a demonstration that numeric WQBELs are infeasible to calculate, the narrative WQBELs in these permits are inconsistent with regulatory requirements at 40 CFR 122.44(k)(3)." Besides the fact that this statement appears to be a belated challenge an eleven year old order, there are many other problems with this statement, as follows:

i) Section 122.44(k)(3) Does Not Apply Where WQBELs Are Included.

USEPA regulations at 40 C.F.R. §122.44(k)(3) relate to the use of Best Management

[32] In fact, section 122.44(d) references "any requirements... necessary to (1) Achieve water quality standards...," and does not limit these requirements to "effluent limitations."

Practices ("BMPs") *in lieu of* numeric effluent limitations. This section is not discussing or authorizing narrative effluent limitations; it is authorizing BMPs. In this case, as discussed above, the permits contain valid narrative effluent limitations for chronic toxicity so 40 C.F.R. section 122.44(k)(3) is not applicable.

ii). If Section 122.44(k) Applies, There is No Requirement That Numeric Effluent Limitations be Infeasible "To Calculate."

USEPA states in its Formal Objection Letter at page 4 that "For the Whittier Narrows and Pomona permits, the L.A. Regional Water Board has not provided any explanation as to why it would be infeasible to calculate numeric WET limits for chronic toxicity." (Emphasis added.) USEPA is using the language of 40 C.F.R. section 122.44(k)(3), which allows BMPs in lieu of effluent limitations when "numeric effluent limitations are infeasible." However, the words "to calculate" are not included in this regulation. Nevertheless, USEPA apparently believes that feasibility turns on the ability and propriety of *calculating* numeric effluent limitations, rather than on the ability of a discharger to comply.

USEPA's argument is unfounded and is not supported by case law or any other authority. "It will nearly always be possible to [calculate or] establish numeric effluent limitations, but there will be many instances in which it will not be feasible for dischargers to comply with such limitations. In those instances, states have the authority to adopt non-numeric effluent limitations." (Emphasis added.) *See City of Tracy* Statement of Decision at p. 42. The *Communities for a Better Environment* case made clear that one factor a board may consider in determining whether a numerical effluent limitation is "feasible" is the "ability of the discharger to comply." *See CBE, supra*, 109 Cal.App 4th at 1100. The court expressly approved the regional board's consideration of this factor in upholding the determination that numeric effluent limits were not "appropriate" for the refinery at issue in that case. *Id.* at 1105 (approving determination that numeric WQBEL was not feasible "for the reasons discussed above," which included inability of discharger to comply).

In *Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369 (D.C.Cir.1977), the D.C. Circuit stressed that when it is infeasible to comply with numerical effluent limitations, USEPA may issue permits with conditions designed to reduce the level of effluent discharges to acceptable levels.

This may well mean opting for a gross reduction in pollutant discharge rather than the fine-tuning suggested by numerical limitations. *Id.* at 1380, and at n. 21 (noting the proposition that Congress did not regard numeric effluent limitations as the only permissible limitation was supported by section 302(a) of the CWA (33 U.S.C. §1312(a)).

Accordingly, Courts have rejected the argument that in determining the "feasibility" or "propriety" of numeric effluent limitations, the Regional Board may not consider the ability (or inability) of the discharger to comply with such limitations.[33] The ability to comply is a critical factor in determining the "feasibility" or "propriety" of numerical limitations.[34] *City of Tracy v. SWRCB,* Statement of Decision at pg. 42. The feasibility of calculating a limit is not.

Regarding the ability to comply with numeric effluent limitations, the inherent variability of biological testing and the likelihood of inaccurate test results needs to be carefully handled or

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[33] The State Board recognized the following in the June 10, 2003 draft of Long Beach/Los Coyotes Order No. 2003-0012 at page 10 (emphasis added):

> Because the influent can consist largely of domestic wastewater over which the District has little or no control, we find that a numeric effluent limitation should not have been used … for chronic toxicity. It is not feasible, at least initially, to impose numeric effluent limitations since it will result in a permit violation whenever there is toxicity in the effluent, even if the cause were from the domestic influent, the District had no basis for knowing the cause, and the District was pursuing the cause and its elimination through vigorous compliance with stringent TRE requirements…
>
> While industrial and commercial wastewater is often well controlled and characterized, domestic wastewater may contain pesticides and other toxins as a result of homeowner applications for which there is no reasonable method of predicting the toxic event or identifying the source or sources. In the case of a homeowner discharge of a toxic substance, the discharge is often a one-time or seasonal event, but when the District receives influent from entire communities the toxic spikes may affect wastewater plants at a greater frequency. Thus, *the initial use of numeric effluent limitations for chronic toxicity when reasonable potential is determined may be infeasible at publicly owned treatment works ("POTWs")* ….

See also Exhibit C at ¶ 18.

[34] Regarding the ability to comply with numeric effluent limitations, the inherent variability of biological testing and the likelihood of false positive test results needs to be carefully handled or compliance will not be feasible. False positive results put the permittee in compliance jeopardy when the effluent is not really "toxic." Any numeric effluent toxicity limitations must be carefully crafted, to recognize this inherent variability and potential for false positives. That is one reason the State Board has repeatedly, in four precedential orders with the most recent in 2012, indicated its preference for establishing the method of setting any numeric chronic toxicity effluent limits for inland dischargers through a statewide process. Without adequate consideration of false indications of toxicity (*e.g.*, false positives or false failures), it should be considered infeasible to set numeric limitations for toxicity.

compliance will not be feasible. Inaccurate ("False Failure") results put the District in compliance jeopardy when the effluent is not really "toxic." Any numeric effluent toxicity limitations must be carefully crafted, to recognize this inherent variability and potential for false indications of toxicity. Development of any such limitations should be done on a statewide basis through an open process considering input from all stakeholders, not on a permit-by-permit basis. Without adequate consideration of false failures under the TST or false positives under other tests, it should be considered infeasible to set numeric limitations for toxicity.

iii) The State Board Has Held that Numeric Limits for Chronic Toxicity Are Not Feasible or Appropriate.

> The State Board's WQO 2003-0012 held the following, which was referred to by USEPA:
>
> While numeric effluent limitations are generally preferred, NPDES permits can legally contain "best management practices" in lieu of numeric limitations where the permitting authority determines that numeric effluent limitations are not "feasible."

WQO 2003-0012 at p. 9 and fn. 25, *citing* 40 C.F.R. § 122.44(k); *Communities for a Better Environment v. Tesoro* (2003) 109 Cal.App.4th 1089; *Natural Resources Defense Council v. Costle* (D.C. Cir. 1977) 568 F.2d 1369; WQO 91-03 (*Citizens for a Better Environment*). Under state law, "infeasible" is defined as "not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." Cal. Water Code §8307(c)(4); *see also* SIP at Appendix 1-3.

When making its determination as to whether "numeric effluent limitations are infeasible," the State Board stated: "The issue we will explore is whether the use of numeric effluent limitations for chronic toxicity is appropriate." See WQO 2003-0012 at 9, fn. 26, *citing Tesoro, supra*, slip opn., p. 18. The State Board has repeatedly found that the imposition of numeric limitations for chronic toxicity is not appropriate. *See* WQO 2003-0012, WQO 2008-0008, and WQO 2012-0001. In WQO 2008-0008 (City of Davis), adopted on September 2, 2008, the State Board concluded that a numeric effluent limitation for chronic toxicity was not appropriate in the permit under review, but that the permit had to include a *narrative* effluent limitation for chronic toxicity. The pre-public notice drafts of the permits were consistent with that binding precedent.

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e) **USEPA Ignored the Existence of Section 122.44(k)(4).**

Section 122.44(k)(3) of the federal regulations, regarding infeasibility of numeric limits, is not the only exemption available. 40 C.F.R. §122.44(k)(3). Subdivision (k)(4) authorizes BMPs where "the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA." 40 C.F.R. §122.44(k)(4). Here, the trigger approach confirming toxicity and then, where toxicity is confirmed, performing a TIE and TRE could be construed or interpreted to be BMPs that are reasonably necessary to determine the underlying source of toxicity to remedy that issue. Having numeric limits that merely result in the imposition of penalties for a random and unconfirmed "violation" does not remedy any potential water quality issue, it just penalizes sampling results. Thus, the BMP trigger approach is authorized under federal rules. 40 C.F.R. §122.44(k)(4).

6) **Numeric Effluent Limitations for Chronic Toxicity Remain Inappropriate.**

Numeric effluent limits for chronic toxicity are not appropriate because of the inherent inaccuracies of biological testing and the likelihood of false test results that put the permittee in compliance jeopardy when the effluent is not really "toxic."

The legal validity of numeric chronic toxicity limits is also questionable. USEPA recognizes that "the precision of freshwater chronic toxicity tests is discussed in the representative methods sections in the methods manual (EPA/600/4-91/002). NOEC … is generally in the range of 30-60% [coefficient of variation]." *See* 60 Fed. Reg. 53533-4 (Oct. 16, 1995). This variation is similar to a range of non-detect to 2.2 TU_c for any particular clean (method blank) sample, or using a non-technical analogy, is similar to a radar detector registering a stopped car at any speed from zero to more than 60 miles per hour.

In addition, chronic toxicity tests and subsequent statistical analyses were developed to exhibit no more than a 5% single test false positive failure rate. However, the USEPA Interlaboratory variability study on non-toxic blank samples conducted as a part of the test method promulgation process in 2001 showed a substantially higher single test false positive error rate (failing when there is no actual toxicity) for certain endpoints including the freshwater test species used to determine compliance in the Permits. USEPA. *Final Report: Interlaboratory Variability*

Study of EPA Short-term Chronic and Acute Whole Effluent Toxicity Test Methods, Vol. 1; EPA-821-B-01-004 (Sept., 2001). This places the regulatory usefulness of numeric limits for chronic toxicity in question and raises constitutional due process issues in the context of strict liability for permit violations. Even USEPA itself has determined that "the accuracy of toxicity tests cannot be determined." *See Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*; EPA/600/4-91/002 at 139, 193, and 225 (July 1994). Even if there is only a 5% false failure level (as was statistically set for the TST but never verified through an actual study of known, non-toxic samples), this false indication of toxicity would constitute a violation subject to citizen suits and discretionary Regional Board enforcement.[35] No reason exists to put permittees in compliance jeopardy unnecessarily when there is no real confirmed toxicity, or where the existence of actual, lingering chronic toxicity is not confirmed.

Because of the unreliability and inaccuracy of these biological test methods, numeric effluent limits for chronic toxicity are inappropriate and should not be imposed.

a) Numeric Limits Based on a Two-Concentration TST are Highly Problematic.

Reanalysis of actual WET test data, from a wide variety of real-world samples, demonstrates that the TST statistical hypothesis test consistently "detects" the existence of toxicity more frequently than the NOEC statistical hypothesis test, especially for freshwater test species. *See* State Board, *Effluent, Stormwater and Ambient Toxicity Test Drive Analysis of the Test of Significant Toxicity (TST)* ("State Board Test Drive") (Dec., 2011)(*see e.g.,* Chronic Freshwater results in Table E-1). However, one should not assume that greater statistical *sensitivity* equates with improved *accuracy* in WET testing.

Reanalysis of data from USEPA's inter-laboratory WET variability study indicates that the TST statistical hypothesis test also "detects" toxicity in clean blank samples at a rate up to three times higher than the NOEC statistical test. USEPA. *Final Report: Interlaboratory Variability Study of EPA Short-term Chronic and Acute Whole Effluent Toxicity Test Methods*, Vol. 1; EPA-

[35] Such a violation would be subject to discretionary enforcement, but would not be subject to Mandatory Minimum Penalties or "MMPs" (Water Code section 13385(i)(1)(D)) if there are other toxic pollutant limits in the permit.

821-B-01-004 (Sept., 2001). Blank samples are comprised solely of laboratory dilution water that is known to be non-toxic before the test begins. Such inaccuracies demonstrate that the TST does not provide performance "acceptably equivalent" to that of the standard methods that were promulgated in 40 C.F.R. Part 136 in the 2002 Methods.

It has been suggested by USEPA and Tetra Tech that a more thorough review of USEPA's blank study data revealed several previously undetected quality assurance and quality control issues that at least partially explains the presumed high false positive error rate associated with the TST. *See* Tetra Tech presentation at the August 22, 2011 State Board TST Workshop, slides 22 through 28, which can be found on the following website: http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/docs/testdrive_presentation.pdf. However, the restrictions being imposed by requiring use of the two-concentration TST method will also restrict the ability of toxicologists to identify and address similar issues when interpreting compliance test results. Neither the USEPA's inter-laboratory WET variability study nor the State Board Test Drive evaluated the impact associated with incorporation of the two-concentration design, with no concentration-response evaluation, on the false positive error rate. The State Board Test Drive simply compared the results of NOEC and TST analyses on a large number of multiple concentration effluent tests incorporating a concentration-response evaluation and two-concentration receiving water tests. However, no evaluations comparing the multiple concentration TST method (with the concentration-response evaluation) to the two-concentration TST method have been conducted. In contrast, the USEPA did conduct an evaluation of the multiple concentration NOEC method with and without incorporation of a concentration-response evaluation and determined that incorporation of the concentration-response evaluation was responsible for reducing the false positive error rate from 14% to less than 5%. 67 Federal Register 69,964 (November 19, 2002). Therefore, a similar improvement in the error rate in the TST statistical test would be expected with incorporation of a multiple concentration test design that included a similar concentration-response evaluation.

While some contend that the State Board Test Drive adequately demonstrated that the false positive error rate for the TST statistical test is comparable to the NOEC statistical test, such a

conclusion is unfounded. The State Board Test Drive was not able to estimate the false positive error rate of either the NOEC or the TST because the analysis was not conducted on known non-toxic blank samples. Tests used in the State Board Test Drive evaluation were performed on effluents, receiving waters, and ambient waters whose actual or true "toxicity" was not known. Some of the tests that exhibited relatively high effects may have actually been "non-toxic" while others that exhibited relatively small effects may have been truly "toxic." Additionally, as discussed above, this analysis failed to examine the impact of eliminating the concentration-response evaluation on false positive error rates.

In the absence of any actual studies on the error rate of the two-concentration TST method, based on inference from the study referenced above, the single test false positive error rate for the two-concentration TST method is estimated to be 14%. Exhibit C at ¶ 8.

Because of the general unreliability and inaccuracy of these biological test methods, and the amplifying effects on the false positive error rate imposed by the two-concentration TST method, strictly construed numeric ("Pass/Fail" or "% Effect") effluent limits for toxicity are inappropriate, infeasible to comply with, and should not have been imposed.

In conclusion, for all the reasons cited in herein, the effluent limits for chronic toxicity in Table 4 of the Permits should be changed back to the narrative effluent limitation contained in the last permits and pre-public notice draft of the Whittier Narrows permit with a numeric trigger for additional investigations (e.g., TIE/TRE). No authority exists for mandating numeric chronic toxicity effluent limitations and particularly not limits of "Pass", or "% effect <50" using a non-Part 136 promulgated method. Furthermore, as stated above, the inclusion of numeric chronic toxicity effluent limitations violates the current binding precedent from WQO 2003-0012 and WQO 2003-0013, applicable to the Pomona and Whittier Narrows WRPs. Finally, since the two-concentration TST method is not an approved Part 136 methodology (or a valid ATP), this method should not be utilized for compliance purposes unless promulgated as a formal rule by EPA.

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7) **The Regional Board Failed to Consider the Required Factors Set Forth in Water Code Section 13241 in Violation of Water Code Section 13263(a).**

The Regional Board's inclusion of numeric and daily limits in the Permits went beyond the requirements of federal law and, thus, are state law requirements. When the Regional Board goes beyond federal law requirements, it must take into consideration the beneficial uses to be protected, the water quality objectives *reasonably* required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code Section 13241. *See City of Burbank v. State Board,* 35 Cal.4th 613, 627-629 (2005); Water Code §13263(a). In developing the chronic toxicity effluent limitations contained in the Permits, the Regional Board did not take into consideration the water quality objectives reasonably required for the protection of the existing and probable future beneficial uses and other waste discharges preventing the attainment of the purported beneficial uses listed in the Permits. By failing to consider each of the mandated factors, the Regional Board violated Water Code section 13263(a). The Regional Board was also required to "consider the provisions of Section 13241." *See* Water Code §13263(a). Section 13241 requires the consideration of each of the following factors:

(a) Past, present, and probable future uses of water;
(b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;
(c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area
(d) Economic considerations
(e) The need for housing within the region.
(f) The need to develop and use recycled water.

The Regional Board failed to properly consider each and every one of the required factors contained in Water Code section 13241 during the process of developing the chronic toxicity effluent limitations contained in the Permits. By failing to consider the provisions of Water Code section 13241, the Regional Board violated Water Code section 13263(a).

For the foregoing reasons, the State Board should find that the action and inaction of the Regional Board was inconsistent with the law and an abuse of discretion. Accordingly, the State

Board should remove the chronic toxicity effluent limitations from the Permits because the Regional Board failed to properly consider the factors contained in Water Code sections 13263(a) and 13241.

8) Numeric Limits for Chronic Toxicity are Not Necessary to Protect Water Quality.

The CWA generally only requires a permit to contain WQBELs in certain instances. 40 C.F.R. §122.44(d)(1). The requirements for the inclusion of WQBELs for toxicity are set forth in the federal regulations, as follows:

> "Except as provided in this sub-paragraph, when the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, toxicity testing data, or other information, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative criterion within an applicable State water quality standard, the permit must contain effluent limits for whole effluent toxicity. Limits on whole effluent toxicity are not necessary where the permitting authority demonstrates in the fact sheet or statement of basis of the NPDES permit, using the procedures in paragraph (d)(1)(ii) of this section, that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative State water quality standards."

40 C.F.R. §122.44(d)(1)(v)(emphasis added).

Both this federal regulation and the Basin Plan acknowledge that toxicity limits are *not required* where chemical-specific limits for the pollutants most likely to be the cause of toxicity are included in the permits. 40 C.F.R. §122.44(d)(1)(v); Basin Plan at 3-17 (Toxicity Objective states "Effluent limits for specific toxicants can be established by the Regional Board to control toxicity identified under Toxicity Identification Evaluations (TIEs)."). For these Permits, the most likely pollutants to cause toxicity are all assigned effluent limitations within the permit such that WET limits are not required under 40 C.F.R. section 122.44(d)(1)(v). Ammonia was identified as the constituent responsible for nearly all of the historical incidences of toxicity at the Whittier Narrows and Pomona WRPs. Exhibit C at ¶ 18. Numeric ammonia limits were incorporated into the NPDES permits for these facilities and treatment upgrades to remove ammonia from the effluent were fully implemented approximately ten years ago. *Id.* As a result, numeric effluent limitations for toxicity are not necessary to protect water quality and USEPA's determination that "water quality based effluent limits (WQBELs) are required under 40 CFR 122.44(d)(1)(i) and (v)" was incorrect. *See*

USEPA, Initial Objection Letter at pg. 1.

