CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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ORDER NO. R4-2011-0196
NPDES NO. CA0056227

WASTE DISCHARGE REQUIREMENTS FOR CITY OF LOS ANGELES DONALD C. TILLMAN WATER RECLAMATION PLANT DISCHARGE TO LOS ANGELES RIVER VIA DISCHARGE OUTFALLS

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	City of Los Angeles
Name of Facility	Donald C. Tillman Water Reclamation Plant
Facility Address	6100 Woodley Avenue
	Van Nuys, CA 91406
	Los Angeles County
The United States Environmental Protection Agency and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the City of Los Angeles from the Discharge Point of the Donald C. Tillman Water Reclamation Plant identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001 (Inactive but available)	Tertiary treated wastewater	34° 10' 20.4" N	118° 28' 52.0" W	Los Angeles River
002	Tertiary treated wastewater	34° 11' 09.0" N	118° 29' 40.0" W	Los Angeles River via Lake Balboa, Hayvenhurst Channel, and Bull Creek
003	Tertiary treated wastewater	34° 10' 39.6" N	118° 28' 24.2" W	Los Angeles River via Wildlife Lake and Haskell Channel
008	Tertiary treated wastewater	34° 09' 53.3" N	118° 28' 18.5" W	Los Angeles River

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	December 8, 2011
This Order shall become effective on:	February 3, 2012
This Order shall expire on:	November 10, 2016
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on December 8, 2011.

Samuel Unger, Executive Officer

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I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	City of Los Angeles
Name of Facility	Donald C. Tillman Water Reclamation Plant
Facility Address	6100 Woodley Avenue
	Van Nuys, CA 91406
	Los Angeles County
Facility Contact, Title, and Phone	Hiddo Netto, Plant Manager, (818) 778-4121
Mailing Address	1149 S. Broadway 9th Floor, Los Angeles, CA 90015
Type of Facility	Publicly-Owned Treatment Works
Facility Design Flow	80 Million Gallons per Day

II. FINDINGS

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

A. Background. The City of Los Angeles (hereinafter City or Discharger) is currently discharging pursuant to Order Nos. R4-2006-0091[1] and R4-2010-0060[2] and National Pollutant Discharge Elimination System (hereinafter NPDES) Permit No. CA0056227. The Discharger submitted a Report of Waste Discharge (ROWD), dated April 18, 2011**,** and applied for an NPDES permit renewal to discharge up to 80 millions gallons per day (MGD) of tertiary treated wastewater from the Donald C. Tillman Water Reclamation Plant[3] (hereinafter Tillman WRP or Facility), a Publicly-Owned Treatment Works (POTW). The additional ROWD information requested by Regional Water Board staff was received on April 26, 2011. During site visit conducted on May 2, 2011, Regional Water Board staff observed operations and collected additional data in order to develop permit limitations and conditions. The

[1] Order No. R4-2006-0091, adopted by this Regional Water Board on December 14, 2006, regulates the tertiary-treated wastewater discharged from the Tillman WRP.

[2] On January 25, 2010, the Regional Water Board entered into a settlement agreement with the City in an effort to resolve lawsuits and petitions challenging the 1998 Permit (Order No. 98-046) and 2006 Permit (Order No. R4-2006-0091). The settlement agreement required that a variety of negotiated modifications to Order No. R4-2006-0091 be brought before the Regional Water Board for its consideration. The settlement agreement did not bind the Regional Water Board's judgment in consideration of those modifications, but the modifications did reflect staff recommendations. Order No. R4-2010-0060 adopted by this Regional Water Board on April 1, 2010, modifying Order No. R4-2006-0091, was the result of the public hearing on staff's proposals pursuant to the settlement agreement.

[3] The Tillman WRP consists of two identical treatment trains, each with a dry weather average design capacity of 40 MGD, for a total 80 MGD.

Regional Water Board issued a letter to the Discharger on July 25, 2011, indicating that the application for the NPDES permit renewal and ROWD were complete.

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

B. Facility Description. The Discharger owns and operates the Tillman WRP, located in the Sepulveda Flood Control Basin. The treatment system consists of grit removal, screening, flow equalization, primary sedimentation, nitrification and denitrification (NDN[4]) activated sludge biological treatment with fine pore aeration, secondary clarification, coagulation, aqua diamond cloth filtration, disinfection by chlorination with the addition of ammonium hydroxide, and dechlorination. No facilities are provided for solids processing at the Tillman WRP. Solids from the Tillman WRP are returned to the collection system for processing at the Hyperion Treatment Plant. Solids returned to the sewer consist of grit, primary and secondary sludge and skimmings, and filter backwash (approximately 10 MGD). Attachment B depicts schematics of the Tillman WRP wastewater flows. The dechlorinated wastewater is discharged from Discharge Points[5] 001, 002, 003, and 008 (see Table 2 of Order and Fact Sheet II.B. (Attachment F) for more information) to the Los Angeles River, a water of the United States within the Los Angeles River Watershed. Attachment C provides a map of the area.