For the Whittier Narrows WRP, no exceedances of the 1.0 TUc monthly median accelerated testing trigger specified in the 2009 permit were observed in the final effluent from January 1, 2009 through January 31, 2014. *See* Whittier Narrows Permit at pg. F-53. For the Whittier Narrows WRP, one exceedance of 1.0 TUc occurred in a single test that was observed only once per year between 2012 and 2014, out of 67 valid chronic toxicity tests (~4.0% of tests). *Id.*

For the Pomona WRP, the Regional Board at the November 6, 2014 hearing pointed out that there was a single monthly median exceedance of the 1 TUc trigger (Regional Board presentation at Slide titled "Reasonable Potential and Compliance").[36] Although a TRE was triggered during accelerated testing subsequent to this trigger exceedance, no persistent toxicity was observed during the TRE. Identifying the pollutant responsible for rare, sporadic exceedances is rarely, if ever, successful as the toxicity, if valid, may prove to be ephemeral and, in some incidences, the initial observation of toxicity may have actually been caused by a test error. Exhibit C at ¶ 18. Therefore, the use of numeric toxicity limits to control for rare and sporadic incidences of chronic toxicity are not feasible for POTWs since proactive measures to address such incidences prior to observation are not possible nor are numeric toxicity limits necessary to protect beneficial uses. *Id.* For these reasons, numeric triggers, accelerated testing, and TRE requirements continue to represent the most effective means to identify and ultimately control discharges of toxicity and to provide full protection of water quality. *Id.*

9) The Regional Board Imposed Unreasonable Requirements in Violation of Water Code Section 13000.

The California Legislature has found and declared that activities affecting water quality "shall be regulated to attain the highest water quality which is reasonable, considering all demands

[36] Exhibit C at ¶ 18. This trigger exceedance and the single test exceedances were used by the Regional Board to determine that "reasonable potential" existed and WQBELs were required under 40 C.F.R. §122.44. *See* Whittier Narrows Permit at pg. F-51; Pomona Permit at pg. F-47. However, without adequate guidance from the State Board on how to determine reasonable potential in the SIP, the determination that RP existed was arbitrary, capricious, and contrary to USEPA guidance and should not have been used to justify the imposition of numeric effluent limitations for chronic toxicity.

being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." *See* Water Code §13000. This section sets State policy and imposes an overriding requirement on the Regional Boards that all effluent limits be reasonable considering all circumstances. For reasons set forth above, the requirements contained in the Permits are not reasonable, considering all of the related circumstances. Therefore, the chronic toxicity limits contained in the Permits violate Water Code section 13000.

The Regional Board imposed numerous other requirements related to the chronic toxicity effluent limitations in the Permits that were objected to by the District as unreasonable or unauthorized, yet were not modified, including the following:

a. The Permits Should Not Require Routine Toxicity Compliance Monitoring and the Continued Determination of Effluent Limit Violations After Triggering Accelerated Testing and Initiation of the TRE.

The 2009 NPDES permits for the Pomona and Whittier Narrows WRPs required accelerated testing following an exceedance of the 1 TUc monthly median chronic toxicity trigger. The purpose of the accelerated testing was to confirm that toxicity was indeed present, not simply the result of false positive test results, and to ensure that any toxicity was persistent enough to identify the source of the toxicity. If accelerated testing confirmed the toxicity, the 2009 permits required a TIE/TRE to identify the specific cause or causes of the observed toxicity. The accelerated testing and TRE process represents essentially a confirmation and diagnosis process, as toxicity cannot be addressed until the cause of the toxicity is known.

The new Permits do not allow time for this confirmation and diagnosis process to occur, but instead continue to require monthly chronic toxicity compliance determinations to be made during the accelerated testing and TIE/TRE process. This subjects the District to additional liability for violations during this critical confirmation and diagnosis process, which is unnecessarily punitive. The District will be penalized even when all appropriate steps are being timely and diligently taken the resolve the issue. The apparent justification for this requirement is to incentivize the District to move quickly during this TIE/TRE process, but the Permits themselves contain tight timelines for

required actions, so no need exists to impose additional violations during this process so long as the process is being diligently undertaken.

In addition to being unnecessarily punitive, assessing compliance during accelerated testing would be challenging because the regulatory threshold used during accelerated testing is different from the threshold for used routine compliance determination. For routine compliance determination, a monthly median TST is used to evaluate compliance. During accelerated testing, a single TST exceedance is used as a TRE trigger. Under this bifurcated approach, a Permittee could "Fail" one of the four accelerated tests while "Passing" the MMEL compliance tests. This would result in the triggering of a TRE on a Permittee that is actually demonstrating compliance. Additionally, if the MMEL compliance monitoring tests and the accelerated monitoring both resulted in "Fail", it is unclear if additional accelerated testing would be conducted concurrently with the TRE in response to the new MMEL failure. Finally, during the TRE, a Permittee could demonstrate compliance with the MMEL while in the middle of the TRE analysis. In such a situation, it is unclear if the Permittee could end the TRE or would be forced to continue TRE implementation even while currently in compliance with the applicable effluent limit.

Overall, it seems to be of very little use to require accelerated testing or the initiation of a TRE while the Permittee is actually demonstrating compliance with the applicable limits. By requiring continued compliance monitoring during accelerated testing and TRE initiation, such confounding scenarios are likely to be observed. The only reasonable solution to these multiple conflicts, which are not addressed in any way in the Permits, is to discontinue compliance monitoring during the accelerated monitoring/TIE/TRE process. A less satisfactory, partial solution to some of the conflicts would be to allow the District to discontinue accelerated testing and/or TRE plan implementation if compliance with the applicable limits is demonstrated during a calendar month.

Additionally, State Board staff has been actively working on the development of a statewide policy/plan to address regulation of WET for several years now. A significant and meaningful part of this process includes working with multiple stakeholders across the state and the issue discussed above has been a part of the discussions with State Board staff. As a result, State

Board staff has made its intentions known that, after an initial WET limit violation, no further violations should be incurred during accelerated testing and for a period of six months after initiation of the TRE implementation plan provided that the Permittee conducts the required and appropriate actions to address the WET exceedance.[37] Under staff's proposal, an extension of the six-month exemption could be granted by the regulating authority on a case-by-case basis. This approach would allow for the Permittee to focus any and all available efforts on quickly confirming the persistence of toxicity during accelerated testing and/or more completely characterizing and identifying the toxicity-causing constituent(s) during the TRE instead of conducting additional independent testing that would not be useful in achieving the goal of controlling toxicity. Because the State Board approach is an outgrowth of a wider stakeholder process, this suggested approach should have been applied in the Permits.

The Petitioners have also become aware that USEPA may now be claiming that this suggested approach is illegal. However, this approach was included in the San Diego Regional Board's NPDES permit for the San Diego Naval Complex on August 14, 2013, which stated that there would be an initial violation imposed for exceeding the applicable limit, but:

> "…Any exceedances occurring during a required accelerated monitoring period and, if appropriate, a TRE period shall not constitute additional violations provided that: (1) the Discharger proceeds with the accelerated monitoring and TRE (if required) in a timely manner; and (2) the accelerated monitoring and TRE are completed within one year of the initial exceedance. The San Diego Water Board has the discretion to impose additional violations and initiate an enforcement action for toxicity tests that result in a "fail" after one year from the initial violation. Additionally, a discharger's failure to initiate an accelerated monitoring schedule or conduct a TRE, as required by this Order will result in all exceedances being considered violations of the MDEL or MMEL and may result in the initiation of an enforcement action."

See Naval Complex permit located at the following website and in the MRP at pg. 21, Para. F, http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2013/R9-2013-0064.pdf. Prior to adoption of that permit, USEPA sent a comment letter on the Naval Complex permit and in

[37] State Board, Fact Sheet, Draft Toxicity Amendment to the Water Quality Control Plan for Enclosed Bays and Estuaries of California, Revision Summary (August 2013); State Board, Draft Policy for Toxicity Assessment and Control (June 2012).

that letter stated that: "EPA has worked closely with the State and Regional Water Boards to ensure effluent limitations and testing are conducted consistent with federal and state requirements." *See* USEPA Region IX, Letter from David Smith, Manager of the NPDES Permits Office to David Barker, Supervising Water Resource Engineer, San Diego Water Board (July 8, 2013)(emphasis added). Thus, any argument that this approach is illegal is contradicted by USEPA's own approving comment letter.

Other similar issues were raised in the District's comment letter and are incorporated by reference herein in order to save space. However, these issues related to toxicity should also be addressed by the State Board if the numeric limits are not removed.

For the foregoing reasons, the State Board should find that the Regional Board acted contrary to law and abused its discretion. The State Board should issue an order instructing the Regional Board that imposition of the objected to requirements was inappropriate. The State Board should issue an order directing the Regional Board to instead adopt requirements that are reasonable, considering all of the related circumstances.

5. THE MANNER IN WHICH THE PETITIONERS ARE AGGRIEVED:

Normally, end-of-pipe controls can be installed or at least considered in order to achieve consistent compliance with effluent limitations contained in an NPDES permit. However, for chronic toxicity, there is no advanced treatment technology that can be installed to guarantee compliance because the inherent variability of the test method, significantly exacerbated in this case by the selection of the non-promulgated two concentration TST test method, exposes the discharger to the jeopardy of non-compliance due to false test results. *See* accord Exhibit C at ¶ 6, ¶ 7 and ¶ 17. Unlike conventional pollutants, toxicity is an effect that can be caused by a variety of reasons, not all of them related to pollutants. In fact, water that is too clean (i.e., distilled water) can demonstrate chronic toxicity effects on aquatic organisms.

The Petitioners are aggrieved because the challenged requirements contained in the Permits are unnecessary, inconsistent with law, infeasible to consistently comply with, and may place the District in enforcement jeopardy from civil and even criminal enforcement actions or from third party citizen suits under the CWA. If left to stand, the Permits may become models for future

permit decisions affecting wastewater treatment plants throughout the state and render Petitioners' efforts to work with the State Board on a clear and consistent statewide plan for addressing toxicity a nullity. The Petitioners are further aggrieved because many of the effluent limits and requirements were imposed without adequate justification and legal authority and without any demonstrated water quality or other public benefit.

6. SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH PETITIONERS REQUEST

Petitioners seek an Order by the State Board that will remove the numeric chronic toxicity limits from the Permits, and replace the limits with a narrative effluent limits and numeric triggers for further evaluation of the potential sources of toxicity (e.g., TIE/TRE), as required in WQOs 2003-0012 and 2003-0013. Whether the limits ultimately remain or not, the Petitioners also seek an Order by the State Board that will change the requirement to use the two-concentration TST method to allow use of a multi-concentration toxicity test design with consideration of concentration-response, and that will eliminate the requirement to continue routine compliance monitoring and assessment during the accelerated monitoring/TIE/TRE process.

7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL ISSUES RAISED IN THE PETITION:

A preliminary statement of points and authorities are set forth in Section 4 above. In sum, the numeric effluent limitations for chronic toxicity contained in the Permits are inconsistent with the law and otherwise inappropriate because, *inter alia*, the Regional Board failed to comply with the Porter-Cologne Water Quality Control Act (Cal. Water Code §§13000 *et seq.*) and its implementing regulations; failed to act in a manner consistent with the requirements of the APA, the SIP, the Basin Plan; the CWA and its implementing regulations; and precedential State Board orders, including one directly related to the Whittier Narrows permit; failed to include findings supporting the provisions of the Permits; and included findings not supported by evidence.

8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE REGIONAL BOARD AND THE DISCHARGER:

A true and correct copy of this Petition was mailed by First Class Mail on December 8,

2014 to the Regional Board at the following address:

Mr. Samuel Unger, Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013

One of the Petitioners in this case is the Discharger; therefore, a Petition was not separately sent to the Discharger.

9. A STATEMENT THAT THE SUBSTANTIVE ISSUES OR OBJECTIONS RAISED IN THE PETITION WERE RAISED BEFORE THE REGIONAL BOARD, OR WERE UNABLE TO BE RAISED:

The substantive and legal issues raised in this petition have been presented to the Regional Board before the Regional Board acted to adopt the Permits, or relate to issues raised at the adoption hearing. The District, CASA, SCAP, and BACWA submitted extensive written comments to the Regional Board, and the District provided supplemental comments during in-person meetings with Regional Board staff. Exhibit C, ¶ 5. Representatives from the District, SCAP and CASA also appeared and provided testimony at the adoption hearing on November 6, 2014. *Id.*

10. PETITIONERS' REQUEST FOR HEARING:

For the reasons set forth above, the Petitioners request that the State Board conduct a hearing to consider this Petition in accordance with 23 C.C.R. sections 2052(c) and 2067.

11. DISTRICTS' REQUEST FOR STAY

Because of the very real possibility of harm from the imposition of numeric effluent limitations for chronic toxicity contained in the Permits, the District include a request for stay of several provisions in the Permits before the effective date of the Permits on January 1, 2015. The District specifically requests that the State Board immediately provide notice in accordance with 23 C.C.R. section 2053(b) so that a stay may be granted on an expedited basis before the effective date of the Permits and so that the District can avoid additional accelerated monitoring and TIE/TRE implementation costs associated with increased false positive indications of toxicity, due to the

inappropriate use of the non-promulgated two-concentration TST method (while the false positive error rate of the two-concentration TST method has not been established, it is expected to be significantly higher than the promulgated 5-concentration toxicity test using the NOEC or EC/IC25 statistical test)[38]), and avoid the imposition of discretionary administrative civil or criminal penalties and third party lawsuits for chronic toxicity effluent limit violations pending administrative review of the Petitioners' Petition for Review.

A. PROVISIONS THE DISTRICT IS REQUESTING BE STAYED PENDING A DECISION ON THE PETITION FOR REVIEW

The District requests the State Board, either on its own motion or in accordance with Water Code sections 13320 and 13321 and 23 C.C.R. section 2053(a), issue a stay of the following contested provisions of the Permits:

POMONA PERMIT, ORDER R4-2014-0212:

- The final numeric effluent limitations for Chronic Toxicity contained in Permit Provision IV.A.1.a., Table 4 at pg. 7 and footnotes 10-12. The Permit prescribes a Monthly Median Effluent Limitation ("MMEL") of "Pass" and a Maximum Daily Effluent Limitation ("MDEL") of "Pass or %Effect <50."
- The requirements to use the two-concentration TST method to implement those limits and determine compliance, including Provision VII.J. Compliance Determination at pgs. 26-27.
- Effluent monitoring requirements for chronic toxicity utilizing the two-concentration TST method contained in Table E-3, Effluent Monitoring on pg. E-9 and footnote 11; Quality Assurance and Additional Requirements related to chronic toxicity in Section V.A.5 at pgs. E-12 and E-13; Accelerated Monitoring in Section V.A.7 at pgs. E-14 and E-15; TRE Process in Section V.A.8 at pgs. E-15 and E-16; Reporting at Section V.A.9 at pg. E-16.
- Receiving water monitoring using the two-concentration TST method at pg. E-18, Section VIII.A.1. Table E-5a and footnote 30.
- Continued compliance monitoring and assessment during accelerated testing and TRE implementation, including Provision VII.J. Compliance Determination at pgs. 26-27, Accelerated Monitoring in Section V.A.7 at pgs. E-14 and E-15; and TRE Process in Section V.A.8 at pg. E-15.

WHITTIER NARROWS PERMIT, ORDER R4-2014-0213:

- The final numeric effluent limitations for Chronic Toxicity and the requirement to use the two-concentration Test of Significant Toxicity to implement those

[38] *See* Exhibit C at ¶ 8.

limits. (Permit Provision IV.A.1.a., Table 4 at pg. 7 and footnotes 3-5, and Provision IV.B.1.a., Table 5 at pg. 9 and footnotes 3-5.) The Permit prescribes a Monthly Median Effluent Limitation ("MMEL") of "Pass" and a Maximum Daily Effluent Limitation ("MDEL") of "Pass or %Effect <50."

- The requirements to use the two-concentration TST method to implement those limits and determine compliance, including Provision VII.J. Compliance Determination.
- Effluent monitoring requirements for chronic toxicity utilizing the two-concentration TST method contained in Table E-3, Effluent Monitoring on pg. E-10 and footnote 17; Quality Assurance and Additional Requirements related to chronic toxicity in Section V.A.5 at pgs. E-14 and E-15; Accelerated Monitoring in Section V.A.7 at pg. E-15; TRE Process in Section V.A.8 at pg. E-16; Reporting at Section V.A.9 at pg. E-17.
- Receiving water monitoring using the two-concentration TST method at pg. E-18, Section VIII.A.1. Table E-5a and footnote 22.
- Continued compliance monitoring and assessment during accelerated testing and TRE implementation, including Provision VII.J. Compliance Determination at pgs. 26-27, Accelerated Monitoring in Section V.A.7 at pg. E-15; and TRE Process in Section V.A.8 at pg. E-16.

B. THE STATE BOARD HAS THE DUTY TO GRANT A STAY OF PROVISIONS IN THE PERMIT UPON THE SHOWING OF HARM TO THE DISTRICT, A LACK OF HARM TO THE PUBLIC, AND SUBSTANTIAL QUESTIONS OF LAW OR FACT.

Pursuant to State Board regulations, the State Board has the duty to issue a stay of provisions contained in the Permits if the District can "allege facts and produce proof of (1) substantial harm to the District or to the public interest if a stay is not granted; (2) a lack of substantial harm to other interested persons and to the public interest if a stay is granted; and (3) substantial questions of fact or law regarding the disputed action."[39] *See* 23 C.C.R. §2053(a)(1)-(3); *see accord* Water Code §13321.

As discussed herein, the District's stay request meets the regulatory criteria set forth in 23 C.C.R. §2053(a), which mandates that the requested stay be granted by the State Board upon the City making the required showings. The District therefore requests that the State Board issue the requisite public notice so that it may grant the District's stay request on an expedited basis before

[39] Importantly, had the USEPA taken over and issued the Permits instead of the Regional Board, issuance of a stay would be *mandatory*. *See* 40 C.F.R. §124.16. California law must be construed to assure consistency with the requirements of the CWA related to NPDES Permits, under which the above regulation was promulgated. *See* Water Code §13372; 23 C.C.R. §2235.2.

the effective date of the permit on January 1, 2015, so that the District can avoid needlessly expending limited public resources on additional monitoring requirements triggered by additional false positive indications of toxicity, and avert detrimental discretionary civil and criminal enforcement of any violations of the numeric chronic toxicity effluent limitations in the Permits pending administrative review. *See* 23 C.C.R. §2053.

1) **The District Satisfies the Regulatory Requirements Applicable To Stay Requests.**

a) Substantial Harm to the District or to the Public Interest Will Occur if a Stay Is Not Granted.

The District and the public interest will incur substantial harm if the requested stay is not granted by the State Board pending administrative review of the District's Petition for Review. In accordance with 23 C.C.R. section 2053(a), the following discussion alleges facts and provides evidence in support of the District's stay request.

i) Substantial Harm to the District Will Occur If a Stay is Not Granted for the Final Effluent Limitations For Chronic Toxicity.

As previously discussed herein, when the Regional Board adopted the Permits, the Regional Board failed to comply with precedential orders regarding the appropriate limitations for chronic toxicity, even though the Regional Board was aware of these orders. The Regional Board's failure to include a *narrative* effluent limit for chronic toxicity within the Permits not only ignored State Board precedent, but also ignored the Regional Board's prior practice of basing effluent limitations on chronic toxicity units (i.e., TUc) and implemented as a trigger instead of as numeric effluent limitations. This failure by the Regional Board to follow applicable precedent and prior practice places the District in immediate jeopardy of being in violation of the final effluent limitations for chronic toxicity set forth in the Permits on January 1, 2015, the effective date of the Permits. Exhibit C at ¶ 6.

Notwithstanding the District's objection in its comments and testimony regarding the imposition of the final numeric effluent limitations for chronic toxicity, the Regional Board imposed the limits anyway. It is unclear why the District is being burdened with these newly

imposed, final effluent limitations since the WRPs have a very high level of treatment including nitrification/denitrification, and very little likelihood of exceeding the current toxicity trigger of 1 TUc as a monthly median at both plants. *See* Exhibit C at ¶ 18; Permit Hearing Presentation of the Regional Board (November 6, 2014) at slide 9 (Only a single incidence in 5 years of a monthly median trigger exceedance at the Pomona WRP). With the new "Pass" limits, implemented using the two-concentration TST method, which is not approved under 40 C.F.R. Part 136 as a standard method, the District is likely to be in violation of its permit even when there is no real toxicity in the effluent due to a single test false positive error rate estimated to be 14%. Exhibit C at ¶ 8. This is an unacceptable situation.

The Regional Board's action will unnecessarily result in the District being forced to undertake new accelerated testing and TIE/TRE analyses and to likely be out of compliance with the final effluent limitations for chronic toxicity set forth in the Permits and subject to citizen suits and discretionary penalties because the District is expected to incur, on average, two monthly median exceedances of the numeric chronic numeric effluent limits at each WRP in the Permits' term even if the recycled water is not truly "toxic." Exhibit C at ¶ 8; *see City of Manteca v. State Water Board*, Sacramento Superior Court, Case No. 34-2010-800000492-CU-WM-GDS, Ruling on Submitted Matter at pg. 11, line 13 ("Non-compliance is not a credible alternative.") This mischaracterization of recycled water as toxic also harms the District and the public by making recycled water less marketable and less likely to be used to replace potable water (even though potable water would fail these same tests an equivalent number of times). Discouraging recycling in a time of severe statewide drought is extremely harmful. Exhibit C at ¶ 9. Requiring new monitoring and reporting tasks that may ultimately be overturned, or the commencement of enforcement actions based on such requirements, is a misdirection of scarce public resources, and should be avoided in order to prevent substantial harm to the District. *In the Matter of the Petition of International Business Machines,* State Board WQO 88-15 at pg. 4 (State Board agreed that IBM could be substantially prejudiced by the preparation of reports and plans that might not be affirmed on appeal); *see also City of Manteca* ruling at pg. 12, lines 14-19 ("Implicit in the State Board's decision is the State Board's understanding of the potentially unnecessary effort and

expenditure of costs related to a Regional Board requirement that could potentially be reversed by the State Board.").

For the foregoing reasons, the District requests that the State Board stay the final numeric effluent limitations for chronic toxicity and related provisions set forth in the Permits. During the period in which the requested stay is in effect, the District would be willing to comply with the narrative toxicity limit in the current permits, using 1 TUc as a monthly median chronic toxicity trigger for accelerated monitoring and potentially a TIE/TRE. Exhibit C at ¶ 10.

ii) Substantial Harm Will be Incurred by the Public if a Stay is Not Granted.

The general public will also be substantially harmed if the State Board does not grant the District's stay request. If the requirements contained in the Permits are not immediately stayed, residents and ratepayers in the District's service area, already under substantial strain from the recent recession and other rising utility costs, will be required to pay for unnecessary costs of additional accelerated monitoring and for TIE/TREs that may not be needed, due to more frequent instances of false positives. *See* Exhibit C at ¶ 11.

The forced implementation of costly new requirements that may ultimately prove unnecessary, or the commencement of enforcement actions based on such requirements, is a misdirection of scarce public resources, and should be avoided in order to prevent substantial harm to the public (as well as the District). *Id.*; *see also In the Matter of the Petition of IBM,* State Water Board Order No. WQ 88-15 at pg. 4. The adoption of effluent limitations in violation of federal and state law causes substantial harm to the public who have a vested interest in the government complying with its own laws and regulations. Exhibit C at ¶ 12. Finally, as stated above, the mischaracterization of recycled water as "toxic" also harms the public by decreasing the acceptance and use of recycled water in a time of drought. Exhibit C at ¶ 9.

b) Other Interested Parties and the Public Will Not Incur Substantial Harm If A Stay is Granted.

Other interested persons and the public will not suffer substantial harm if a stay of the requested requirements is granted by the State Board. Granting a stay of the requested provisions

will not eliminate the requirements to monitor for chronic toxicity or to report those results. *See* Exhibit C at ¶ 13. In addition, the issuance of the stay will not eliminate or alter any other requirements set forth in the Permits besides those specifically stayed. *Id.* Instead, the issuance of a stay will simply prevent unwarranted compliance jeopardy and unnecessary costs associated with the current requirements while these requirements are being administratively reviewed. Exhibit C at ¶ 14. The requested stay will also temporarily suspend administrative, and civil and potential criminal liability for non-compliance with requirements that the District may not consistently meet, and which may ultimately be removed from the Permits or modified. *Id.* Thus, issuance of a stay by the State Board simply suspends the possible unnecessary imposition of onerous fines and penalties that would be passed on to the public, and susceptibility to third-party lawsuits pending review of the requested provisions, which may ultimately be removed from the Permits. Exhibit C at ¶ 15. Given that permits throughout the State have been written without these requirements for over 11 years, there is little to no chance of harm in granting a stay of the appealed provisions. *Id.*

In addition, if a stay were issued, the Regional Board's regulatory oversight of the District's WRPs will remain unchanged. *See* Exhibit C at ¶ 16. All other effluent limitations, monitoring and reporting requirements, and substantive provisions contained in the Permits will remain in effect, and fully enforceable by the Regional Board. *Id.* Specifically, the Permits will continue to require the District to operate its facilities in the same manner as before the stay was issued, and will continue to require the District to monitor and submit detailed reports regarding the facility's performance and compliance with the limitations in the Permits. *Id.* Thus, during the period of the requested stay, the District will continue its existing, protective level of treatment and recycled water production, and will continue to implement source control efforts and pretreatment requirements. *See* Exhibit C at ¶ 17. Finally, the issuance of a stay will benefit the public by providing orderly resolution of the issues raised by the Petitioners' Petition for Review. *Id.*

c) Substantial Questions of Fact or Law Exist.

In addition to the facts and laws discussed herein, the District and the other Petitioners raised numerous substantial questions of fact and law regarding the numeric effluent limitations for chronic toxicity contained in the Permits, including whether the challenged limits were legal and

necessary. *See* Exhibit C at ¶ 19. One of these issues is the fact that where the pollutant causing rare and sporadic indications toxicity is unknown, proactive measures to address such incidences before they are observed are not possible, nor are they necessary to protect beneficial uses. *Id.* at ¶ 18. The inability to ever come into or maintain consistent compliance with the numeric effluent limitations represents an important and substantial question of fact and law. Exhibit C at ¶ 19.

The fact that serious questions of fact and law exist weighs heavily in favor of granting a stay and maintaining the status quo until such disputes can be resolved. *See Mason v. Superior Court*, 23 Cal.App.3d 913, 916 (1972) ("the purpose of the various stays which are set forth in the code is maintenance of the status quo").

d) Conclusion

Because the District alleged facts and provided evidence of the substantial harm to the District and the public interest while the District awaits a final resolution of its administrative appeal, the lack of substantial harm to other interested persons and to the public interest if a stay is granted, and the substantial questions of fact and law that exist, the State Board should immediately act to stay the requested provisions of the Permits pending administrative review of the Petitioners' Petition for Review.

Respectfully Submitted,

DATED: December 8, 2014

DOWNEY BRAND LLP

By: _____

MELISSA A. THORME
Attorneys for Petitioners
COUNTY SANITATION DISTRICT NO. 2
OF LOS ANGELES COUNTY,
CASA, SCAP and BACWA

DOWNEY BRAND LLP

EXHIBIT A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

320 West 4th Street, Suite 200, Los Angeles, California 90013
(213) 576-6600 • Fax (213) 576-6640
http://www.waterboards.ca.gov/losangeles/

ORDER R4-2014-0213
NPDES NO. CA0053716

WASTE DISCHARGE REQUIREMENTS FOR THE JOINT OUTFALL SYSTEM WHITTIER NARROWS WATER RECLAMATION PLANT

The following entity is subject to waste discharge requirements (WDRs) set forth in this Order:

Table 1. Discharger Information

Discharger	Joint Outfall System[1] (JOS, Permittee or Discharger)
Name of Facility	Whittier Narrows Water Reclamation Plant (Whittier Narrows WRP or Facility) and its associated wastewater collection system and outfalls
Facility Address	301 North Rosemead Boulevard
	El Monte, CA 91733
	Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Tertiary treated wastewater	34.02278°	-118.05528°	San Gabriel River
002	Tertiary treated wastewater	34.02750°	-118.05833°	Zone 1 Ditch
003	Tertiary treated wastewater	34.02889°	-118.06111°	Test Basin 1
004	Tertiary treated wastewater	34.03278°	-118.07111°	Rio Hondo

Table 3. Administrative Information

This Order was adopted on:	November 6, 2014
This Order shall become effective on:	January 1, 2015
This Order shall expire on:	December 31, 2019
The Permittee shall file a Report of Waste Discharge as an application for renewal of waste discharge requirements in accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System permit in accordance with Title 40, part 122.21(d) of the Code of Federal regulations no later than:	180 days prior to the Order expiration date
The United States Environmental Protection Agency and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Major

[1] Ownership and operation of the Joint Outfall System is proportionally shared among the signatory parties to the amended Joint Outfall Agreement effective July 1, 1995. These parties include County Sanitation Districts of Los Angeles County Nos. 1, 2, 3, 5, 8, 15, 16, 17, 18, 19, 21, 22, 23, 28, 29, and 34, and South Bay Cities Sanitation District of Los Angeles County.

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on **the date indicated above**.

Samuel Unger

Samuel Unger, P.E., Executive Officer

ADOPTED: 11/06/2014

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I. FACILITY INFORMATION

Information describing the Whittier Narrows Water Reclamation Plant (Whittier Narrows WRP or Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board), finds:

A. **Legal Authorities.** This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (CWC; commencing with section 13260).This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the United States Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the CWC (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit for point source discharges from this facility to surface waters.

B. **Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G and H are also incorporated into this Order.

C. **Notification of Interested Parties.** The Regional Water Board has notified the Permittee and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.

D. **Provisions and Requirements Implementing State Law.** Some of the provisions/requirements in this Order and the MRP are included to implement state law only. These provisions/requirements are not mandated or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies available for NPDES violations.

E. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order R4-2009-0077 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the CWC (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Permittee is authorized to discharge from the identified facility and outfalls into waters of the United States and shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for past violations of the previous Order.

III. DISCHARGE PROHIBITIONS

A. Discharge of treated wastewater at a location different from that described in this Order is prohibited.

B. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision I.G. of Attachment D, Standard Provisions.

C. The monthly average effluent dry weather discharge flow rate from the facility shall not exceed the 15.0 million gallons per day (mgd) design capacity.

D. The Permittee shall not cause degradation of any water supply, except as consistent with State Water Board Resolution No. 68-16.

E. The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in section 13050, subdivisions (l) and (m), of the California Water Code.

F. The discharge of any substances in concentrations toxic to animals or plants is prohibited.

G. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001 (San Gabriel River)

a. The Permittee shall maintain compliance with the following effluent limitations at Discharge Point 001 into San Gabriel River, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP), Attachment E:

Table 4. Effluent Limitations – San Gabriel River

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand ($BOD_5$20°C)	mg/L	20	30	45		
	lbs/day[1]	2,500	3,800	5,600		
Total Suspended Solids (TSS)	mg/L	15	40	45		
	lbs/day[1]	1,900	5,000	5,600		
pH	standard units	--	--	--	6.5	8.5
Removal Efficiency for BOD and TSS	%	85	--	--		
Oil and Grease	mg/L	10	--	15		
	lbs/day[1]	1,300	--	1,900		
Settleable Solids	ml/L	0.1	--	0.3		
Total Residual Chlorine	mg/L	--	--	0.1		
	lbs/day[1]	--	--	13		

[1] The mass emission rates are based on the plant design flow rate of 15.0 mgd, and are calculated as follows: Flow (mgd) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total Dissolved Solids	mg/L	750	--	--		
	lbs/day[1]	94,000	--	--		
Sulfate	mg/L	300	--	--		
	lbs/day[1]	38,000	--	--		
Chloride	mg/L	180	--	--		
	lbs/day[1]	23,000	--	--		
Boron	mg/L	1.0	--	--		
	lbs/day[1]	130	--	--		
MBAS	mg/L	0.5	--	--		
	lbs/day[1]	63	--	--		
Ammonia Nitrogen (ELS Present, April 1 – September 30)	mg/L	3.4	--	9.0		
	lbs/day[1]	425	--	1,126		
Ammonia Nitrogen (ELS Absent, October 1 – March 31)	mg/L	4.4	--	11.6		
	lbs/day[1]	550	--	1,451		
Nitrate + Nitrite (as N)	mg/L	8	--	--		
	lbs/day[1]	1,000	--	--		
Nitrate (as N)	mg/L	8	--	--		
	lbs/day[1]	1,000	--	--		
Nitrite (as N)	mg/L	1.0	--	--		
	lbs/day[1]	130	--	--		
Copper	µg/L	16.8	--	21.7		
	lbs/day[1]	2.1	--	2.7		
Lead (wet-weather)[2]	µg/L	--	--	166		
	lbs/day[1]	--	--	21		
2,3,7,8-TCDD (Dioxin)	µg/L	1.4E-08	--	2.8E-08		
	lbs/day[1]	1.8E-09	--	3.5E-09		
Benzo(k)Fluoranthene	µg/L	0.049	--	0.098		
	lbs/day[1]	0.006	--	0.012		
	µg/L	0.049	--	0.098		

[2] Wet-weather effluent limitations apply when the maximum daily flow measured at the San Gabriel River, United States Geological Survey gauging station 11087020 is equal to or greater than 260 cubic feet per second.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Dibenzo(a,h)Anthracene	lbs/day[1]	0.006	--	0.012		
Indeno(1,2,3-cd)Pyrene	µg/L	0.049	--	0.098		
	lbs/day[1]	0.006	--	0.012		
Chronic Toxicity[3,4]	Pass or Fail, % Effect (Test of Significant Toxicity, (TST))	Pass[5]	--	Pass or % Effect <50		

B. Effluent Limitations – Discharge Points 002, 003, and 004

1. Final Effluent Limitations – Discharge Points 002, 003, and 004 (Rio Hondo)

a. The Permittee shall maintain compliance with the following effluent limitations at Discharge Points 002, 003, and 004 into Rio Hondo, thence to the Los Angeles River, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP), Attachment E:

Table 5. Effluent Limitations – Rio Hondo

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand ($BOD_5$20°C)	mg/L	20	30	45		
	lbs/day[1]	2,500	3,800	5,600		
Total Suspended Solids (TSS)	mg/L	15	40	45		
	lbs/day[1]	1,900	5,000	5,600		
pH	standard units	--	--	--	6.5	8.5

[3] The median monthly effluent limitation (MMEL) shall be reported as "Pass" or "Fail". The maximum daily effluent limitation (MDEL) shall be reported as "Pass" or "Fail" and "% Effect". The MMEL for chronic toxicity shall only apply when there is a discharge more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests are required when one toxicity test results in "Fail".

[4] A numeric WQBEL is established because effluent data showed that there was reasonable potential for the effluent to cause or contribute to an exceedance of the chronic toxicity water quality objective. The Chronic Toxicity final effluent limitation is protective of both the numeric acute toxicity and the narrative toxicity Basin Plan water quality objectives. This final effluent limitation will be implemented using current USEPA guidance in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June /2010)* and *EPA Regions 8, 9, and 10 Toxicity Training Tool (January 2010), http://www2.epa.gov/region8/epa-regions-8-9-and-10-toxicity-training-tool-january-2010*.

[5] This is a Median Monthly Effluent Limitation.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Removal Efficiency for BOD and TSS	%	85	--	--		
Oil and Grease	mg/L	10	--	15		
	lbs/day[1]	1,300	--	1,900		
Settleable Solids	ml/L	0.1	--	0.3		
Total Residual Chlorine	mg/L	--	--	0.1		
	lbs/day[1]	--	--	13		
Total Dissolved Solids	mg/L	750	--	--		
	lbs/day[1]	94,000	--	--		
Sulfate	mg/L	300	--	--		
	lbs/day[1]	38,000	--	--		
Chloride	mg/L	180	--	--		
	lbs/day[1]	23,000	--	--		
MBAS	mg/L	0.5	--	--		
	lbs/day[1]	63	--	--		
Ammonia Nitrogen	mg/L	3.9	--	10.1		
	lbs/day[1]	488	--	1,264		
Nitrate + Nitrite (as N)	mg/L	8	--	--		
	lbs/day[1]	1,000	--	--		
Nitrate (as N)	mg/L	8	--	--		
	lbs/day[1]	1,000	--	--		
Nitrite (as N)	mg/L	1.0	--	--		
	lbs/day[1]	130	--	--		
Cadmium (wet-weather)[6]	µg/L	1.1	--	3.5		
	lbs/day[1]	0.14	--	0.44		
Copper	µg/L	13	--	16.8		
	lbs/day[1]	1.6	--	2.1		
Lead (wet-weather)[6]	µg/L	--	--	62		
	lbs/day[1]	--	--	7.8		
Mercury	µg/L	0.051	--	0.095		
	lbs/day[1]	0.0064	--	0.012		

[6] Wet-weather effluent limitations apply when the maximum daily flow measured at the Los Angeles River Wardlow gauging station is equal to or greater than 500 cubic feet per second.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Zinc (wet-weather)[6]	µg/L	114	--	159		
	lbs/day[1]	14.3	--	20		
2,3,7,8-TCDD (Dioxin)	µg/L	1.4E-08	--	2.8E-08		
	lbs/day[1]	1.8E-09	--	3.5E-09		
Benzo(k)Fluoranthene	µg/L	0.049	--	0.098		
	lbs/day[1]	0.006	--	0.012		
Dibenzo(a,h)Anthracene	µg/L	0.049	--	0.098		
	lbs/day[1]	0.006	--	0.012		
Indeno(1,2,3-cd)Pyrene	µg/L	0.049	--	0.098		
	lbs/day[1]	0.006	--	0.012		
Chronic Toxicity[3, 4]	Pass or Fail, % Effect (TST)	Pass[5]	--	Pass or % Effect <50		

C. Other Effluent Limitations Applicable to Discharge Points 001, 002, 003, and 004

a. **Percent Removal:** The average monthly percent removal of BOD 5-day 20°C and TSS shall not be less than 85 percent.

b. The temperature of wastes discharged shall not exceed 86°F except as a result of external ambient temperature.

c. The radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, chapter 15, article 5, sections 64442 and 64443, of the California Code of Regulations (CCR), or subsequent revisions.

d. The wastes discharged to water courses shall at all times be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if: (1) the median number of total coliform bacteria in the disinfected effluent does not exceed a 7-day median of 2.2 Most Probable Number (MPN) or Colony Forming Unit (CFU) per 100 milliliters utilizing the bacteriological results of the last seven (7) days for which an analysis has been completed, (2) the number of total coliform bacteria does not exceed 23 MPN or CFU per 100 milliliters in more than one sample within any 30-day period, and (3) no sample shall exceed 240 MPN or CFU of total coliform bacteria per 100 milliliters. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and disinfection processes.

e. For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the treated wastewater does not exceed any of the following: (a) an average of 2 Nephelometric turbidity units (NTUs) within a 24-hour period; (b) 5 NTUs more than 5 percent of the time (72 minutes) within a 24-hour period; and (c) 10 NTU at any time.

2. Interim Effluent Limitations – Not Applicable

D. Land Discharge Specifications – Not Applicable

E. Recycling Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives (WQOs) contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in San Gabriel River and Rio Hondo:

1. For waters designated with a warm freshwater habitat (WARM) beneficial use, the temperature of the receiving water at any time or place and within any given 24-hour period shall not be altered by more than 5°F above the natural temperature and shall not be raised above 86°F due to the discharge of effluent at the receiving water station located downstream of the discharge. Natural conditions shall be determined on a case-by-case basis.

   If the receiving water temperature, downstream of the discharge, exceeds 86°F as a result of the following:

   a. High temperature in the ambient air; or,

   b. High temperature in the receiving water upstream of the discharge,

   then the exceedance shall not be considered a violation.