The Tillman WRP is one of the three upstream WRPs in the Hyperion Service Area. The other two upstream WRPs are the Los Angeles-Glendale WRP and the Burbank WRP. The City maintains and operates the Hyperion Treatment System which collects, treats, and processes municipal wastewater from domestic, commercial, and industrial sources from the entire City (except the Terminal Island Service Area surrounding the Los Angeles Harbor area) and from a number of other cities and agencies under contractual agreements, including the communities of Chatsworth, Granada Hills, Mission Hills, Northridge, Pacoima, Tarzana, Van Nuys, Sylmar, Woodland Hills, Canoga Park; the City of San Fernando; the Las Virgenes Municipal Water District; Veterans Memorial Park; and the Triunfo Canyon Sanitation District. Sewage enters the Tillman WRP via both the Additional Valley Outfall Relief Sewer (AVORS) and the East Valley Interceptor Sewer (EVIS). In case of the Tillman WRP operational problems or a need for the Tillman WRP shutdown, wastewater can be

[4] In order to achieve compliance with the ammonia water quality objectives (WQOs) specified in the *Water Quality Control Plan for the Los Angeles Region* (Basin Plan), the City began to test different NDN treatments, including Modified Ludzack-Ettinger (MLE) Process, Enhanced Modified Ludzack-Ettinger (eMLE) Process, and Step-Feed Process. The City completed construction of the NDN treatment facility in September 2007, and took 90 days to optimize operation of the NDN facilities.
For the nitrification process, there are two steps for ammonia being oxidized into nitrate.
Step 1: Ammonia → Nitrite
Step 2: Nitrite → Nitrate
For the denitrification process, nitrate is through a redox reaction and becomes nitrogen.
Nitrate → Nitrogen

[5] The Discharge Points 001, 002, and 003 are located within Los Angeles River Reach 5 Sepulveda Basin. The Discharge Point 008 is located within Los Angeles River Reach 4. All these Discharge Points are within Hydraulic Unit 405.21.

diverted back to the AVORS for treatment at the Hyperion Treatment Plant. There are approximately 4 million people living in the Hyperion Service Area with approximately 1.1 million people in the San Fernando Valley, which is served by the Tillman WRP. For Fiscal Year 2010, industrial wastewater represented approximately 15% of the total flow to the Facility.

C. Legal Authorities. This Order is 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 California Water Code (CWC) section 13370. It shall serve as a NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the CWC section 13260.

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on the application, monitoring reports, and other available information. The Fact Sheet, which contains background information and rationale for requirements in this Order, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through P are also incorporated into this Order.

E. California Environmental Quality Act (CEQA). Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

F. Technology-based Effluent Limitations (TBELs). Section 301(b) of the CWA and implementing USEPA permit regulations at 122.44, title 40 of the Code of Federal Regulations (CFR), require that permits include conditions meeting applicable technology-based requirements, at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR part 133 and 40 CFR part 125.3. A detailed discussion of the TBELs development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations (WQBELs). Section 301(b) of the CWA and 40 CFR part 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirements, more stringent than secondary treatment requirements that are necessary to meet applicable water quality standards. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements or other provisions, is discussed in section IV.C.2. of the Fact Sheet.

40 CFR part 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the

pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR part 122.44(d)(1)(vi).

H. Water Quality Control Plan (Basin Plan). The Regional Water Board adopted a Basin Plan on June 13, 1994, that designates beneficial uses, establishes WQOs, and contains implementation programs and policies to achieve those WQOs for all waters addressed through the Basin Plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the receiving waters are as follows:

Table 5A. Basin Plan Beneficial Uses – Surface Waters

Discharge Points	Receiving Water Name	Beneficial Use(s)
001 002 003 008	Los Angeles River Upstream to Figueroa Street (Hydro. Unit No. 405.21)	Existing: ground water recharge (GWR); water contact recreation (REC-1); non-contact water recreation (REC-2); warm freshwater habitat (WARM); wildlife habitat (WILD); and wetland habitat[6] (WET). Potential: Municipal and domestic water supply[7] (MUN), and industrial service supply (IND).
	Los Angeles River Figueroa Street to Carson Street (Hydro. Unit No. 405.15)	Existing: GWR; REC-1[8]; REC-2; and WARM. Potential: MUN[8]; IND; and WILD.
	Los Angeles River Carson Street to Estuary (Hydro. Unit No. 405.12)	Existing: GWR; REC-1[8]; REC-2; WARM; marine habitat (MAR); WILD; and rare, threatened, or endangered species (RARE). Potential: MUN[7]; IND; industrial process supply (PROC); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN); and shellfish harvesting[8]. (SHELL).
	Los Angeles River Estuary (Hydro. Unit No. 405.12)	Existing: IND; navigation (NAV); REC-1; REC-2; commercial and sport fishing (COMM); estuarine habitat (EST); MAR; WILD; RARE[9]; MIGR[10]; SPWN[10]; and WET[6]. Potential: SHELL.

[6] Waterbodies designated as WET may have wetlands habit associated with only a portion of the waterbody. Any regulatory action would require a detailed analysis of the area.

[7] The potential municipal and domestic supply beneficial uses for the water body is consistent with State Water Board Order No. 88-63 and Regional Water Board Resolution No. 89-003; however, the Regional Water Board has only conditionally designated the MUN beneficial use and at this time cannot legally establish effluent limitations designed to protect the conditional designation.