2. The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of wastes discharged. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of wastes discharged. Natural conditions shall be determined on a case-by-case basis.

3. The dissolved oxygen in the receiving water shall not be depressed below 5 mg/L as a result of the wastes discharged.

4. The total residual chlorine shall not exceed 0.1 mg/L in the receiving waters and shall not persist in the receiving water at any concentration that causes impairment of beneficial uses as a result of the wastes discharged.

5. The Escherichia coli (E. coli) concentration in the receiving water shall not exceed the following, as a result of wastes discharged:

   a. Geometric Mean Limits

      i. E. coli density shall not exceed 126/100 mL.

   b. Single Sample Limits

      i. E. coli density shall not exceed 235/100 mL.

6. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in natural turbidity attributable to controllable water quality factors shall not exceed the following limits, as a result of wastes discharged:

   a. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%, and

   b. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.

7. The wastes discharged shall not produce concentrations of substances in the receiving water that are toxic to or cause detrimental physiological responses in human, animal, or aquatic life.

8. The wastes discharged shall not cause concentrations of contaminants to occur at levels that are harmful to human health in waters which are existing or potential sources of drinking water.
9. The concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses as a result of the wastes discharged.
10. The wastes discharged shall not contain substances that result in increases in BOD, which adversely affect the beneficial uses of the receiving waters.
11. Waters discharged shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
12. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions as a result of waters discharged.
13. The wastes discharged shall not cause the receiving waters to contain any substance in concentrations that adversely affect any designated beneficial use.
14. The wastes discharged shall not alter the natural taste, odor, or color of fish, shellfish, or other surface water resources used for human consumption.
15. The wastes discharged shall not result in problems due to breeding of mosquitoes, gnats, black flies, midges, or other pests.
16. The wastes discharged shall not result in visible floating particulates, foams, or oil and grease in the receiving waters.
17. The wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; or cause aesthetically undesirable discoloration of the receiving waters.
18. The wastes discharged shall not contain any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses of the receiving waters. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life as a result of the wastes discharged.
19. Chronic Toxicity Narrative Receiving Water Quality Objective
    a. There shall be no chronic toxicity in ambient waters as a result of wastes discharged.
    b. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.
20. The wastes discharged shall not cause the ammonia water quality objective in the Basin Plan to be exceeded in the receiving waters. Compliance with the ammonia water quality objectives shall be determined by comparing the receiving water ammonia concentration to the ammonia water quality objective in the Basin Plan. The ammonia water quality objective can also be calculated using the pH and temperature of the receiving water at the time of collection of the ammonia sample.

B. Groundwater Limitations

1. The discharge shall not cause the underlying groundwater to be degraded except as consistent with State Board Resolution No. 68-16, exceed WQOs, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

VI. PROVISIONS

A. Standard Provisions

1. The Permittee shall comply with all Standard Provisions included in Attachment D.
2. **Regional Water Board Standard Provisions**. The Permittee shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
   a. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by section 13050 of the CWC.
   b. Odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system due to improper operation of facilities, as determined by the Regional Water Board, are prohibited.
   c. All facilities used for collection, transport, treatment, or disposal of wastes shall be adequately protected against damage resulting from overflow, washout, or inundation from a storm or flood having a recurrence interval of once in 100 years.
   d. Collection, treatment, and disposal systems shall be operated in a manner that precludes or impedes public contact with wastewater.
   e. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer of the Regional Water Board.
   f. The provisions of this order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
   g. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the CWA, related to oil and hazardous substances liability.
   h. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities or penalties to which the Permittee is or may be subject to under section 311 of the CWA, related to oil and hazardous substances liability.
   i. Discharge of wastes to any point other than specifically described in this Order is prohibited.
   j. The Permittee shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the federal CWA and amendments thereto.
   k. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility; and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
   l. A copy of these waste discharge specifications shall be maintained at the discharge Facility so as to be available at all times to operating personnel.

m. If there is any storage of hazardous or toxic materials or hydrocarbons at this Facility and if the Facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

n. The Permittee shall file with the Regional Water Board a report of waste discharge at least 120 days before making any proposed change in the character, location or volume of the discharge.

o. In the event of any change in name, ownership, or control of these waste disposal facilities, the Permittee shall notify the Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board, 30 days prior to taking effect.

p. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this Order.

q. The Permittee shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

   i. Name and general composition of the chemical,

   ii. Frequency of use,

   iii. Quantities to be used,

   iv. Proposed discharge concentrations, and

   v. USEPA registration number, if applicable.

r. Violation of any of the provisions of this Order may subject the Permittee to any of the penalties described herein or in Attachment D of this Order, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

s. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this Facility, may subject the Permittee to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Permittee to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

t. The CWC provides that any person who violates a waste discharge requirement or a provision of the CWC is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation, or some combination thereof, depending on the violation, or upon the combination of violations.

u. CWC section 13385(h)(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars ($3,000) for each serious violation. Pursuant to CWC section 13385(h)(2), a "serious violation" is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR part 123.45

specifies the Group I and II pollutants. Pursuant to CWC section 13385.1(a)(1), a "serious violation" is also defined as "a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations."

v. CWC section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars ($3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.

w. Pursuant to CWC section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, "effluent limitation" means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim, and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.

x. CWC section 13387(e) provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this order, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained in this order shall be punished by a fine of not more than twenty-five thousand dollars ($25,000), imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code for 16, 20, or 24 months, or by both that fine and imprisonment. For a subsequent conviction, such a person shall be punished by a fine of not more than twenty-five thousand dollars ($25,000) per day of violation, by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code for two, three, or four years, or by both that fine and imprisonment.

y. In the event the Permittee does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Permittee shall notify the Chief of the Watershed Regulatory Section at the Regional Water Board by telephone (213) 576-6616 or by fax at (213) 576-6660 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing to the Regional Water Board within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. The written notification shall also be submitted via email with reference to CI-2848 to losangeles@waterboards.ca.gov. Other noncompliance requires written notification as above at the time of the normal monitoring report.

z. The Permittee shall investigate the feasibility of recycling, conservation, and/or alternative disposal methods of wastewater (such as groundwater injection), and/or use of storm water and dry-weather urban runoff. The Permittee submitted a feasibility study on January 3, 2014. The Permittee shall submit an update to this

feasibility study as part of the submittal of the Report of Waste Discharge (ROWD) for the next permit renewal.

B. Monitoring and Reporting Program (MRP) Requirements

The Permittee shall comply with the MRP, and future revisions thereto, in Attachment E.

C. Special Provisions

1. Reopener Provisions

a. This Order may be modified, revoked and reissued, or terminated for cause, including, but not limited to:

i. Violation of any term or condition contained in this Order;

ii. Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts; or

iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Permittee for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

b. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity testing, monitoring of internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

c. This Order may be modified, in accordance with the provisions set forth in title 40 of the Code of Federal Regulations (40 CFR) parts 122 and 124 to include requirements for the implementation of a watershed protection management approach.

d. The Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order have or will have a reasonable potential to cause, or contribute to adverse impacts on water quality or beneficial uses of the receiving waters.

e. This Order may also be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Permittee for an Order modification, revocation and issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

f. This Order may be modified, in accordance with the provisions set forth in 40 CFR parts 122 to 124, to include new minimum levels (MLs).

g. If an applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Water Board

may institute proceedings under these regulations to modify or revoke and reissue the Orders to conform to the toxic effluent standard or prohibition.

h. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments, thereto, the Regional Water Board will revise and modify this Order in accordance with such standards.

i. This Order may be reopened and modified, to add or revise effluent limitations as a result of future Basin Plan Amendments, such as an update of a water quality objective, or the adoption/revision of any of the San Gabriel River and Los Angeles River Watershed TMDLs.

j. This Order may be reopened and modified, to revise effluent limitations as a result of the delisting of a pollutant from the 303(d) list.

k. This Order will be reopened and modified to revise any and all of the chronic toxicity testing provisions and effluent limitations, to the extent necessary, to be consistent with any Toxicity Plan that is subsequently adopted by the State Water Board promptly after USEPA approval of such Plan.

l. This Order will be reopened and modified to the extent necessary, to be consistent with new policies, a new state-wide plan, new laws, or new regulations.

m. This Order may be reopened to modify effluent limits if copper, lead, and zinc waste load allocations are revised if the USEPA approves a revised TMDL and Implementation Plan for Metals in the San Gabriel River.

n. Upon the request of the Permittee, the Regional Water Board will review future studies conducted by the Permittee to evaluate the appropriateness of utilizing dilution credits and/or attenuation factors if they are demonstrated to be appropriate and protective of the GWR beneficial use, on a pollutant-by-pollutant basis. Following this evaluation, this Order may be reopened to modify final effluent limitations, if at the conclusion of necessary studies conducted by the Permittee, the Regional Water Board determines that dilution credits, attenuation factors, or metal translators are warranted.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

The Permittee shall prepare and submit a copy of the Permittee's initial investigation Toxicity Reduction Evaluation (TRE) workplan in accordance with Monitoring and Reporting Program section V.A.6.

b. Ammonia Site-Specific Objective (SSO) Evaluation

The Permittee shall prepare and submit an annual "Ammonia Site-Specific Objective Evaluation" report on May 15th of each year. This report will include the following:

i. Concurrent increases in hardness and sodium (measured as alkalinity) have been linked to decreases in ammonia sensitivity[7] and a relationship consistent with these findings was observed in the LA County SSO study. Therefore, on an annual basis, receiving water hardness and alkalinity will be evaluated and compared to conditions observed from 2000 through 2007. If the current year's

[7] April 2007. Arid West Water Quality Research Project Special Studies Final Report, 07-03-P-139257-0207. Relative Role of Sodium and Alkalinity vs. Hardness in Controlling Acute Ammonia Toxicity. Report prepared by Parametrix Environmental Research Lab in collaboration with GEI Consultants, Chadwick Ecological Division.

annual mean hardness and alkalinity is 25% lower than the 2000 through 2007 mean, the Discharger will initiate quarterly receiving water chronic testing using the invertebrate *Ceriodaphnia dubia* at the downstream receiving water location 100 feet below the outfall[8]. Results from this toxicity testing will be evaluated to determine if waste discharged ammonia is causing toxicity (see section (ii) below for details on this evaluation).

ii. 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.

iii. 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.

iv. Sampling observations and other available information will be evaluated every two years to determine if winter spawning fish species are present in Reach 2 of the San Gabriel River or the Rio Hondo. If winter spawning fish were observed, the Discharger will propose a plan to evaluate if significant numbers of early life-stage (ELS) fish are present during the period of October 1st to March 31st (ELS absent). This plan will identify appropriate methods for gathering additional information to determine if the Basin Plan ELS implementation provisions for the ammonia objective are protective of the species and life stages present.

c. **Treatment Plant Capacity**

The Permittee shall submit a written report to the Executive Officer of the Regional Water Board within 90 days after the "30-day (monthly) average" daily dry-weather flow equals or exceeds 75 percent of the design capacity of waste treatment and/or disposal facilities. The Permittee's senior administrative officer shall sign a letter, which transmits that report and certifies that the Permittee's policy-making body is adequately informed of the report's contents. The report shall include the following:

i. The average daily flow for the month, the date on which the peak flow occurred, the rate of that peak flow, and the total flow for the day;

ii. The best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the facilities; and,

iii. A schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

This requirement is applicable to those facilities which have not reached 75 percent of capacity as of the effective date of this Order. For those facilities that have reached 75 percent of capacity by that date but for which no such report has been

[8] 25% reduction determined using statistical power analyses of the 2000 through 2007 hardness and alkalinity data assuming a minimum annual sample size of 12.

previously submitted, such a report shall be filed within 90 days of the issuance of this Order.

d. **Special Study for Constituents of Emerging Concern (CECs)**

The Permittee has completed the minimum required two years of CEC monitoring and will not be required to conduct additional monitoring at this time.

3. **Best Management Practices and Pollution Prevention**

a. **Storm Water Pollution Prevention Plan (SWPPP) – (Not Applicable)**

b. **Spill Clean-up Contingency Plan (SCCP)**

Within 90 days of the effective date of this Order, the Permittee is required to submit a SCCP, which describes the activities and protocols to address clean-up of spills, overflows, and bypasses of untreated or partially treated wastewater from the Permittee's collection system or treatment facilities that reach water bodies, including dry channels and beach sands. At a minimum, the plan shall include sections on spill clean-up and containment measures, public notification, and monitoring. The Permittee shall review and amend the plan as appropriate after each spill from the Facility or in the service area of the Facility. The Permittee shall include a discussion in the annual summary report of any modifications to the Plan and the application of the Plan to all spills during the year.

c. **Pollutant Minimization Program (PMP)**

Reporting protocols in MRP section X.B.4 describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a reported Minimum Level (ML) and Method Detection Limit (MDL) are provided in Attachment A. These reporting protocols and definitions are used in determining the need to conduct a PMP as follows:

The Permittee shall develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL; sample results from analytical methods more sensitive than those methods required by this Order; presence of whole effluent toxicity; health advisories for fish consumption; or, results of benthic or aquatic organism tissue sampling) that a pollutant is present in the effluent above an effluent limitation and either of the following is true:

i. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the reported ML; or,

ii. The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in the MRP.

The goal of the PMP shall be to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan (PPP), if required pursuant to CWC section 13263.3(d), shall be considered to fulfill the PMP requirements.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

i. An annual review and semi-annual monitoring of potential sources of the reportable pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

ii. Quarterly monitoring for the reportable pollutant(s) in the influent to the wastewater treatment system;

iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant(s) in the effluent at or below the effluent limitation;

iv. Implementation of appropriate cost-effective control measures for the reportable pollutant(s), consistent with the control strategy; and

v. An annual status report that shall be sent to the Regional Water Board including:

(a) All PMP monitoring results for the previous year;

(b) A list of potential sources of the reportable pollutant(s);

(c) A summary of all actions undertaken pursuant to the control strategy; and

(d) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

a. Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to California Code of Regulations (CCR), title 23, division 3, chapter 26 (CWC sections 13625 – 13633).

b. The Permittee shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the Permittee shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.

c. The Permittee shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur

5. Special Provisions for Municipal Facilities (POTWs Only)

a. **Sludge Disposal Requirements (Not Applicable)**

b. **Pretreatment Requirements**

i. The Permittee has developed and implemented an approved Pretreatment Program that was submitted to the Regional Water Board. This Order requires implementation of the approved Pretreatment Program. Any violation of the Pretreatment Program will be considered a violation of this Order.

ii. In 1972, the County Sanitation Districts of Los Angeles County's (Sanitation Board) Board of Directors adopted the *Wastewater Ordinance*. The purpose of this Ordinance is to establish controls on users of the Sanitation Districts sewerage system in order to protect the environment and public health, and to provide for the maximum beneficial use of the Sanitation District's facilities. This *Wastewater Ordinance*, as amended July 1, 1998, shall supersede all previous regulations and policies of the Sanitation Districts' governing items covered in this Ordinance. Specifically, the provisions of this Ordinance shall supersede the Sanitation Districts' "Policy Governing Use of District Trunk Sewers" dated December 6, 1961, and shall amend the Sanitation Districts' "An Ordinance Regulating Sewer Construction, Sewer Use and Industrial Wastewater Discharges," dated April 1, 1972, and as amended July 1, 1975, July 1, 1980, July 1, 1983, and November 1, 1989.

iii. In 2012, there are 429 CIU permittees, 1,025 SIU permittees, and 1,640 other industrial users in the Sanitation District's Pretreatment Program.

iv. Any change to the program shall be reported to the Regional Water Board in writing and shall not become effective until approved by the Executive Officer in accordance with procedures established in 40 CFR part 403.18.

v. Applications for renewal or modification of this Order must contain information about industrial discharges to the POTW pursuant to 40 CFR part 122.21(j)(6). Pursuant to 40 CFR part 122.42(b) and provision VII.A of Attachment D, Standard Provisions, of this Order, the Permittee shall provide adequate notice of any new introduction of pollutants or substantial change in the volume or character of pollutants from industrial discharges which were not included in the permit application. Pursuant to 40 CFR part 122.44(j)(1), the Permittee shall annually identify and report, in terms of character and volume of pollutants, any Significant Industrial Users discharging to the POTW subject to Pretreatment Standards under section 307(b) of the CWA and 40 CFR part 403.

vi. The Permittee shall evaluate whether its pretreatment local limits are adequate to meet the requirements of this Order and shall submit a written technical report as required under section B.1 of Attachment H. The Whittier Narrows is part of the Joint Outfall System (JOS), consisting of the Joint Water Pollution Control Plant (JWPCP) and the upstream plants. In the reevaluation of the local limits, the Permittee shall consider the effluent limitations contained in this Order, the contributions from the upstream WRPs in the JOS, and other relevant factors due to the interconnection of the Districts' WRPs within the JOS. The Permittee shall submit to the Regional Board revised local limits, as necessary, for Regional Water Board approval based on the schedule specified in the NPDES Permit issued to the JWPCP. In addition, the Permittee shall consider collection system overflow protection from such constituents as oil and grease, etc.

vii. The Permittee shall comply with Attachment H – Pretreatment Reporting Requirements.

c. **Collection System Requirements**

i. The Permittee's collection system is part of the system that is subject to this Order. As such, the Permittee must properly operate and maintain its collection system (40 CFR part 122.41(e)). The Permittee must report any

non-compliance (40 CFR part 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 CFR part 122.41(d)). See the Order at Attachment D, subsections I.D, V.E, V.H, and I.C., and the following section of this Order.

6. Spill Reporting Requirements

a. Initial Notification

Although State and Regional Water Board staff do not have duties as first responders, this requirement is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. For certain spills, overflows and bypasses, the Permittee shall make notifications as required below:

i. In accordance with the requirements of Health and Safety Code section 5411.5, the Permittee shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but no later than two hours after becoming aware of the release.

ii. In accordance with the requirements of CWC section 13271, the Permittee shall provide notification to the California Office of Emergency Services (OES) of the release of reportable amounts of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but not later than two hours after becoming aware of the release. The CCR, Title 23, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting these releases to the OES is (800) 852-7550.

iii. The Permittee shall notify the Regional Water Board of any unauthorized release of sewage from its POTW that causes, or probably will cause, a discharge to a water of the state as soon as possible, but not later than two hours after becoming aware of the release. This initial notification does not need to be made if the Permittee has notified OES and the local health officer or the director of environmental health with jurisdiction over the affected waterbody. The phone number for reporting these releases of sewage to the Regional Water Board is (213) 576-6657. The phone numbers for after hours and weekend reporting of releases of sewage to the Regional Water Board are (213) 305-2284 and (213) 305-2253.

At a minimum, the following information shall be provided to the Regional Water Board:

(a) The location, date, and time of the release;

(b) The water body that received or will receive the discharge;

(c) An estimate of the amount of sewage or other waste released and the amount that reached a surface water at the time of notification;

(d) If ongoing, the estimated flow rate of the release at the time of the notification; and,

(e) The name, organization, phone number and email address of the reporting representative.

b. **Monitoring**

For spills, overflows and bypasses reported under section VI.C.6.a, the Permittee shall monitor as required below:

i. To define the geographical extent of the spill's impact, the Permittee shall obtain grab samples (if feasible, accessible, and safe) for all spills, overflows or bypasses of any volume that reach any waters of the state (including surface and ground waters). The Permittee shall analyze the samples for total coliform, fecal coliforms, E. coli (if fecal coliform test shows positive), enterococcus (if the spill reaches the marine waters), and relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible, and safe). This monitoring shall be done on a daily basis from the time the spill is known until the results of two consecutive sets of bacteriological monitoring indicate the return to the background level or the County Department of Public Health authorizes cessation of monitoring.

c. **Reporting**

The initial notification required under section VI.C.6.a shall be followed by:

i. As soon as possible, but not later than twenty-four hours after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, the Permittee shall submit a statement to the Regional Water Board by email at augustine.anijielo@waterboards.ca.gov . If the discharge is 1,000 gallons or more, this statement shall certify that OES has been notified of the discharge in accordance with CWC section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:

(a) Agency, NPDES No., Order No., and MRP CI No., if applicable;

(b) The location, date, and time of the discharge;

(c) The water body that received the discharge;

(d) A description of the level of treatment of the sewage or other waste discharged;

(e) An initial estimate of the amount of sewage or other waste released and the amount that reached a surface water;

(f) The OES control number and the date and time that notification of the incident was provided to OES; and,

(g) The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).

ii. A written preliminary report five working days after disclosure of the incident is required. Submission to the Regional Water Board of the California Integrated Water Quality System (CIWQS) Sanitary Sewer Overflow (SSO) event number shall satisfy this requirement. Within 30 days after submitting the preliminary report, the Permittee shall submit the final written report to this Regional Water Board. (A copy of the final written report, for a given incident, already

submitted pursuant to a statewide General WDRs for Wastewater Collection System Agencies (SSO WDR), may be submitted to the Regional Water Board to satisfy this requirement.) The written report shall document the information required in paragraph d below, monitoring results and any other information required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences. The Executive Officer for just cause can grant an extension for submittal of the final written report.

iii. The Permittee shall include a certification in the annual summary report (due according to the schedule in the MRP) that states that the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components were maintained and tested in accordance with the Permittee's preventive maintenance plan. Any deviations from or modifications to the plan shall be discussed.

d. **Records**

The Permittee shall develop and maintain a record of all spills, overflows or bypasses of raw or partially treated sewage from its collection system or treatment plant. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the annual summary report. The records shall contain:

i. The date and time of each spill, overflow, or bypass;

ii. The location of each spill, overflow, or bypass;

iii. The estimated volume of each spill, overflow, and bypass including gross volume, amount recovered and amount not recovered, monitoring results as required by section VI.C.6.b;

iv. The cause of each spill, overflow, or bypass;

v. Whether each spill, overflow, or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances;

vi. Any mitigation measures implemented;

vii. Any corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences; and,

viii. The mandatory information included in SSO online reporting for finalizing and certifying the SSO report for each spill, overflow, or bypass under the SSO WDR.

e. **Activities Coordination**

Although not required by this Order, Regional Water Board expects that the POTW's owners/operators will coordinate their compliance activities for consistency and efficiency with other entities that have responsibilities to implement: (i) this NPDES permit, including the Pretreatment Program, (ii) a MS4 NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements and (iii) the SSO WDR.

f. **Consistency with SSO WDRs**

The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 United States Code sections 1311, 1342). The State Water Board adopted *General Waste Discharge Requirements for Sanitary Sewer Systems*, (WQ Order No. 2006-0003-DWQ; SSO WDR) on May 2, 2006, to provide a consistent, statewide regulatory approach to address sanitary sewer overflows. The SSO WDR requires public agencies that own or operate sanitary sewer systems to apply for coverage under the SSO WDR, develop and implement sewer system management plans, and report all SSO to the State Water Board's online SSOs database. Regardless of the coverage obtained under the SSO WDR, the Permittee's collection system is part of the POTW that is subject to this NPDES permit. As such, pursuant to federal regulations, the Permittee must properly operate and maintain its collection system (40 CFR part 122.41 (e)), report any non-compliance (40 CFR part 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR part 122.41(d)).

The requirements contained in this Order in sections VI.C.3.b (SCCP Plan section), VI.C.4 (Construction, Operation and Maintenance Specifications section), and VI.C.6 (Spill Reporting Requirements section) are intended to be consistent with the requirements of the SSO WDR. The Regional Water Board recognizes that there may be some overlap between these NPDES permit provisions and SSO WDR requirements, related to the collection systems. The requirements of the SSO WDR are considered the minimum thresholds (see finding 11 of State Water Board Order No. 2006-0003-DWQ). To encourage efficiency, the Regional Water Board will accept the documentation prepared by the Permittees under the SSO WDR for compliance purposes as satisfying the requirements in sections VI.C.3.b, VI.C.4, and VI.C.6 provided the more stringent provisions contained in this NPDES permit are also addressed. Pursuant to SSO WDR, section D, provision 2(iii) and (iv), the provisions of this NPDES permit supercede the SSO WDR, for all purposes, including enforcement, to the extent the requirements may be deemed duplicative

7. **Compliance Schedules – Not Applicable**

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

A. General

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Permittee shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of DNQ or ND, the Permittee shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Permittee may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Permittee may be considered out of compliance for that calendar month. The Permittee will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to the AMEL.

If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for a given parameter, the Permittee will have demonstrated compliance with the AMEL for each day of that month for that parameter.

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Permittee may collect up to four additional samples within the same calendar month. All analytical results shall be reported in the monitoring report for that month. The concentration of pollutant (an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data Reduction" section above, will be used for compliance determination.

In the event of noncompliance with an AMEL, the sampling frequency for that parameter shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

D. Average Weekly Effluent Limitation (AWEL)

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Permittee will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Permittee will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week with respect to the AWEL.

A calendar week will begin on Sunday and end on Saturday. Partial calendar weeks at the end of calendar month will be carried forward to the next month in order to calculate and report a consecutive seven-day average value on Saturday.

E. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge on a calendar day exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Permittee will be considered out of compliance for that day for that parameter. If no sample (daily discharge) is taken over a calendar day, no compliance determination can be made for that day with respect to effluent violation determination, but compliance determination can be made for that day with respect to reporting violation determination.

F. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the Permittee will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

G. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the Permittee will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

H. Six-month Median Effluent Limitation

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, an alleged violation will be flagged and the Permittee will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the six-month median, the Permittee will be considered out of compliance for the 180-day period. For any 180-period during which no sample is taken, no compliance determination can be made for the six-month median effluent limitation.

I. Median Monthly Effluent Limitation (MMEL)

If the median of daily discharges over a calendar month exceeds the MMEL for a given parameter, an alleged violation will be flagged and the Permittee will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). However, an alleged violation of the MMEL will be considered one violation for the purpose of assessing State mandatory minimum penalties. If no sample (daily discharge) is taken over a calendar month, no compliance determination can be made for that month with respect to effluent violation determination, but compliance determination can be made for that month with respect to reporting violation determination.

J. Chronic Toxicity

The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this

null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response)) × 100.

The Maximum Daily Effluent Limitation (MDEL) for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST approach, results in "Fail" and the "Percent Effect" is ≥0.50.

The Median Monthly Effluent Limitation (MMEL) for chronic toxicity is exceeded and a violation will be flagged when the median of no more than three independent chronic toxicity tests, conducted within the same calendar month and analyzed using the TST approach, results in "Fail". The MMEL for chronic toxicity shall only apply when there is a discharge more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests are required when one toxicity test results in "Fail".

The chronic toxicity MDEL and MMEL are set at the IWC for the discharge (100% effluent) and expressed in units of the TST approach ("Pass" or "Fail", "Percent Effect"). All NPDES effluent compliance monitoring for the chronic toxicity MDEL and MMEL shall be reported using only the 100% effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (Ho) (see above) is not tested using a multi-concentration test design; therefore, the concentration-response relationship for the effluent and/or PMSDs shall not be used to interpret the TST result reported as the effluent compliance monitoring result. While the Permittee can opt to monitor the chronic toxicity of the effluent using five or more effluent dilutions (including 100% effluent and negative control), only the TST result will be considered for compliance purposes. The Board may consider the results of any TIE/TRE studies in an enforcement action.

K. Percent Removal

The average monthly percent removal is the removal efficiency expressed in percentage across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of pollutant concentrations (C in mg/L) of influent and effluent samples collected at about the same time using the following equation:

$$\text{Percent Removal (\%)} = [1-(C_{Effluent}/C_{Influent})] \times 100\%$$

When preferred, the Permittee may substitute mass loadings and mass emissions for the concentrations.

L. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or DNQ, the corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

M. Compliance with single constituent effluent limitations

Permittees may be considered out of compliance with the effluent limitation if the concentration of the pollutant (see section B "Multiple Sample Data Reduction" above) in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

N. Compliance with effluent limitations expressed as a sum of several constituents

Permittees are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

O. Compliance with 2,3,7,8-TCDD Equivalents

TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (MLs), and toxicity equivalency factors (TEFs) are as provided in the table below. The Permittee shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Permittee shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

$$Dioxin\ Concentration = \sum_{1}^{17}(TEQi) = \sum_{1}^{17}(Ci)(TEFi)$$

where:

Ci = individual concentration of a dioxin or furan congener

TEFi = individual TEF for a congener

MLs and TEFs

Congeners	MLs (pg/L)	TEFs
2,3,7,8-TetraCDD	10	1.0
1,2,3,7,8-PentaCDD	50	1.0
1,2,3,4,7,8-HexaCDD	50	0.1
1,2,3,6,7,8-HexaCDD	50	0.1
1,2,3,7,8,9-HexaCDD	50	0.1
1,2,3,4,6,7,8-HeptaCDD	50	0.01
OctaCDD	100	0.0001
2,3,7,8-TetraCDF	10	0.1
1,2,3,7,8-PentaCDF	50	0.05
2,3,4,7,8-PentaCDF	50	0.5
1,2,3,4,7,8-HexaCDF	50	0.1
1,2,3,6,7,8-HexaCDF	50	0.1
1,2,3,7,8,9-HexaCDF	50	0.1
2,3,4,6,7,8-HexaCDF	50	0.1
1,2,3,4,6,7,8-HeptaCDFs	50	0.01
1,2,3,4,7,8,9-HeptaCDFs	50	0.01
OctaCDF	100	0.0001

P. Mass Emission Rate

The mass emission rate shall be obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.34}{N}\sum_{i=1}^{N} Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.79}{N}\sum_{i=1}^{N} Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Qi' and 'Ci' are the flow rate (mgd) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples, which may be taken in any calendar day. If a composite sample is taken, 'Ci' is the concentration measured in the composite sample and 'Qi' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$\text{Daily concentration} = \frac{1}{Q_t}\sum_{i=1}^{N} Q_i C_i$$

in which 'N' is the number of component waste streams. 'Qi' and 'Ci' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Qt' is the total flow rate of the combined waste streams.

Q. Bacterial Standards and Analysis

1. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

   $$\text{Geometric Mean} = (C_1 \times C_2 \times \ldots \times C_3)^{1/n}$$

   where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling.

2. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for enterococcus). The detection methods used for each analysis shall be reported with the results of the analyses.

3. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR part 136, unless alternate methods have been approved by USEPA pursuant to 40 CFR part 136, or improved methods have been determined by the Executive Officer and/or USEPA.

4. Detection methods used for enterococcus shall be those presented in Table 1A of 40 CFR part 136 or in the USEPA publication EPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure or any improved method determined by the Executive Officer and/or USEPA to be appropriate.

R. Single Operational Upset (SOU)

A SOU that leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation and limits the Permittee's liability in accordance with the following conditions:

1. A SOU is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.

2. A Permittee may assert SOU to limit liability only for those violations which the Permittee submitted notice of the upset as required in Provision V.E.2(b) of Attachment D – Standard Provisions.

3. For purpose outside of CWC section 13385 subdivisions (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Permittees to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA Memorandum "Issuance of Guidance Interpreting Single Operational Upset" (September 27, 1989).

4. For purpose of CWC section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Permittees to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with CWC section 13385 (f)(2).

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)
Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)
The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)
The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative
Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Biosolids
Biosolids refer to sewage sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agricultural, silvicultural, horticultural, and land reclamation activities as specified under 40 CFR part 503.

Carcinogenic
Pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV)
CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge
Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)
DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dilution Credit
Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)
ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in U.S. EPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration
The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries
Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Inland Surface Waters
All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation
The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation
The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the n/2 and n/2+1).

Method Detection Limit (MDL)
MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in in 40 CFR part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)
ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone
Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND)
Sample results which are less than the laboratory's MDL.

Persistent Pollutants
Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)
PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention
Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as

defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Resources Control Board (State Water Board) or Regional Water Board.

Reporting Level (RL)
The RL is the ML (and its associated analytical method) chosen by the Permittee for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water
Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ)
Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

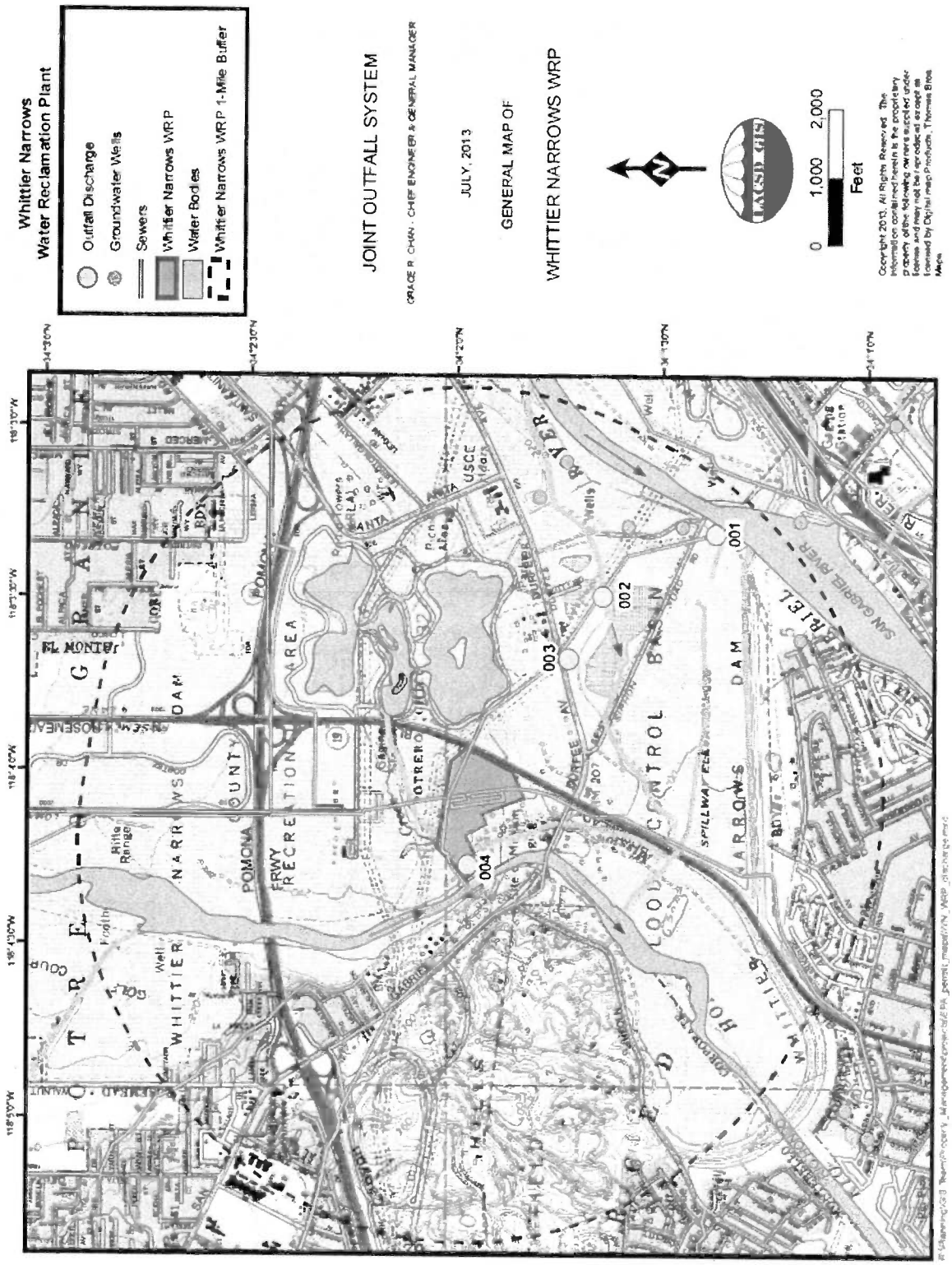
x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

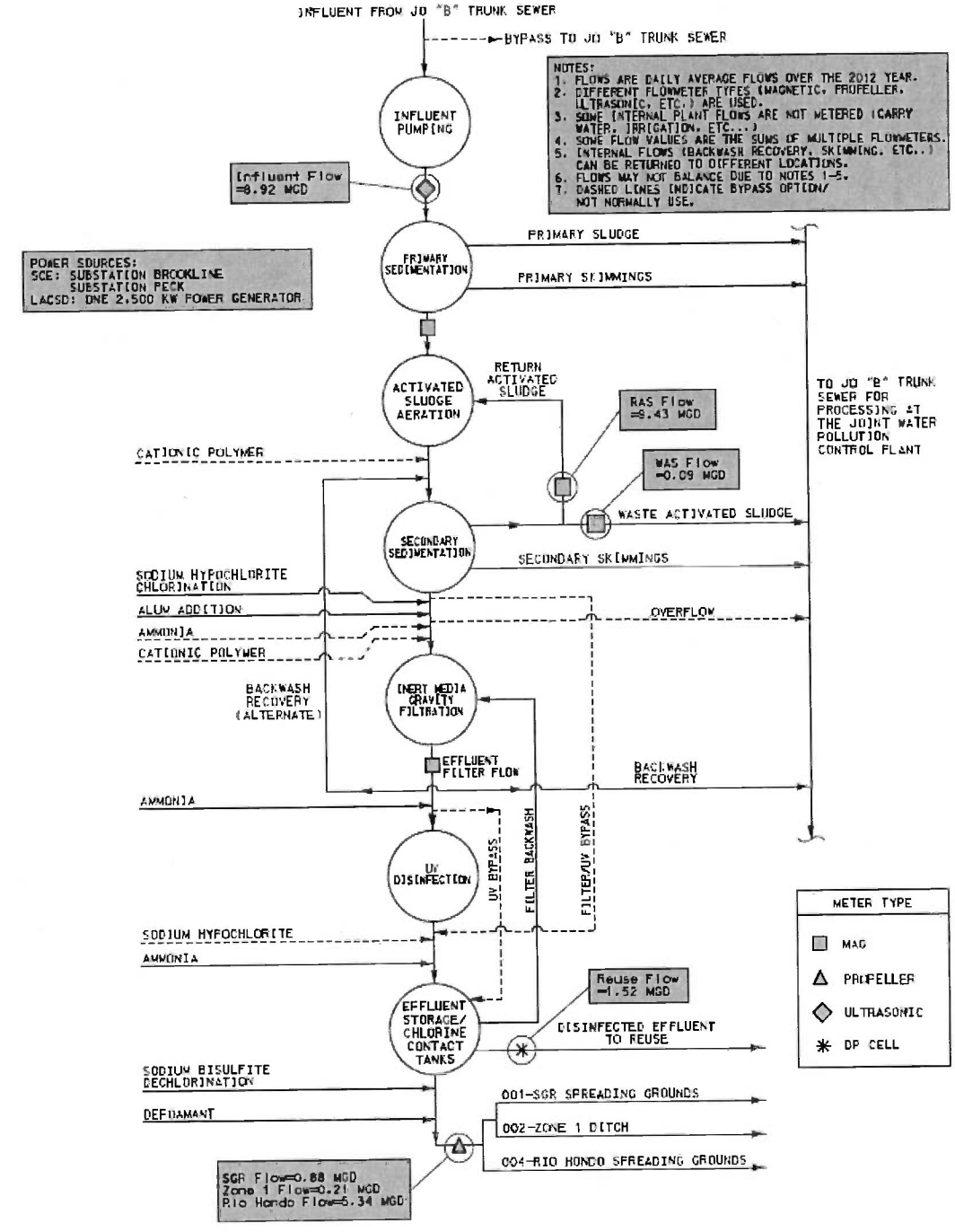
Toxicity Reduction Evaluation (TRE)
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC

WHITTIER NARROWS WATER RECLAMATION PLANT
PROCESS SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Permittee must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA), its regulations, and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 CFR part 122.41(a); California Water Code (CWC) sections 13261, 13263, 13264, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

2. The Permittee shall comply with effluent standards or prohibitions established under Part 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (Title 40 of the Code of Federal Regulations (40 CFR) part 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR part 122.41(c).)

C. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR part 122.41(d).)

D. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Permittee only when necessary to achieve compliance with the conditions of this Order. (40 CFR part 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR part 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR part 122.5(c).)

F. Inspection and Entry

The Permittee shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. section 1318(a)(4)(B); 40 CFR part 122.41(i); CWC sections 13267 and 13383):

1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. section 1318(a)(4)(B)(i); 40 CFR part 122.41(i)(1); CWC sections 13267 and 13383);
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. section 1318(a)(4)(B)(ii); 40 CFR part 122.41(i)(2); CWC sections 13267 and 13383);
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. section 1318(a)(4)(B)(ii); 40 CFR part 122.41(i)(3); CWC sections 13267 and 13383); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location. (33 U.S.C. section 1318(a)(4)(B); 40 CFR part 122.41(i)(4); CWC sections 13267 and 13383)

G. Bypass

1. Definitions
   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR part 122.41(m)(1)(i).)
   b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR part 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR part 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Permittee for bypass, unless (40 CFR part 122.41(m)(4)(i)):
   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR part 122.41(m)(4)(i)(A));
   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR part 122.41(m)(4)(i)(B)); and
   c. The Permittee submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR part 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR part 122.41(m)(4)(ii).)

5. Notice

   a. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR part 122.41(m)(3)(i).)

   b. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR part 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 CFR part 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR part 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR part 122.41(n)(3)):

   a. An upset occurred and that the Permittee can identify the cause(s) of the upset (40 CFR part 122.41(n)(3)(i));

   b. The permitted facility was, at the time, being properly operated (40 CFR part 122.41(n)(3)(ii));

   c. The Permittee submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR part 122.41(n)(3)(iii)); and

   d. The Permittee complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR part 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof. (40 CFR part 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR part 122.41(f).)

B. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this Order after the expiration date of this Order, the Permittee must apply for and obtain a new permit. (40 CFR part 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Permittee and incorporate such other requirements as may be necessary under the CWA and the CWC. (40 CFR part 122.41(l)(3); and 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR part 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures approved under 40 CFR part 136 for the analyses of pollutants unless another method is required under 40 CFR subchapters N or O. In the case of pollutants for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR subchapters N or O, monitoring must be conducted according to a test procedure specified in this Order for such pollutants. (40 CFR part 122.41(j)(4); part 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 CFR part 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR part 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 CFR part 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 CFR part 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 CFR part 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 CFR part 122.41(j)(3)(v)); and
6. The results of such analyses. (40 CFR part 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 CFR part 122.7(b)):

1. The name and address of any permit applicant or Permittee (40 CFR part 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 CFR part 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Permittee shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing,

or terminating this Order or to determine compliance with this Order. Upon request, the Permittee shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR part 122.41(h); CWC sections 13267 and 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR part 122.41(k).)
2. *Signatory requirements for a municipality, State, Federal, or other public agency.* All applications submitted to the Regional Water Board shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR part 122.22(a)(3).).
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
   a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR part 122.22(b)(1));
   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR part 122.22(b)(2)); and
   c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR part 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR part 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 CFR part 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR part 122.41(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR part 122.41(l)(4)(i).)
3. If the Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 CFR part 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR part 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 CFR part 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Permittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR part 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR part 122.41(l)(6)(ii)):
   a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR part 122.41(l)(6)(ii)(A).)
   b. Any upset that exceeds any effluent limitation in this Order. (40 CFR part 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR part 122.41(l)(6)(iii).)

F. Planned Changes

The Permittee shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR part 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR part 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR part 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR part 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Permittee shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 CFR part 122.41(l)(2).)

H. Other Noncompliance

The Permittee shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR part 122.41(l)(7).)

I. Other Information

When the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Permittee shall promptly submit such facts or information. (40 CFR part 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13268, 13385, 13386, and 13387.

B. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two years, or both. Any person who *knowingly* violates such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of

violation, or imprisonment of not more than 6 years, or both. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions (40 CFR part 122.41(a)(2); CWC section 13385 and 13387).

C. Any person may be assessed an administrative penalty by the Administrator of USEPA, the Regional Water Board, or State Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000. (40 CFR part 122.41(a)(3))

D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both. (40 CFR part 122.41(j)(5)).

E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both. (40 CFR part 122.41(k)(2)).

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 CFR part 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect Permittee that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR part 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 CFR part 122.42(b)(2).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 CFR part 122.42(b)(3).)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP), (CI-2848)

Section 308(a) of the federal Clean Water Act and sections 122.41(h), (j)-(l), 122,44(i), and 122.48 of Title 40 of the Code of Federal Regulations (40 CFR) require that all NPDES permits specify monitoring and reporting requirements. California Water Code (CWC) sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and California laws and/or regulations.

I. GENERAL MONITORING PROVISIONS

A. All samples shall be representative of the waste discharge under conditions of peak load. Quarterly effluent analyses shall be performed during the months of February, May, August, and November. Semiannual analyses shall be performed during the months of February and August. Annual analyses shall be performed during the month of August with the exception of bioassessments. Should there be instances when monitoring could not be done during these specified months, the Permittee must notify the Regional Water Board, state the reason why monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of monthly, quarterly, semiannual, and annual analyses shall be reported as due date specified in Table E-8 of MRP.

B. Pollutants shall be analyzed using the analytical methods described in 40 CFR parts 136.3, 136.4, and 136.5; or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided in the Annual Report due to the Regional Water Board each time a new certification and/or renewal of the certification is obtained from ELAP. On July 1, 2014, the Drinking Water Program's ELAP was transferred from the California Department of Public Health (CDPH) to the State Water Board's new Division of Drinking Water (DDW).

C. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR part 136.3. All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Permittee shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Water Board. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the monthly report.

D. The Permittee shall calibrate and perform maintenance procedures on all monitoring instruments and to ensure accuracy of measurements, or shall ensure that both equipment activities will be conducted.

E. For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (USEPA) guidelines, or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

F. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the DDW or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this Monitoring and Reporting Program."

G. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), and the Reporting Level (RL) [the applicable minimum level (ML) or reported Minimum Level (RML)] for each pollutant. The MLs are those published by the State Water Resources Control Board (State Water Board) in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, (State Implementation Policy or SIP),* February 9, 2005, Appendix 4. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the reported ML.

H. The Permittee shall select the analytical method that provides a ML lower than the permit limit established for a given parameter, unless the Permittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR part 136, and obtains approval for a higher ML from the Executive Officer, as provided for in section J, below. If the effluent limitation is lower than all the MLs in Appendix 4, SIP, the Permittee must select the method with the lowest ML for compliance purposes. The Permittee shall include in the Annual Summary Report a list of the analytical methods employed for each test.

I. The Permittee shall instruct its laboratories to establish calibration standards so that the ML (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. In accordance with section J, below, the Permittee's laboratory may employ a calibration standard lower than the ML in Appendix 4 of the SIP.

J. In accordance with section 2.4.3 of the SIP, the Regional Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program Manager, may establish an ML that is not contained in Appendix 4 of the SIP to be included in the Permittee's permit in any of the following situations:

1. When the pollutant under consideration is not included in Appendix 4, SIP;
2. When the Permittee and the Regional Water Board agree to include in the permit a test method that is more sensitive than those specified in 40 CFR part 136;
3. When the Permittee agrees to use an ML that is lower than those listed in Appendix 4;
4. When the Permittee demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 and proposes an appropriate ML for the matrix; or,
5. When the Permittee uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are USEPA-approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Permittee, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

   If there is any conflict between foregoing provisions and the SIP, the provisions stated in the SIP (section 2.4) shall prevail.

K. If the Permittee samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water

constituent more frequently than required by this MRP using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with limitations set forth in this Order.

L. The Permittee shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the WDR section of this Order. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the annual summary report.

M. For all bacteriological analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for *enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.

1. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR part 136, unless alternate methods have been approved in advance by the USEPA pursuant to 40 CFR part 136.
2. Detection methods used for E.coli shall be those presented in Table 1A of 40 CFR part 136 or in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure*, or any improved method determined by the Regional Water Board to be appropriate.

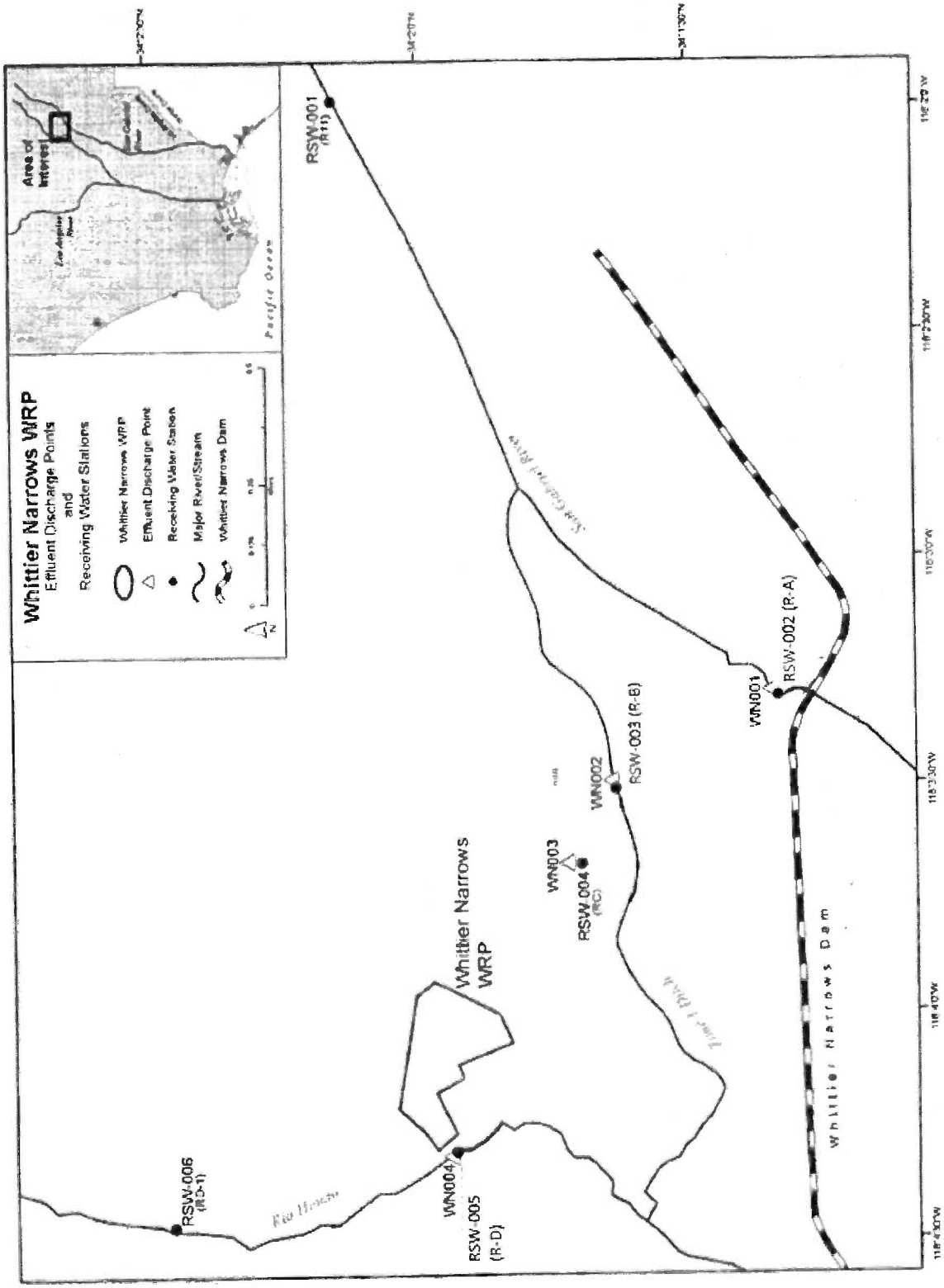
II. MONITORING LOCATIONS

The Permittee shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Influent Monitoring Station		
--	INF-001	Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and/or where representative samples of the influent can be obtained.
Effluent Monitoring Stations		
001, 002, 003, & 004	EFF-001	The effluent sampling station shall be located downstream of any in-plant return flows and after the final disinfection process, where representative samples of the effluent can be obtained. E. coli, fecal coliform and total coliform sampling shall be conducted immediately downstream of the UV disinfection process. All other effluent sampling shall be conducted downstream of the dechlorination process and inside the plant.
Receiving Water Monitoring Stations		
--	RSW-001	San Gabriel River, before the confluence with Zone 1 Ditch, upstream of Discharge Points 001 and 002. (R-11)
San Gabriel River Monitoring Station and Ammonia Receiving Water Point of Compliance	RSW-002	San Gabriel River, 100 feet downstream of Discharge Point 001 (R-A). This station can also be used as a sampling location for SSO Compliance Point (RH-1), as described in Table 11, page 32 of the SSO staff report.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Zone 1 Ditch Monitoring Station and Ammonia Receiving Water Point of Compliance	RSW-003	Zone 1 Ditch, 100 feet downstream of Discharge Point 002. (R-B)
--	RSW-004	Test Basin, Discharge Point 003. (R-C)
Rio Hondo Monitoring Station and Ammonia Receiving Water Point of Compliance	RSW-005	Rio Hondo, 100 feet downstream of Discharge Point 004. (R-D)
--	RSW-006	Rio Hondo, 3,100 feet upstream of Discharge Point 004. (RD-1)
TMDL Wet-Weather Flow Monitoring Station		
--	RSW-007	Los Angeles River Wardlow station. This gauging station is operated and maintained by the USGS.
--	RSW-008	San Gabriel River (USGS station 11087020). This gauging station is operated and maintained by the USGS.



Whittier Narrows WRP Receiving Water Stations

III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to:

- Determine compliance with NPDES permit conditions.
- Assess treatment plant performance.
- Assess effectiveness of the Pretreatment Program.

A. Monitoring Location INF-001

1. The Permittee shall monitor influent to the facility at INF-001 as follows:

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	recorder	continuous[1]	[1]
pH	pH unit	grab	weekly	[2]
Total suspended solids	mg/L	24-hour composite	weekly	[2]
BOD_5 20°C	mg/L	24-hour composite	weekly	[2]
Cadmium	µg/L	24-hour composite	quarterly	[2]
Copper	µg/L	24-hour composite	quarterly	[2]
Lead	µg/L	24-hour composite	quarterly	[2]
Zinc	µg/L	24-hour composite	quarterly	[2]
Mercury	µg/L	24-hour composite	quarterly	[2]
PCBs[3]	µg/L	24-hour composite	annually	[2]
Remaining USEPA priority pollutants[4] excluding asbestos	µg/L	24-hour composite; grab for VOCs and Cyanide	semiannually	[2]

[1] Total daily flow, monthly average flow, and instantaneous peak daily flow (24-hr basis) shall be reported. Actual monitored flow shall be reported (not the maximum flow, i.e., design capacity).

[2] Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

[3] PCBs as aroclors shall be analyzed using method EPA 608, PCBs as congeners shall be analyzed using method EPA 1668c. PCBs as congeners shall be analyzed for three years and may be discontinued for the remaining life of this Order if none of the PCBs congeners are detected using method EPA 1668c.

USEPA recommends that until USEPA proposed method 1668c for PCBs is incorporated into 40 CFR 136, Permittees should use for discharge monitoring reports/State monitoring reports: (1) USEPA method 608 for monitoring data, reported as aroclor results, that will be used for assessing compliance with WQBELs (if applicable) and (2) USEPA proposed method 1668c for monitoring data, reported as 41 congener results, that will be used for informational purposes.

[4] Priority pollutants are those constituents referred to in 40 CFR part 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.

IV. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

- Determine compliance with National Pollutant Discharge Elimination System (NPDES) permit conditions and water quality standards.
- Assess plant performance, identify operational problems and improve plant performance.
- Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.
- Determine reasonable potential analysis for toxic pollutants.
- Determine TMDL effectiveness in waste load allocation compliance.

A. Monitoring Location EFF-001

1. The Permittee shall monitor the discharge of tertiary-treated effluent at EFF-001 as follows. If more than one analytical test method is listed for a given parameter, the Permittee must select from the listed methods and corresponding Minimum Level:

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Total waste flow	mgd	recorder	continuous[5]	[6]
Turbidity	NTU	recorder	continuous[5]	[6]
Total residual chlorine	mg/L	recorder	continuous[7]	--
Total residual chlorine	mg/L	grab	daily[8,9]	[6]

[5] Where continuous monitoring of a constituent is required, the following shall be reported:
Total waste flow – Total daily and peak daily flow (24-hr basis);
Turbidity – Maximum daily value, total amount of time each day the turbidity exceeded 5 NTU, flow proportioned average daily value. Grab sample can be used to determine compliance with the 10 NTU limit. A flow-weighted 24-hour composite sample may be used in place of the recorder to determine the flow-proportioned average daily value.

[6] Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

[7] Total residual chlorine shall be recorded continuously. The recorded data shall be maintained by the Permittee for at least five years. The Permittee shall extract the maximum daily peak, minimum daily peak, and average daily from the recorded media and shall be made available upon request of the Regional Water Board. The continuous monitoring data are not intended to be used for compliance determination purposes.

[8] Daily grab samples shall be collected at monitoring location EFF-001, Monday through Friday only, except for holidays. Analytical results of daily grab samples will be used to determine compliance with total residual chlorine effluent limitation. Furthermore, additional monitoring requirements specified in section IV.A.2. shall be followed.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Total coliform	MPN/100mL or CFU/100ml	grab	daily[9]	[6]
Fecal coliform	MPN/100mL or CFU/100ml	grab	daily[9]	[6]
E. coli	MPN/100mL or CFU/100ml	grab	daily[9]	[6]
Temperature	°F	grab	daily	[6]
pH	pH units	grab	daily	[6]
Settleable Solids	mL/L	grab	daily	[6]
Total Suspended Solids (TSS)	mg/L	24-hour composite	daily	[6]
BOD_5 20°C	mg/L	24-hour composite	weekly[10]	[6]
Oil and grease	mg/L	grab	monthly	[6]
Dissolved oxygen	mg/L	grab	monthly	[6]
Total Dissolved Solids	mg/L	24-hour composite	monthly	[6]
Sulfate	mg/L	24-hour composite	monthly	[6]
Chloride	mg/L	24-hour composite	monthly	[6]
Boron	mg/L	24-hour composite	monthly	[6]
Ammonia Nitrogen	mg/L	24-hour composite	monthly	[6]
Nitrite nitrogen	mg/L	24-hour composite	monthly	[6]
Nitrate nitrogen	mg/L	24-hour composite	monthly	[6]
Organic nitrogen	mg/L	24-hour composite	monthly	[6]
Total nitrogen	mg/L	24-hour composite	monthly	[6]
Total phosphorus	mg/L	24-hour composite	monthly	[6]
Surfactants (MBAS)	mg/L	24-hour composite	monthly	[6]
Surfactants (CTAS)	mg/L	24-hour composite	monthly	[6]
Total hardness ($CaCO_3$)	mg/L	24-hour composite	monthly	[6]
Chronic toxicity	Pass or Fail, % Effect (TST)	24-hour composite	monthly	[6,11]
Radioactivity				

[9] Daily samples shall be collected Monday to Friday, except for holidays.
E. coli testing shall be conducted only if fecal coliform testing is positive. If the fecal coliform analysis results in no detection, a result of less than (<) the reporting limit for fecal coliform will be reported for E. coli.