[8] Access prohibited by Los Angeles County Department of Public Works.

[9] One or more rare species utilize estuaries and coastal wetlands for foraging and/or nesting.

[10] Aquatic organisms utilize estuary and coastal wetland, to a certain extent, for spawning and early development. This may include migration into areas, which are heavily influenced by freshwater inputs.

Table 5B. Basin Plan Beneficial Uses – Ground Waters

Discharge Point	Receiving Water Name	Beneficial Use(s)
001 002 003 008	San Fernando Basins (East and West of Highway 405) – DWR Basin No.[11] 4-12	Existing: MUN; IND; PROC; and, agricultural supply (AGR).
	Los Angeles Coastal Plain (Central and West Basins) – DWR Basin No.[11] 4-11	Existing: MUN; IND; PROC; and AGR.

Requirements of this Order implement the Basin Plan and subsequent amendment.

1. **Ammonia WQOs –** Table 3-1 through Table 3-4 of the 1994 Basin Plan provide WQOs for ammonia to protect aquatic life. Those ammonia WQOs were revised on April 25, 2002, by the Regional Water Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Lif*e. The ammonia Basin Plan amendment was approved by the State Water Board, Office of Administrative Law (OAL), and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. On December 1, 2005, Resolution No. 2005-014, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life,* was adopted by the Regional Water Board. Resolution No. 2005-014 was approved by the State Water Board, OAL, and USEPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively. On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005, *Amendments to the Water Quality Control Plan-Los Angeles Region - To Incorporate Site-Specific Objectives for Select Inland Surface Waters in the San Gabriel River, Los Angeles River and Santa Clara River Watersheds.* This amendment to the Basin Plan incorporates site-specific 30-day average objectives for ammonia along with corresponding site-specific early life stage implementation provisions for select waterbody reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River watersheds. The State Water Board, OAL, and USEPA approved this Basin Plan amendment on January 15, 2008, May 12, 2008, and March 30, 2009, respectively.

2. **Chloride WQOs –** Table 3-8 of the 1994 Basin Plan contains WQOs for chloride. However, the chloride WQOs for some waterbodies were revised by the Regional Water Board on January 27, 1997, with the adoption of Resolution No. 97-02, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Policy for Addressing Levels of Chloride in Discharges*

[11] Basins are numbered according to DWR (California Department of Water Resources) Bulletin No. 118-80 (DWR, 1980).

of Wastewaters. Resolution No. 97-02 was approved by the State Water Board, OAL, and USEPA on October 23, 1997, January 9, 1998, and February 5, 1998, respectively, and is now in effect. The chloride WQO was revised from 150 mg/L to 190 mg/L, for the Los Angeles River between Figueroa Street and Los Angeles River Estuary (Willow Street) and between Sepulveda Flood Control Basin and Figueroa Street (including Burbank Western Channel). The final effluent limitations for chloride prescribed in this Order are based on the revised chloride WQOs and apply at the end of pipe.

3. Integrated Report – The State Water Board proposed the California 2008-2010 Integrated Report from a compilation of the adopted Regional Water Boards' Integrated Reports containing 303(d) List of Impaired Waters and 305(b) Reports following recommendations from the Regional Water Boards and information solicited from the public and other interested parties. The Regional Water Boards' Integrated Reports were used to revise their 2006 303(d) List. On August 4, 2010, the State Water Board adopted the California 2008-2010 Integrated Report. On November 12, 2010, the USEPA approved California 2008-2010 Integrated Report Section 303(d) List of Impaired Waters requiring TMDLs for the Los Angeles Region.

The Los Angeles River and its tributaries are in California 2008-2010 Integrated Report. The following pollutants were identified as impacting the receiving waters:

a. **Los Angeles River Estuary (Queensway Bay) –** Calwater Watershed 40512000 (Hydro. Unit No. 405.12 in Basin Plan)

Pollutants – Chlordane (sediment) [12] , DDT (dichlorodiphenyl trichloroethane) (sediment)[12], PCBs (polychlorinated biphenyls) (sediment)[12], sediment toxicity[12], and trash[13]

b. **Los Angeles River Reach 1 (Estuary to Carson Street) –** Calwater Watershed 40512000 (Hydro. Unit No. 405.12 in Basin Plan)

Pollutants – Ammonia[13], cadmium[13], coliform bacteria[12], copper[13], cyanide[12], diazinon[12], lead[13], nutrients (algae)[13], trash[13], zinc[13], and pH[13]

c. **Los Angeles River Reach 2 (Carson Street to Figueroa Street) –** Calwater Watershed 40515000 (Hydro. Unit No. 405.15 in Basin Plan)

Pollutants – Ammonia[13], coliform bacteria[12], copper[13], lead[13], nutrients (algae)[13], oil[12], and trash[13]

d. **Angeles River Reach 3 (Figueroa Street to Riverside Drive) –** Calwater Watershed 40521000 (Hydro. Unit No. 405.21 in Basin Plan)

[12] This pollutant requires TMDL.
[13] A TMDL has been approved for this pollutant, which has being addressed by USEPA.