[10] If the result of the weekly BOD analysis yields a value greater than the AMEL, the frequency of analysis shall be increased to daily within one week of knowledge of the test result for at least 30 days and until compliance with the BOD AWEL and AMEL are demonstrated; after which the frequency shall revert to weekly.

[11] The Permittee shall conduct whole effluent toxicity monitoring as outlined in section V. Please refer to section V.A.7 of this MRP for the accelerated monitoring schedule. The median monthly summary result shall be reported as "Pass" or "Fail". The maximum daily single result shall be reported as "Pass" or "Fail" and "% Effect". When there is a discharge more than one day in a calendar month period, up to three independent toxicity tests are required when one toxicity test results in "Fail".

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
(Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium)	pCi/L	24-hour composite	semiannually	[12]
Cadmium	µg/L	24-hour composite	monthly	[6]
Copper	µg/L	24-hour composite	monthly	[6]
Lead	µg/L	24-hour composite	monthly	[6]
Mercury[13]	µg/L	24-hour composite	monthly	[6]
Zinc	µg/L	24-hour composite	monthly	[6]
2,3,7,8-TCDD[14]	µg/L	24-hour composite	quarterly	[6]
Benzo(k)Fluoranthene	µg/L	24-hour composite	monthly	[6]
Dibenzo(a,h)Anthracene	µg/L	24-hour composite	monthly	[6]
Indeno(1,2,3-cd)Pyrene	µg/L	24-hour composite	monthly	[6]
Antimony	µg/L	24-hour composite	quarterly	[6]
Arsenic	µg/L	24-hour composite	quarterly	[6]
Beryllium	µg/L	24-hour composite	quarterly	[6]
Chromium III	µg/L	calculation	quarterly	[6]
Chromium VI	µg/L	grab	quarterly	[6]
Nickel	µg/L	24-hour composite	quarterly	[6]
Selenium	µg/L	24-hour composite	quarterly	[6]
Silver	µg/L	24-hour composite	quarterly	[6]
Thallium	µg/L	24-hour composite	quarterly	[6]
Cyanide	µg/L	grab	quarterly	[6]
Iron	mg/L	24-hour composite	semiannually	[6]
Fluoride	mg/L	24-hour composite	semiannually	[6]
Barium	mg/L	24-hour composite	semiannually	[6]

[12] Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined Radium-226 & 228 shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L or beta greater than 50 pCi/L. If Radium-226 & 228 exceeds the stipulated criteria, analyze for Tritium, Strontium-90 and uranium.

[13] The mercury effluent samples shall be analyzed using EPA method 1631E, per 40 CFR part 136.

[14] In accordance with the SIP, the Discharger shall conduct effluent monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in the receiving water Station RSW-001 and RSW-006, located upstream of the discharge points 001 and 004, respectively. The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i), (i.e., $TEQ_i = C_i \times TEF_i$). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

$$\text{Dioxin concentration in effluent} = \sum_{1}^{17}(TEQ_i) = \sum_{1}^{17}(C_i)(TEF_i)$$

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Methoxychlor	mg/L	24-hour composite	semiannually	[6]
2,4-D	mg/L	24-hour composite	semiannually	[6]
2,4,5-TP (Silvex)	mg/L	24-hour composite	semiannually	[6]
Perchlorate	µg/L	grab	semiannually	[15]
1,4-Dioxane	µg/L	grab	semiannually	[15]
1,2,3-Trichloropropane	µg/L	grab	semiannually	[15]
Methyl tert-butyl-ether (MTBE)	µg/L	grab	semiannually	[15]
PCBs as aroclors[16]	µg/L	24-hour composite	annually	[6]
PCBs as congeners[17]	µg/L	24-hour composite	annually	[6]
Remaining USEPA priority pollutants[18] excluding asbestos	µg/L	24-hour composite; grab for VOCs	semiannually	[6]

2. **Total Residual Chlorine Additional Monitoring**

   Continuous monitoring of total residual chlorine at the current location shall serve as an internal trigger for the increased grab sampling at EFF-001 if either of the following occurs, except as noted in item c:

   a. Total residual chlorine concentration excursions of up to 0.3 mg/L lasting greater than 15 minutes; or

   b. Total residual chlorine concentration peaks in excess of 0.3 mg/L lasting greater than 1 minute.

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[15] Emerging chemicals include 1,4-dioxane (USEPA 8270M test method), perchlorate (USEPA 314 test method, or USEPA method 331 if a detection limit of less than 6 µg/L is achieved), 1,2,3-trichloropropane (USEPA 504.1, 8260B test method, or USEPA 524.2 in SIM mode), and methyl tert-butyl ether (USEPA 8260B test method or USEPA method 624 if a detection level of less than 5 µg/L is achieved, and if the Permittee received ELAP certification to run USEPA method 624).

[16] PCBs as Aroclors is the sum of PCB 1016, PCB 1221, PCB 1232, PCB 1242, PCB 1248, PCB 1254, and PCB 1260 when monitoring using USEPA method 608.

[17] PCBs mean the sum of 41 congeners when monitoring using USEPA proposed method 1668c. PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105,110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206 shall be individually quantified. PCBs as congeners shall be analyzed using method EPA 1668c for three years and may be discontinued for the remaining life of this Order if none of the PCB congeners are detected using method EPA 1668c.

USEPA recommends that until USEPA proposed method 1668c for PCBs is incorporated into 40 CFR 136, Permittees should use for discharge monitoring reports/State monitoring reports: (1) USEPA method 608 for monitoring data, reported as aroclor results, that will be used for assessing compliance with WQBELs (if applicable) and (2) USEPA proposed method 1668c for monitoring data, reported as 41 congener results, that will be used for informational purposes.

[18] Priority pollutants are those constituents referred to in 40 CFR part 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.

c. Additional grab samples need not be taken if it can be demonstrated that a stoichiometrically appropriate amount of dechlorination chemical has been added to effectively dechlorinate the effluent to 0.1 mg/L or less for peaks in excess of 0.3 mg/L lasting more than 1 minute, but not for more than five minutes.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

1. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity

The chronic toxicity IWC for this discharge is 100 percent effluent.

2. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. For the receiving water, sufficient sample volume shall also be collected for subsequent TIE studies, if necessary, at each sampling event. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

3. Chronic Freshwater Species and Test Methods

If effluent samples are collected from outfalls discharging to receiving waters with salinity <1 ppt, the Permittee shall conduct the following chronic toxicity tests on effluent samples at the in-stream waste concentration for the discharge in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR part 136). In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

a. A static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0).

b. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0).

c. A static renewal toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

4. Species Sensitivity Screening

Species sensitivity screening shall be conducted beginning the first month the permit is in effect. The Permittee shall collect a single effluent sample to initiate and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required for the discharge, during that given month. As allowed under the test method for the Ceriodaphnia dubia and the Fathead minnow, a second and third sample may be collected for use as test solution renewal water as the seven-day toxicity test progresses. However, that same sample shall be used to renew both the Ceriodaphnia dubia and the Fathead minnow. The species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle. Likewise, if two or more species result in "Fail," then the species that exhibits the highest "Percent Effect" at the discharge IWC during the suite of species sensitivity screening shall be used for routine monitoring during the permit cycle, until such time as a rescreening is required (24 months later).

Species sensitivity rescreening is required every 24 months if there has been discharge during dry weather conditions. If the intermittent discharge is only during wet weather, rescreening is not required. If rescreening is necessary, the Permittee shall rescreen with the fish, an invertebrate, and the alga species previously referenced and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive then the rescreening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Permittee shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

During the calendar month, toxicity tests used to determine the most sensitive test species shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.

5. **Quality Assurance and Additional Requirements**

Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.

a. The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (H_o) for the TST approach is: Mean discharge IWC response ≤0.75 × Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response)) × 100.

b. The Median Monthly Effluent Limit (MMEL) for chronic toxicity only applies when there is a discharge more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests are required when one toxicity test results in "Fail".

c. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (USEPA 2002, EPA-821-R-02-013) (see Table E.4, below), then the Permittee must re-sample and re-test within 14 days.

Table E-4. USEPA Test Methods and Test Acceptability Criteria

Species & USEPA Test Method Number	Test Acceptability Criteria (TAC)
Fathead Minnow, *Pimephales promelas*, Larval Survival and Growth Test Method 1000.0 (Table 1 of the test method, above)	80% or greater survival in controls; average dry weight per surviving organism in control chambers equals or exceeds 0.25 mg. (required)
Daphnid, *Ceriodaphnia dubia*, Survival and Reproduction Test Method 1002.0. (Table 3 of the test method, above)	80% or greater survival of all control organisms and an average of 15 or more young per surviving female in the control solutions. 60% of surviving control females must produce three broods. (required)

Species & USEPA Test Method Number	Test Acceptability Criteria (TAC)
Green Alga, *Selenastrum capricornutum,* Growth Toxicity Test Method 1003.0. (Table 3 of the test method, above)	Mean cell density of at least 1 X 10^6 cells/mL in the controls; and variability (CV%) among control replicates less than or equal to 20%. (required)

d. Dilution water and control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.

e. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported using EC25[19].

f. The Permittee shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the Monitoring and Reporting Program and the rational is explained in the Fact Sheet (Attachment F).

6. **Preparation of an Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan**

The Permittee shall prepare and submit a copy of the Permittee's initial investigation TRE work plan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the work plan within 60 days, the work plan shall become effective. The Permittee shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the TRE Work Plan must contain the provisions in Attachment G. This work plan shall describe the steps that the Permittee intends to follow if toxicity is detected. At minimum, the work plan shall include:

a. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

b. A description of the Facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility; and,

c. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

7. **Accelerated Monitoring Schedule for Median Monthly Summary Result: "Fail" (or Maximum Daily Single Result: "Fail and % Effect ≥50").**

The summary result shall be used when there is discharge more than one day in a calendar month. The single result shall be used when there is discharge of only one day in a calendar month.

Once the Permittee becomes aware of this result, the Permittee shall implement an accelerated monitoring schedule within 48 hours for the *Ceriodaphnia dubia* test, and within 5 calendar days for both the *Pimephales promelas* and *Selenastrum capricornutum* tests. However, if the sample is contracted out to a commercial laboratory,

[19] EC25 is a point estimate of the toxicant concentration that would cause an observable adverse effect (e.g., death, immobilization, or serious incapacitation) in 25 percent of the test organisms.

the Permittee shall ensure that the first of four accelerated monitoring tests is initiated within seven calendar days of the Permittee becoming aware of the summary result. The accelerated monitoring schedule shall consist of four, five-concentration toxicity tests (including the discharge IWC), conducted at approximately two week intervals, over an eight week period; in preparation for the TRE process and associated reporting, these results shall also be reported using the EC25. If each of the accelerated toxicity tests results in "Pass", the Permittee shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail", the Permittee shall immediately implement the TRE Process conditions set forth below. During accelerated monitoring schedules, only TST results ("Pass" or "Fail", "Percent Effect") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.

8. **TRE Process**

During the TRE Process, monthly effluent monitoring shall resume and TST results ("Pass" or "Fail", "Percent Effect") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.

a. **Preparation and Implementation of Detailed TRE Work Plan.** The Permittee shall immediately initiate a TRE using, according to the type of treatment facility, USEPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) and, within 15 days, submit to the Executive Officer a Detailed TRE Work Plan, which shall follow the TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:

   i. Further actions by the Permittee to investigate, identify, and correct the causes of toxicity.

   ii. Actions the Permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.

   iii. A schedule for these actions, progress reports, and the final report.

b. **TIE Implementation.** The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, USEPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Permittee shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

d. The Permittee shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE process is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE is begun.

e. The Regional Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

f. The Board may consider the results of any TIE/TRE studies in an enforcement action.

9. **Reporting**

The Self-Monitoring Report (SMR) shall include a full laboratory report for each toxicity test. This report shall be prepared using the format and content of the test methods manual chapter called Report Preparation, including:

a. The toxicity test results for the TST approach, reported as "Pass" or "Fail" and "Percent Effect" at the chronic toxicity IWC for the discharge.

b. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).

c. TRE/TIE results. The Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses.

d. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.

e. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon request of Regional Water Board staff.

B. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Permittee must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.

c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.

d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water

Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

C. Chlorine Removal

1. Except with prior approval from the Executive Office of the Regional Water Board, chlorine shall not be removed from bioassay samples. Chlorine may be removed from the Whittier Narrows WRP effluent bioassay samples in the laboratory when the recycled water demand is high and there is no effluent water available for sampling over the weir after the dechlorination process.

VI. LAND DISCHARGE MONITORING REQUIREMENTS (NOT APPLICABLE)

VII. RECYCLING MONITORING REQUIREMENTS (NOT APPLICABLE)

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location RSW-001 through RSW-006

1. The Permittee shall monitor San Gabriel River and Rio Hondo at RSW-001 through RSW-006 as follows:

Table E-5. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total flow[20]	cfs	calculation	monthly	--
Turbidity	NTU	grab	monthly	[21]
Total residual chlorine	mg/L	grab	monthly	[21]
E. coli	MPN/100ml or CFU/100ml	grab	monthly	[21]
Temperature	°F	grab	monthly	[21]
pH	pH units	grab	monthly	[21]
Settleable Solids	mL/L	grab	monthly	[21]
Total Suspended Solids	mg/L	grab	monthly	[21]
BOD_5 20°C	mg/L	grab	monthly	[21]
Oil and grease	mg/L	grab	monthly	[21]
Dissolved oxygen	mg/L	grab	monthly	[21]
Conductivity	µmho/cm	grab	monthly	[21]
Total Dissolved Solids	mg/L	grab	monthly	[21]
Sulfate	mg/L	grab	monthly	[21]
Chloride	mg/L	grab	monthly	[21]
Boron	mg/L	grab	monthly	[21]

[20] Flow at receiving water stations RSW-001 and RSW-002 cannot be measured or estimated because of soft bottom nature of the channel. Therefore, total flow is not required to be reported.

[21] Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia nitrogen	mg/L	grab	monthly	[21]
Nitrate nitrogen	mg/L	grab	monthly	[21]
Nitrite nitrogen	mg/L	grab	monthly	[21]
Organic nitrogen	mg/L	grab	monthly	[21]
Total kjeldahl nitrogen (TKN)	mg/L	grab	monthly	[21]
Total nitrogen	mg/L	grab	monthly	[21]
Total phosphorus	mg/L	grab	monthly	[21]
Orthophosphate-P	mg/L	grab	monthly	[21]
Surfactants (MBAS)	mg/L	grab	monthly	[21]
Surfactants (CTAS)	mg/L	grab	monthly	[21]
Total hardness ($CaCO_3$)	mg/L	grab	monthly	[21]
Chronic toxicity[22]	Pass or Fail, % Effect (TST)	grab	quarterly	[21]
Cadmium	µg/L	grab	monthly	[21]
Copper	µg/L	grab	monthly	[21]
Lead	µg/L	grab	monthly	[21]
Mercury[13]	µg/L	grab	monthly	[21]
Zinc	µg/L	grab	monthly	[21]
Antimony	µg/L	grab	quarterly	[21]
Arsenic	µg/L	grab	quarterly	[21]
Beryllium	µg/L	grab	quarterly	[21]
Chromium III	µg/L	calculation	quarterly	[21]
Chromium VI	µg/L	grab	quarterly	[21]
Nickel	µg/L	grab	quarterly	[21]
Selenium	µg/L	grab	quarterly	[21]
Silver	µg/L	grab	quarterly	[21]
Thallium	µg/L	grab	quarterly	[21]
Cyanide	µg/L	grab	quarterly	[21]
Methyl tert-butyl-ether	µg/L	grab	annually	[23]

[22] The Permittee shall conduct whole effluent toxicity monitoring as outlined in section V. Please refer to section V.A.7 of this MRP for the accelerated monitoring schedule. The median monthly summary result is a threshold value for a determination of meeting the narrative receiving water objective and shall be reported as "Pass" or "Fail". The maximum daily single result is a threshold value for a determination of meeting the narrative receiving water objective and shall be reported as "Pass or Fail" and "% Effect". Up to three independent toxicity tests are required when one toxicity test results in "Fail".

If the chronic toxicity median monthly threshold at the immediate downstream receiving water location is not met and the toxicity cannot be attributed to upstream toxicity, as assessed by the Permittee, then the Permittee shall initiate accelerated monitoring.

If the chronic toxicity median monthly threshold of the receiving water at both upstream and downstream stations is not met, but the effluent chronic toxicity median monthly effluent limitation was met, then accelerated monitoring need not be implemented.

[23] Emerging chemicals include 1,4-dioxane (USEPA 8270M test method), perchlorate (USEPA 314 test method, or USEPA method 331 if a detection limit of less than 6 µg/L is achieved), 1,2,3-trichloropropane (USEPA 504.1, 8260B test method, or USEPA 524.2 in SIM mode), and methyl tert-butyl ether (USEPA

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
(MTBE)				
Perchlorate	µg/L	grab	annually	[23]
1,2,3-Trichloropropane	µg/L	grab	annually	[23]
1,4-Dioxane	µg/L	grab	annually	[23]
Diazinon[24]	µg/L	grab	quarterly	[21]
2,3,7,8-TCDD[25]	µg/L	grab	quarterly	[21]
Iron	µg/L	grab	semiannually	[21]
Fluoride	mg/L	grab	semiannually	[21]
Barium	µg/L	grab	quarterly	[21]
Methoxychlor	µg/L	grab	quarterly	[21]
2,4-D	µg/L	grab	quarterly	[21]
2,4,5-TP (Silvex)	µg/L	grab	quarterly	[21]
PCBs as aroclors[16]	µg/L	grab	annually	[21]
PCBs as congeners[17]	µg/L	grab	annually	[21]
Remaining USEPA priority pollutants[26] excluding asbestos	µg/L	grab	semiannually	[21]

2. Receiving water samples shall not be taken during or within 48-hours following the flow of rainwater runoff into the San Gabriel River and Rio Hondo. Sampling may be rescheduled at receiving water stations if weather and/or flow conditions would endanger personnel collecting receiving water samples. The monthly monitoring report shall note such occasions.

B. Ammonia Receiving Water Monitoring Requirements

1. On March 2, 2011, the Regional Water Board approved the ammonia receiving water monitoring location based on the study conducted by the Permittee. The study concluded that the ammonia compliance monitoring shall be conducted 100 feet below the outfall. To ensure that downstream receiving waters are protected at all times, the Discharger shall monitor the ammonia concentrations at RSW-002, RSW-003, and RSW-005, 100 feet from the discharge outfall. The purpose of the monitoring location is to ensure that

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8260B test method or USEPA method 624 if a detection level of less than 5 µg/L is achieved, and if the Permittee received ELAP certification to run USEPA method 624).

[24] Diazinon sampling shall be conducted concurrently with the receiving water chronic toxicity sampling.

[25] In accordance with the SIP, the Discharger shall conduct effluent monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in the receiving water Station RSW-001 and RSW-006, located upstream of the discharge points 001 and 004, respectively. The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i), (i.e., $TEQ_i = C_i \times TEF_i$). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

$$\text{Dioxinconcentrationineffluent} = \sum_{1}^{17}(TEQ_i) = \sum_{1}^{17}(C_i)(TEF_i)$$

[26] Priority pollutants are those constituents referred to in 40 CFR part 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.

ammonia water quality objectives are met in the receiving water, even immediately downstream of the discharge when there has been little time for uptake or volatilization of ammonia in the receiving water. Concurrent sampling of ammonia, pH, and temperature will be required at this monitoring location. The Discharger shall compare the ammonia results to Basin Plan ammonia water quality objectives, based on the real-time pH and temperature data collected at the time of ammonia sampling.