Pollutants – Ammonia[13], copper[13], lead[13], nutrients (algae)[13], and trash[13]

e. **Los Angeles River Reach 4 (Riverside Drive to Sepulveda Dam) –** Calwater Watershed 40521000 (Hydro. Unit No. 405.21 in Basin Plan)

Pollutants – Ammonia[13], coliform bacteria[12], copper[13], lead[13], nutrients (algae)[13], and trash[13]

f. **Los Angeles River Reach 5 (within Sepulveda Basin) –** Calwater Watershed 40521000 (Hydro. Unit No. 405.21 in Basin Plan)

Pollutants – Ammonia[13], copper[13], lead[13], nutrients (algae)[13], oil[12], and trash[13]

4. TMDLs – A TMDL is a determination of the amount of a pollutant from point, nonpoint, and natural background sources plus a margin of safety, which may be discharged to a water quality-limited water body. Section 303(d) of the CWA established the TMDL process. The statutory requirements are codified at 40 CFR part 130.7. TMDLs must be developed for the pollutants of concern which impact the water quality of water bodies on the 303(d) list. According to the TMDL schedule under an amended consent decree (Heal the Bay, Santa Monica Bay Keeper, et al. v. Browner, et al. (March 22, 1999)), all TMDLs for the Los Angles River have been approved by the Regional Water Board.

a. **Nitrogen Compounds TMDL –** On July 10, 2003, the Regional Water Board adopted Resolution No. 2003-009, *Amendment to the Basin Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River (LA River Nitrogen Compounds TMDL*). On November 19, 2003, the State Water Board approved the *LA River Nitrogen Compounds TMDL*. On December 4, 2003, the Regional Water Board revised the *LA River Nitrogen Compounds TMDL* by adopting Resolution No. 2003-016*, Revision of Interim Effluent Limitations for Ammonia in the Amendment to the Water Quality Control Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River*. Resolution No. 2003-016 only revised the portion of the *LA River Nitrogen Compounds TMDL* containing interim limitations for total ammonia as nitrogen for the Glendale and Tillman WRPs. All other portions of the TMDL remained unchanged. The *LA River Nitrogen Compounds TMDL* went into effect on March 23, 2004, when the Regional Water Board filed the Certificate of Fee Exemption with the California Department of Fish and Game.

On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005, *Amendments to the Water Quality Control Plan - Los Angeles Region-To Incorporate Site-Specific Objectives for Select Inland Surface Waters in the San Gabriel River, Los Angeles River and Santa Clara River Watersheds.* This amendment to the Basin Plan incorporates site-specific 30-day average objectives for ammonia along with corresponding site-

specific early life stage implementation provisions for select waterbody reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River watersheds. In accordance with Implementation Table, Task 8 of the *LA River Nitrogen Compounds TMDL*, "…If a site specific objective is adopted by the Regional Board, and approved by relevant approving agencies, this TMDL will need to be revised, readopted, and reapproved to reflect the revised water quality objectives."

b. **Trash TMDL –** On September 19, 2001, the Regional Water Board adopted Resolution No. 2001-013, *Amendment to the Basin Plan for the Los Angeles Region to Incorporate a TMDL for Trash in the Los Angeles River (LA River Trash TMDL)*.

The LA River Trash TMDL was subsequently approved by the State Water Board (Resolution No. 02-038) on February 19, 2002, and by OAL on July 16, 2002. However, the State Water Board and OAL failed to approve the *LA River Trash TMDL* in time to meet the relevant federal consent decree; therefore, USEPA promulgated its own Trash TMDL in order to meet the consent decree timeline of March 23, 2002. Then, upon approval of the Regional Water Board's *LA River Trash TMDL* by OAL, USEPA approved the Regional Water Board's *Los Angeles River Trash TMDL* on August 1, 2002, and deemed it to have superseded the Trash TMDL promulgated by USEPA.

The City and the County of Los Angeles both filed petitions and complaints in the Los Angeles Superior Court challenging the *LA* River *Trash TMDL*. Subsequent negotiations led to a settlement agreement, which became effective on September 23, 2003. Twenty-two other cities sued the Regional Water Board to set aside the TMDL, on several grounds. On January 26, 2006, the Court of Appeal rejected the claims litigated by the cities but found that the Regional Water Board did not adequately complete the environmental checklist. The Court therefore affirmed a writ of mandate issued by the trial court ordering the Regional Water Board to set aside and not implement the *LA River Trash TMDL* until it had been brought into compliance with CEQA.

On June 8, 2006, the Regional Water Board set aside the *LA River Trash TMDL* and Resolution No. 01-013 which established it, pursuant to the writ of mandate. On August 9, 2007, the Regional Water Board approved the *LA River Trash TMDL* based on a revised CEQA analysis as Resolution No. 2007-012. The *LA River Trash TMDL* was approved by the State Water Board on April 15, 2008, and USEPA on July 24, 2008. The *LA River Trash TMDL* became effective on September 23, 2008, when the Certificate of Fee Exemption was filed with the California Department of Fish and Game.

c. **Metals TMDL –** On June 2, 2005, the Regional Water Board adopted Resolution No. R05-006, *Amendment to the Water Quality Control Plan for*

the Los Angeles Region to Incorporate a Total Maximum Daily Load for Metals for the Los Angeles River and its Tributaries (*LA River Metals TMDL*). The *LA River Metals TMDL* contains WLAs for cadmium, copper, lead, and zinc. On October 20, 2005, the State Water Board approved the *LA River Metals TMDL* by adopting Resolution No. 2005-0077. On December 9, 2005 and December 22, 2005, respectively, OAL and USEPA approved the *LA River Metals TMDL*. It went into effect on January 11, 2006, when the Certificate of Fee Exemption was filed with the California Department of Fish and Game.

On February 16, 2006, the cities of Bellflower, Carson, Cerritos, Downey, Paramount, Santa Fe Springs, Signal Hill, and Whittier (Cities) filed a petition for a writ of mandate challenging many aspects of the *LA River Metals TMDL* and the *Ballona Creek Metals TMDL*. (*Cities of Bellflower et al v. SWRCB et al,* Los Angeles Superior Court No. BS101732.) On May 24, 2007, the Los Angeles County Superior Court adopted the third of three rulings with respect to the writ petition. Collectively, all challenges to the *LA River Metals TMDL* were rejected, except for one CEQA claim. The Court ruled that the State and Regional Water Boards (Water Boards) should have adopted and circulated an alternatives analysis that analyzed alternatives to the project. The Court issued its writ of mandate, directing the Water Boards to adopt an alternative analysis and to reconsider the *LA River Metals TMDL* accordingly.

After considering the alternative analysis, the Regional Water Board found that the *LA River Metals TMDL* as originally proposed and adopted was appropriate. The Regional Water Board further found that nothing in the alternatives analysis nor any of the evidence generated presented basis for the Regional Water Board to conclude that it would have acted differently when it adopted the TMDLs had the alternative analysis been prepared and circulated at that time. Thus, on September 6, 2007, the Regional Water Board adopted Resolution No. R2007-014, which reestablished the *LA River Metals TMDL* in substantially its original form.

On May 7, 2009, the Regional Water Board adopted Resolution No. 09-003, which voided and set aside Resolution No. R05-006, as required by the writ of mandate in the matter of *Cities of Bellflower et al v. SWRCB*.

On May 6, 2010, the Regional Water Board adopted Resolution No. R10-003, an amendment to the Basin Plan to revise the *LA River Metals TMDL*. The amendment revises the TMDL to adjust the numeric targets for copper in Reaches 1-4 of the Los Angeles River and the Burbank Western Channel and the corresponding WLAs for the Tillman, Los Angeles-Glendale and Burbank WRPs based on a water effect ratio (WER). The revision includes language stating that regardless of the WER, the WRPs must perform at a level that can be attained by existing treatment technologies at the time of permit issuance, reissuance or modification. On April 19, 2011, the State Water Board adopted

Resolution No. 2011-0021, approving the revised *LA River Metals TMDL*. At this hearing, the State Water Board made it clear that should the performance of the facility's treatment technologies change for reasons beyond the facility's control, the permit may be reopened to revise the effluent limitations considering the applicability of the copper WER or other performance-based measure such that the effluent limitations ensure that effluent concentrations and mass discharges do not exceed the levels of water quality that can be attained by performance of this facility's treatment technologies existing at the time of permit issuance, reissuance, or modification. On July 27, 2011, *the LA River Metals TMDL* was approved by the OAL. The *LA River Metals TMDL* (Resolution No. R10-003) must still be approved by the USEPA before it becomes effective.

d. **Bacteria TMDL –** On July 8, 2010, the Regional Water Board adopted Resolution No. R10-007, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Indicator Bacteria in the Los Angeles River Watershed* (*LA River Bacteria TMDL*). The *LA River Bacteria TMDL* contains WLAs for Tillman, Los Angeles-Glendale, and Burbank WRPs, which are set equal to a 7-day median of 2.2 MPN/100 mL of E. coli and/or a daily max of 235 MPN/100mL to ensure zero days of allowable exceedances. No exceedances of the geometric mean TMDL numeric target of 126/100 mL E.coli are permitted. The *LA River Bacteria TMDL* must still be approved by the State Water Board, OAL, and USEPA before it becomes effective.

I. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. Approximately forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

J. State Implementation Plan (SIP). On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

K. Compliance Schedules and Interim Requirements. Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible

for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised WQO. This Order does not include compliance schedules and interim effluent limitations.

L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. (40 CFR part 131.21; 65 Fed. Reg. 24641 (April 27, 2000)) Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

M. Title 22 of the California Code of Regulations (Title 22). The California Department of Public Health established primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water.

These MCLs are codified in Title 22. The Basin Plan (Chapter 3) incorporates Title 22 primary MCLs by reference. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect. Title 22 primary MCLs have been used as the bases for effluent limitations in WDRs and NPDES permits to protect groundwater recharge beneficial use when that receiving groundwater is designated as MUN. Also, the Basin Plan specifies that "Groundwaters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses."