2. The Discharger shall monitor San Gabriel River and Rio Hondo at RSW-002, RSW-003, and RSW-005, depending on where discharge is occurring at the time of sampling. The monitoring requirement specified in Table E-5 will satisfy the monitoring requirement in Table E-6, below, and is not meant to be a duplicative requirement. The parameters shall be reported as follows:

Table E-6. Ammonia Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Temperature	°F	grab	monthly	[21]
pH	pH units	grab	monthly	[21]
Ammonia Nitrogen	mg/L	grab	monthly	[21]
Chronic toxicity[22]	Pass or Fail, %Effect (TST)	grab	quarterly	[21]

C. TMDL Flow Monitoring Requirements

1. The Discharger shall report the maximum daily flow at Los Angeles River Wardlow Station (RSW-007) and San Gabriel River at USGS station 11087020 (RSW-008). This information is necessary to determine the wet-weather condition of the river as defined by *Los Angeles River Metals TMDL* and by *San Gabriel Metals TMDL*. If the gauging station is not operational, an estimated maximum daily flow may be submitted.

Table E-7. TMDL Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Maximum Daily Flow	cfs	recorder	daily	N/A

IX. OTHER MONITORING REQUIREMENTS

A. Watershed Monitoring

1. The goals of the Watershed-wide Monitoring Program for the San Gabriel River/Los Angeles Watersheds are to:

   - Determine compliance with receiving water limits.
   - Monitor trends in surface water quality.
   - Ensure protection of beneficial uses.
   - Provide data for modeling contaminants of concern.
   - Characterize water quality including seasonal variation of surface waters within the watershed.
   - Assess the health of the biological community.
   - Determine mixing dynamics of effluent and receiving waters in the estuary.

2. To achieve the goals of the Watershed-wide Monitoring Program, the Permittee shall undertake the responsibilities delineated under an approved watershed-wide monitoring plan in the implementation of the Watershed-wide Monitoring Program for the San Gabriel River, which was approved by the Regional Water Board on September 25, 2006. In addition, the Permittee shall also participate with interested stakeholders in the Los Angeles River Watershed in the development and implementation of a watershed-wide monitoring program.

3. In coordination with the Los Angeles County Public Works and other interested stakeholders in the San Gabriel River and Los Angeles River Watersheds, the Permittee shall conduct instream bioassessment monitoring once a year, during the spring/summer period (unless an alternate sampling period is approved by the Executive Officer) and include an analysis of the community structure of the instream macroinvertebrate assemblages, the community structure of the instream algal assemblages (benthic diatoms and soft-bodied algae), chlorophyll a and biomass for instream algae, and physical habitat assessment at the random monitoring stations designated by the San Gabriel River/Los Angeles River Watershed Monitoring Program. Over time, bioassessment monitoring will provide a measure of the physical condition of the waterbody and the integrity of its biological communities.

   a. The bioassessment program shall include an analysis of the community structure of the instream macroinvertebrate, algal assemblages, algal biomass, and physical habitat assessment at monitoring stations RSW-001 through RSW-006.

      This program shall be implemented by appropriately trained staff. Alternatively, a professional subcontractor qualified to conduct bioassessments may be selected to perform the bioassessment work for the Permittee. Analyses of the results of the bioassessment monitoring program, along with photographs of the monitoring site locations taken during sample collection, shall be submitted in the corresponding annual report. If another stakeholder, or interested party in the watershed subcontracts a qualified professional to conduct bioassessment monitoring during the same season and at the same location as specified in the MRP, then the Permittee may, in lieu of duplicative sampling, submit the data, a report interpreting the data, photographs of the site, and related QA/QC documentation in the corresponding annual report.

   b. The Permittee must provide a copy of their Standard Operation Procedures (SOPs) for the Bioassessment Monitoring Program to the Regional Water Board upon request. The document must contain step-by-step field, laboratory and data entry procedures, as well as, related QA/QC procedures. The SOP must also include specific information about each bioassessment program including: assessment program description, its organization and the responsibilities of all its personnel; assessment project description and objectives; qualifications of all personnel; and the type of training each member has received.

   c. Field sampling must conform to the SOP established for the California Stream Bioassessment Procedure (CSBP) or more recently established sampling protocols, such as used by the Surface Water Ambient Monitoring Program (SWAMP). Field crews shall be trained on aspects of the protocol and appropriate safety issues. All field data and sample Chain of Custody (COC) forms must be examined for completion and gross errors. Field inspections shall be planned with random visits and shall be performed by the Permittee or an independent auditor. These visits shall report on all aspects of the field procedure with corrective action occurring immediately.

d. A taxonomic identification laboratory shall process the biological samples that usually consist of subsampling organisms, enumerating and identifying taxonomic groups and entering the information into an electronic format. The Regional Water Board may require QA/QC documents from the taxonomic laboratories and examine their records regularly. Intra-laboratory QA/QC for subsampling, taxonomic validation and corrective actions shall be conducted and documented. Biological laboratories shall also maintain reference collections, vouchered specimens (the Permittee may request the return of their sample voucher collections) and remnant collections. The laboratory should participate in an (external) laboratory taxonomic validation program at a recommended level of 10% or 20%. External QA/QC may be arranged through the California Department of Fish and Wildlife's Aquatic Bioassessment Laboratory located in Rancho Cordova, California.

4. The Executive Officer of the Regional Water Board may modify Monitoring and Reporting Program to accommodate the watershed-wide monitoring.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Permittee shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.
3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.
4. The Permittee shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
5. Each monthly monitoring report shall include a determination of compliance with receiving water ammonia water quality objectives at either RSW-002, RSW-003, or RSW-005, depending on which station is downstream of the plant discharge at the time of sampling. Any exceedances of an ammonia water quality objective shall be noted in the "Summary of Non-Compliance" section of the monitoring report.

B. Self-Monitoring Reports (SMRs)

1. The Permittee shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). The CIWQS Web site will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Permittee shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Permittee shall submit monthly, quarterly, semiannual, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Permittee monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-8. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	Submit with monthly SMR
Daily	Permit effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	Submit with monthly SMR
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1st day of calendar month through last day of calendar month	By the 15th day of the third month after the month of sampling
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	June 15 September 15 December 15 March 15
Semiannually	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	September 15 March 15
Annually	January 1 following (or on) permit effective date	January 1 through December 31	April 15

4. Reporting Protocols. The Permittee shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR part 136.

   The Permittee shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

   a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

      For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

   c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or "ND".

   d. Permittees are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Permittee

to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, the Permittee shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL).

6. Multiple Sample Data. When determining compliance with an average monthly effluent limitation (AMEL), average weekly effluent limitation (AWEL), or maximum daily effluent limitation (MDEL) for priority pollutants and more than one sample result is available, the Permittee shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Permittee shall compute the median in place of the arithmetic mean in accordance with the following procedure:

   a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

   b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

7. The Permittee shall submit SMRs in accordance with the following requirements:

   a. The Permittee shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Permittee is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Permittee shall electronically submit the data in a tabular format as an attachment.

   b. The Permittee shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify instances of non-compliance or exceedances of effluent limitations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

C. Discharge Monitoring Reports (DMRs)

1. At any time during the term of this permit, the State Water Board or Regional Water Board may notify the Permittee to electronically submit DMRs. On October 1, 2014, notification was given specifically for the electronic submittal of DMRs by the Permittee. The Permittee shall submit DMRs electronically via CIWQS and will discontinue submitting paper DMRs.

D. Other Reports

1. The Permittee shall report the results of any special studies, chronic toxicity testing, TRE/TIE, Pollutant Minimization Program (PMP), and Pollution Prevention Plan required

by Special Provisions – section VI.C. The Permittee shall submit reports in compliance with SMR reporting requirements described in subsection X.B. above.

2. **Annual Summary Report**

   By April 15 of each year, the Permittee shall submit an annual report containing a discussion of the previous year's influent/effluent analytical results and receiving water monitoring data. The annual report shall contain an overview of any plans for upgrades to the treatment plant's collection system, the treatment processes, or the outfall system. The Permittee shall submit annual report to the Regional Water Board in accordance with the requirements described in subsection X.B.7 above.

   Each annual monitoring report shall contain a separate section titled "Reasonable Potential Analysis" which discusses whether or not reasonable potential was triggered for pollutants which do not have a final effluent limitation in the NPDES permit. This section shall contain the following statement: "The analytical results for this sampling period did/ did not trigger reasonable potential." If reasonable potential was triggered, then the following information should also be provided:

   a. A list of the pollutant(s) that triggered reasonable potential.

   b. The Basin Plan or CTR criteria that was exceeded for each given pollutant.

   c. The concentration of the pollutant(s).

   d. The test method used to analyze the sample.

   e. The date and time of sample collection.

3. The Permittee shall submit to the Regional Water Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

4. The Regional Water Board requires the Permittee to file with the Regional Water Board, within 90 days after the effective date of this Order, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:

   a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks, and pipes should be considered.

   b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.

   c. Describe facilities and procedures needed for effective preventive and contingency plans.

   d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section IIB of this Order, the Regional Water Board incorporates this Fact Sheet as findings of the Regional Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Permittees in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Permittee. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Permittee.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4B190107016
Discharger	Joint Outfall System
Name of Facility	Whittier Narrows Water Reclamation Plant, El Monte
Facility Address	301 North Rosemead Boulevard El Monte, CA 91733 Los Angeles County
Facility Contact, Title and Phone	Ann Heil, Supervising Engineer, (562) 699-7411
Authorized Person to Sign and Submit Reports	Ann Heil, Supervising Engineer, (562) 699-7411
Mailing Address	1955 Workman Mill Road, Whittier, CA 90601
Billing Address	SAME
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Y
Recycling Requirements	Producer
Facility Permitted Flow	15.0 million gallons per day (mgd)
Facility Design Flow	15.0 mgd
Watershed	San Gabriel River and Los Angeles River
Receiving Water	San Gabriel River and Rio Hondo
Receiving Water Type	Inland surface water

A. The Joint Outfall System (ownership and operation of the Joint Outfall System is proportionally shared among the signatory parties to the amended Joint Outfall Agreement effective July 1, 1995. These parties include County Sanitation Districts of Los Angeles County Nos. 1, 2, 3, 5, 8, 15, 16, 17, 18, 19, 21, 22, 23, 28, 29, and 34, and South Bay Cities Sanitation District of Los Angeles County), formerly referred to as the County Sanitation Districts of Los Angeles County and hereinafter Permittee, Discharger or Districts, is the owner and operator of the Whittier Narrows Water Reclamation Plant and its associated wastewater collection system and outfalls (hereinafter Facility), a Publicly-Owned Treatment Works (POTW).

For the purposes of this Order, references to the "Permittee" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Permittee herein.

B. The Facility discharges wastewater to San Gabriel River and Rio Hondo, waters of the United States. The Permittee was previously regulated by Order R4-2009-0077and NPDES Permit No. CA0053716 adopted on June 4, 2009, and expired on May 10, 2014. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

C. The Permittee filed a report of waste discharge and submitted an application for reissuance of its WDRs and NPDES permit on November 5, 2013. The application was deemed complete on December 3, 2013. A site visit was conducted on July 24, 2014, to observe operations and collect additional data to develop permit limitations and requirements for waste discharge.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment and Controls

1. The Discharger owns and operates the Whittier Narrows WRP, a tertiary wastewater treatment plant located at 301 North Rosemead Boulevard, El Monte, California. Attachment B shows the location of the plant. The Whittier Narrows WRP currently receives wastewater from Alhambra, Arcadia, Azusa, Bradbury, City of Industry, Duarte, El Monte, Glendale, Irwindale, La Cañada Flintridge, Los Angeles, Monrovia, Monterey Park, Pasadena, Rosemead, San Gabriel, San Marino, Sierra Madre, South El Monte, South Pasadena, and Temple City. The wastewater is a mixture of domestic and industrial wastewater that is pre-treated pursuant to 40 CFR Part 403. Whittier Narrows WRP has a design capacity of 15.0 mgd and serves an estimated population of 107,000 people.

   The Districts have undertaken a full evaluation of local limits for the JOS, which is an interconnected system consisting of the Long Beach, Los Coyotes, Pomona, San Jose Creek and Whittier Narrows WRPs, as well as Joint Water Pollution Control Plant (JWPCP), and La Canada WRP (non-industrial). Due to the interconnectedness of this system, it is appropriate to formally evaluate local limits for all treatment plants on the system at one time so that conditions throughout the system can be considered. The Districts have reviewed the discharge limitations in the NPDES permits issued to these facilities and have found that changes to existing local limits are not necessary to meet the limitations. The most recent local limits evaluation was submitted on August 22, 2012 finding that the existing limits were fully protective of the JOS system. However, a re-evaluation will be required following the renewal of the NPDES permit issued to the JWPCP.

   The Whittier Narrows WRP is part of an integrated network of facilities, known as the JOS. The JOS incorporates the Whittier Narrows WRP and six other wastewater treatment plants, which are connected by more than 1,200 miles of interceptors and trunk sewers. The upstream treatment plants (Whittier Narrows, Pomona, La Cañada, Long Beach, Los Coyotes, and San Jose Creek) are connected to the JWPCP located in Carson. This system allows for the diversion of influent flows into or around each upstream plant if so desired.

2. Treatment at the Whittier Narrows WRP consists of primary sedimentation, activated sludge biological treatment with nitrification and denitrification, secondary sedimentation, inert media filtration, and ultraviolet (UV) disinfection. The UV disinfection system has been incorporated into a dual barrier disinfection system which includes application of chlorine as free chlorine at a very low dosage upstream of the UV disinfection to

inactivate any virus that is not readily susceptible to UV, followed by UV disinfection to inactivate any other pathogens that are more susceptible to UV. Since effluent that has been disinfected using the UV process does not carry residual chlorine, a minimal amount of chlorine is added to the UV-disinfected effluent to provide minimal residual chlorine to reclaimed water supplied for direct reuse. Treated wastewater that is not conveyed to direct reuse is dechlorinated prior to discharge in order to remove any chlorine residual. Treated wastewater discharged to San Gabriel River and Rio Hondo is dechlorinated.

3. Under normal operation conditions, sodium hypochlorite is used only in small dosages to supplement the UV disinfection, as part of the dual barrier disinfection process described under Item 2 above. Sodium hypochlorite may be added to the treated effluent prior to the filters to destroy bacteria, pathogens and viruses, to minimize algal growth in the filters, or may be added to provide minimal residual chlorine to reclaimed water supplied for direct reuse. In the event of bypass or UV system failure, the Whittier Narrows WRP may revert to using sodium hypochlorite for disinfection whereby disinfectant may be dosed prior to the serpentine chlorine contact tanks. Prior to discharge, sodium bisulfite is added to the treated effluent to remove residual chlorine.

4. No facilities are provided for solids processing at the plant. Sewage solids separated from the wastewater are returned to the trunk sewer for conveyance to JWPCP for treatment and disposal occurs, under Order No. R4-2011-0151 (NPDES No. CA0053813). Attachment C is a schematic of the Whittier Narrows WRP wastewater flow.

5. The Permittee has constructed a biological nutrient removal system with nitrogen de-nitrification process (NDN) in order to achieve compliance with the ammonia Basin Plan objectives. The system was completed and has been in operation since September 2003.

B. Discharge Points and Receiving Waters

The Whittier Narrows WRP discharges tertiary-treated municipal and industrial wastewater to the San Gabriel River and Rio Hondo, waters of the United States, above the Estuary. Treated effluents are discharged from the plant to surface waters at the following discharge points:

Discharge Point 001: Discharge to San Gabriel River via a point located approximately 700 feet upstream of the Whittier Narrows Dam (approximate coordinates: Latitude 34.02278°, Longitude -118.05528°). The treated effluent generally flows down the river to the San Gabriel River Spreading Grounds.

Discharge Point 002: Discharge to the Zone 1 Ditch at a point located approximately 5,500 feet upstream from its juncture with the Rio Hondo (approximate coordinates: Latitude 34.02750°, Longitude -118.05833°). The treated effluents enter the Rio Hondo at a point located approximately 4,000 feet upstream of the Whittier Narrows Dam. The treated effluent generally flows down the Rio Hondo to the Rio Hondo Spreading Grounds.

Discharge Point 003: Discharge to Test Basin 1 (approximate coordinates: Latitude 34.02889°, Longitude -118.06111°) used for the study of using recycled wastewater for groundwater recharge. There has been no discharge through this point since July 31, 1981, and there is no plan to utilize this point in the immediate future.

Discharge Point 004: Discharge directly to Rio Hondo via a 27-inch diameter discharge line located at a point 1,400 feet upstream of San Gabriel Boulevard, above Whittier Narrows

Dam (approximate coordinates: Latitude 34.03278°, Longitude -118.07111°). The treated effluent generally flows down the Rio Hondo to the Rio Hondo Spreading Grounds.

Discharges from Discharge Points 001, 002, 003, and 004 may influence either the Los Angeles River and/or San Gabriel River Watershed depending upon several operating conditions.

During dry weather (May 1 – October 31), the primary sources of water flow in San Gabriel River, downstream of the discharge points, are the Whittier Narrows WRP effluent and other NPDES-permitted discharges, including urban runoff conveyed through the municipal separate storm sewer systems (MS4). Storm water and dry weather urban runoff from MS4 are regulated under an NPDES permit, *Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within the County of Los Angeles* (LA Municipal Permit), NPDES Permit No. CAS004001.

The Los Angeles County Flood Control District channelized portions of the San Gabriel River to convey and control floodwater, and to prevent damage to homes located adjacent to the river. Although this is not the main purpose, the San Gabriel River conveys treated wastewater along with floodwater, and urban runoff. The San Gabriel River is unlined near the points of discharge. Groundwater recharge occurs both incidentally and through separate water reclamation requirements (WRR) for groundwater recharge, in these unlined areas of the San Gabriel River where the underlying sediments are highly transmissive to water as well as pollutants. The Water Replenishment District recharges groundwater through the Rio Hondo and San Gabriel Spreading Grounds, located in the Montebello Forebay, with water purchased from JOS's Whittier Narrows, Pomona, and San Jose Creek WRPs, under WRR Order No. 91-100, adopted by the Board on September 9, 1991. This order was amended on April 10, 2014, by Order No. R4-2009-0048-A-01.

Notwithstanding that segments located further downstream of the discharge are concrete-lined, the watershed supports a diversity of wildlife, particularly an abundance of avian species such as the *Least Bell's Vireo, Tricolored Blackbird, and California Gnatcatcher.* Aquatic life, such as fish, invertebrates, and algae exist in the San Gabriel River Watershed.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

Effluent limitations contained in the existing Order for discharges from Discharge Points 001, 002 and 004 (Monitoring Location EFF-001) and representative monitoring data from the term of the previous Order as reported in the ROWD, are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation (Order No. R4-2009-0077)			Monitoring Data (From 01/01/2009 To 08/31/2013)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
$BOD_5$20°C	mg/L	20	30	45	8	8	8
Total Suspended Solids (TSS)	mg/L	15	40	45	4.7	4.7	4.7
Oil and Grease	mg/L	10	--	15	<5	--	<5
Settleable Solids	ml/L	0.1	--	0.3	<0.1	--	< 0.1
Residual Chlorine	mg/L	--	--	0.1	<0.05	--	2.2
Total Dissolved Solids	mg/L	750	--	--	638	--	638
MBAS	mg/L	0.5	--	--	<0.1	--	<0.1