N. Stringency of Requirements for Individual Pollutants. This Order contains both TBELs and WQBELs for individual pollutants. The TBELs consist of restrictions on five-day biochemical oxygen demand at 20°C ($BOD_{5@20^{\circ}C}$), total suspended solids (TSS), pH, and percent removal of BOD and TSS. Restrictions on BOD, TSS, and pH are discussed in the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs have been scientifically derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable

standard pursuant to 40 CFR part 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and WQOs contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any WQOs and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR part 131.21(c)(1).

This Order contains pollutant restrictions that are more stringent than applicable federal requirements and standards. Specifically, this Order includes effluent limitations for $BOD_{5@20^{o}C}$ and TSS that are more stringent than applicable federal standards, but that are nonetheless necessary to meet numeric objectives or protect beneficial uses. The rationale for including these limitations is explained in Section IV.C.2.b. of the Fact Sheet.

O. Sources of Drinking Water Policy (SODW Policy). On May 19, 1988, the State Water Board adopted Resolution No. 88-63, *Sources of Drinking Water Policy*, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with State Water Board's SODW policy, on March 27, 1989, the Regional Water Board adopted Resolution No. 89-03, *Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans) – Santa Clara River Basin (4A)/ Los Angeles River Basin (4B).*

Consistent with Regional Water Board Resolution No. 89-03 and State Water Board Resolution No. 88-63, in 1994 the Regional Water Board conditionally designated all inland surface waters in Table 2-1 of the 1994 Basin Plan as existing, intermittent, or potential for Municipal and Domestic Supply (MUN). However, the conditional designation in the 1994 Basin Plan included the following implementation provision: "no new effluent limitations will be placed in WDRs as a result of these [potential MUN designations made pursuant to the SODW policy and the Regional Water Board's enabling resolution] until the Regional Water Board adopts [a special Basin Plan Amendment that incorporates a detailed review of the waters in the Region that should be exempted from the potential MUN designations arising from SODW policy and the Regional Water Board's enabling resolution]." On February 15, 2002, the USEPA clarified its partial approval (May 26, 2000) of the 1994 Basin Plan amendments and acknowledged that the conditional designations do not currently have a legal effect, do not reflect new water quality standards subject to USEPA review, and do not support new effluent limitations based on the conditional designations stemming from the SODW Policy until a subsequent review by the Regional Water Board finalizes the designations for these waters. This permit is designed to be consistent with the existing Basin Plan.

P. Antidegradation Policy. 40 CFR part 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal

antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of 40 CFR part 131.12 and State Water Board Resolution No. 68-16.

Q. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR part 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed in detail in the Fact Sheet, this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

R. Endangered Species Act (ESA). This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California ESA (Fish and Game Code sections 2050 to 2097) or the Federal ESA (16 United States Code (USC) sections 1531 to 1544). This Order requires compliance with effluent limitations, receiving water limitations, and other requirements to protect the beneficial uses of waters of the State. The discharger is responsible for meeting all requirements of the applicable ESA.

S. Monitoring and Reporting. 40 CFR part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and state requirements. This MRP is provided in Attachment E.

T. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR part 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR part 122.42 are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR part 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

U. Provisions and Requirements Implementing State Law. The provisions/requirements in subsection VI.C. of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

V. Notification of Interested Parties. The Regional Water Board has notified the Discharger 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 notification are provided in the Fact Sheet of this Order.

W. 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 of this Order.

THEREFORE, IT IS HEREBY ORDERED, that Order Nos. R4-2006-0091 and R4-2010-0060 are superseded upon the effective date of this Order 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 federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

A. Discharge of wastewater at locations 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 design capacity of 80 MGD. This prohibition is not applicable during wet weather storm events.

D. The Discharger 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, subdivision (l) and (m) of the CWC.

F. The discharge of any substance in concentrations toxic to animal or plant 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

1. Final Effluent Limitations – Effluent Transfer Station EFF-001A

a. The Discharger shall maintain compliance with the following effluent limitations with compliance measured at the Effluent Transfer Station EFF-001A as described in the attached MRP, CI-5695 (Attachment E):

Table 6. Effluent Limitations at Effluent Transfer Station EFF-001A

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
$BOD_{5@20^oC}$	mg/L	20	30	45	--	--
	lbs/day[14]	13,340	20,020	30,020	--	--
TSS	mg/L	15	40	45	--	--
	lbs/day[14]	10,010	26,690	30,020	--	--
pH	standard units	--	--	--	6.5	8.5
Oil and Grease	mg/L	10	--	15	--	--
	lbs/day[14]	6,670	--	10,010	--	--
Settleable Solids	ml/L	0.1	--	0.3	--	--
Total Residual Chlorine	mg/L	--	--	0.1[15]	--	--
	lbs/day[14]	--	--	66.8	--	--
Chloride	mg/L	190[16]	--	--	--	--
	lbs/day[14]	126,770	--	--	--	--
Total Dissolved Solids	mg/L	950[17]	--	--	--	--
	lbs/day[14]	633,840	--	--	--	--
Sulfate	mg/L	300[17]	--	--	--	--
	lbs/day[14]	200,160	--	--	--	--
MBAS	mg/L	0.5[18]	--	--	--	--
	lbs/day[14]	330	--	--	--	--

[14] The mass emission rates are based on the combined plant design flow rate of 80 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.

[15] Determination of compliance with the final effluent limitation 0.10 mg/L for total residual chlorine will be based solely on end of pipe grab samples.

[16] In accordance with the Resolution 97-02, adopted by the Regional Water Board on January 27, 1997, the chloride limitation has been increased from 150 to 190 mg/L.

[17] Based on Table 3-8 of the Basin Plan.

[18] Based on the secondary drinking water standard (CDPH 1992).

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Nitrate (as N)	mg/L	7.2[19]	--	--	--	--
Nitrite (as N)	mg/L	0.9[19]	--	--	--	--
Nitrate + Nitrite (as N)	mg/L	7.2[19]	--	--	--	--
Ammonia Nitrogen (as N)	mg/L	1.4[19]	--	4.2[19]	--	--
Cadmium[20] (wet[21] weather)	µg/L	3.4[22, 23]	--	8.4[22, 23]	--	--
	lbs/day[24]	2.3	--	5.6	--	--
Copper[20] (dry[25] and wet[21] weather)	µg/L	25[22, 23, 26]	--	31[22, 23, 26]	--	--
	lbs/day[24]	16	--	21	--	--
Lead[20] (dry[25] and wet[21] weather)	µg/L	9.0[22, 23]	--	14[22, 23]	--	--
	lbs/day[24]	6.0	--	9.3	--	--
Mercury[27]	µg/L	0.051[23]	--	0.15[23]	--	--
	lbs/day[24]	0.034	--	0.10	--	--
Selenium[27, 28]	µg/L	4.2[23]	--	7.8[23]	--	--
	lbs/day[24]	2.8	--	5.2	--	--
Zinc[20] (wet[21] weather)	µg/L	194[22, 23]	--	277[22, 23]	--	--
	lbs/day[24]	129	--	185	--	--
Cyanide[27]	µg/L	4.3	--	8.5	--	--
	lbs/day[24]	2.9	--	5.7	--	--

[19] This is the WLA, according to the *Nitrogen Compounds TMDL* Resolution No. 2003-009, adopted by the Regional Water Board on July 10, 2003. The WLA serves as the effluent concentration limitation for the discharge. It became effective on March 23, 2004.

[20] This constituent did not show numeric reasonable potential. The numeric limitations of this constituent is consistent with the SIP and the *LA River Metals TMDL* implementation procedure. Attachment J also shows the summary of calculation procedures. Calculating end of pipe effluent limitations will ensure that the in-stream concentrations of each metal meet water quality standards.

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

[22] Hardness value of 246 mg/L from the *LA River Metal TMDL* was used to assess compliance with CTR criteria.

[23] Concentration expressed as total recoverable.

[24] The mass emission rates are based on the combined plant design flow rate of 80 MGD, and are calculated as follows: Flow (MGD) x Concentration (µg/L) x 0.00834 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations for cadmium, copper, lead, and zinc shall not apply, and concentration limitations will provide the only applicable effluent limitations.

[25] Dry weather effluent limitations apply when the maximum daily flow in the River is less than 500 cfs at the LA River Wardlow gage station.

[26] The Site-Specific Translator of 0.74 is used to convert copper chronic criterion.

[27] This constituent shows reasonable potential.

[28] Selenium concentrations in receiving water were greater than its WQO of 5 µg/L. Detailed discussions and calculations are found in the Fact Sheet, section IV.C.4.c.

2. Other Effluent Limitations Applicable to EFF-001A

a. The average monthly percent removal of $BOD_{5@20^{o}C}$ 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. Radioactivity of the wastes discharged shall not exceed the limits specified in title 22, chapter 15, article 5, section 64443, California Code of Regulations, or subsequent revisions.

d. 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 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.

e. To protect the underlying ground water basins, pollutants shall not be present in the wastes discharged at concentrations that pose a threat to ground water quality.

f. Acute Toxicity Limitation:

i. The acute toxicity of the effluent shall be such that:

(i) the average survival in the undiluted effluent for any three (3) consecutive 96-hour static renewal bioassay tests shall be at least 90%, and

(ii) no single test producing less than 70% survival.

ii. If either of the above requirements IV.A.2.f.i.(i) or IV.A.2.f.i.(ii) is not met, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that results of a failing acute toxicity test are received by the Discharger within 24 hours of completion of the test and the additional tests shall begin within 5 business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing. However, if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

iii. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately implement Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.

iv. The Discharger shall conduct acute toxicity monitoring as specified in Attachment E - MRP.

g. Chronic Toxicity Trigger and Requirements:

i. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

$$TU_c = \frac{100}{NOEC}$$

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 monthly median of 1.0 TU_c 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 tests results exceed 1.0 TU_c, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in Attachment E – MRP, Section V.D.

iv. The Discharger shall conduct chronic toxicity monitoring as specified in Attachment E – MRP.

3. Final Effluent Limitations – Effluent Transfer Station EFF-001B

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 the median number of total coliform bacteria in the disinfected effluent does not exceed an MPN or CFU of 2.2 per 100 milliliters, and the number of total coliform bacteria does not exceed an MPN or CFU of 23 per 100 milliliters in more than one sample within any 30-day period. No sample shall exceed an MPN or CFU of 240 total coliform bacteria per 100 milliliters. The median value shall be determined from the bacteriological results of the last seven (7) days for which an analysis has been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and disinfection processes.

B. Reclamation Specifications

1. Current Reclaimed Project for Irrigation & Industrial Use – The production, distribution, and reuse of recycled water are presently regulated under WDRs Order No. R4-2007-0008 and Water Recycling Requirements Order No. R4-2007-0009, both adopted by this Regional Water Board on January 11, 2007.

2. Water Recycling Requirements for Groundwater Recharge – The City is currently developing a master plan for the use of recycled water with a goal of recharging up to 30,000 acre feet per year of recycled water, treated with advanced wastewater treatment facilities, into the San Fernando Groundwater Basin. The master plan is not yet completed and is considering the use of other spreading facilities and not just the Hansen Spreading Grounds. In addition, the final plan may change based on California Department of Public Health requirements or the outcome of the environmental review process.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on WQOs contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in Los Angeles River:

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 5^0F above the natural temperature and shall not be raised above 86^0F 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 86^0F 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 fecal coliform 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.

        ii. Fecal coliform density shall not exceed 200/100 mL.

    b. Single Sample Limits

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

        ii. Fecal coliform density shall not exceed 400/100 mL.

5. 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%.

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

7. 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.

8. 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.

9. The wastes discharged shall not contain substances that result in increases in $BOD_{5@20^{\circ}C}$, which adversely affect the beneficial uses of the receiving waters.

10. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

11. The wastes discharged shall not cause the receiving waters to contain any substance in concentrations that adversely affect any designated beneficial use.

12. The wastes discharged shall not alter the natural taste, odor, and color of fish, shellfish, or other surface water resources used for human consumption.

13. The wastes discharged shall not result in problems due to breeding of mosquitoes, gnats, black flies, midges, or other pests.

14. The wastes discharged shall not result in visible floating particulates, foams, and oil and grease in the receiving waters.

15. The wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; nor cause aesthetically undesirable discoloration of the receiving waters.

16. 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.

17. Acute Toxicity Receiving WQOs

    a. There shall be no acute 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.

    c. The acute toxicity of the receiving water, at the Station RSW-LATT630 located downstream of the discharge, shall be such that: (i) the average survival in the undiluted receiving water for any three (3) consecutive 96-hour static, static-renewal, or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival. Static-renewal bioassay tests may be used, as allowed by the most current USEPA test method for measuring acute toxicity.

    d. If the upstream acute toxicity of the receiving water is greater than the downstream acute toxicity but the effluent acute toxicity is in compliance, the acute toxicity accelerated monitoring in the receiving water specified in MRP Section V.A.2.d. does not apply.

18. Chronic Toxicity Receiving WQO

    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.

    c. If the chronic toxicity in the receiving water at the monitoring station(s) immediately downstream of the discharge, exceeds the monthly median of 1.0 TU_c trigger in a critical life stage test and the toxicity cannot be attributed to upstream toxicity, as assessed by the Discharger, then the Discharger shall immediately implement an accelerated chronic toxicity

testing according to MRP CI 5695, section V.B.3. If two of the six tests exceed a 1.0 TU_c trigger, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan.

d. If the chronic toxicity of the receiving water upstream of the discharge is greater than the downstream and the TUc of the effluent chronic toxicity test is less than or equal to a 1.0 TU_c trigger, then accelerated monitoring need not be implemented.

B. Groundwater Limitations

The discharge shall not cause the underlying groundwater to be degraded, exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

VI. PROVISIONS

A. Standard Provisions

1. Standard Provisions

The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

2. Regional Water Board Standard Provisions

The Discharger shall comply with the Regional Water Board-specific Standard Provisions as follows:

a. Neither the treatment nor the discharge of pollutants shall create 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 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 discharger from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation under authority preserved by section 510 of the CWA.

h. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities or penalties to which the discharger is or may be subject to under section 311 of the CWA.

i. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction, including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

j. Discharge of wastes to any point other than specifically described in this Order is prohibited, and constitutes a violation thereof.

k. The Discharger 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 CWA and amendments thereto.

l. 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.

m. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.

n. 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.

o. 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.

p. The Discharger shall file with the Regional Water Board a ROWD at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

q. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger 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, copy of which shall be forwarded to the Regional Water Board.

r. 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. Violation of any of the provisions of the NPDES program or of any of the provisions of this Order may subject the violator to any of the penalties described herein, 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. Under CWC section 13387, 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 and is subject to a fine of not more than $25,000 or imprisonment of not more than two years, or both. For a second conviction, such a person shall be punished by a fine of not more than $25,000 per day of violation, or by imprisonment of not more than four years, or by both.

t. 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 permit.

u. The Discharger 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.

v. 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 Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

w. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily or instaneous effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Watershed Regulatory Section Chief at the Regional Water Board by telephone at (213) 576-6616, or electronically at dhung@waterboards.ca.gov, 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 non-compliance, and shall describe the measures being taken to remedy the current noncompliance, and the measures to prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

x. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (CWC section 1211)

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

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; and,

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 Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliances 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, monitoring requirements on 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 40 CFR parts 122 and 124 to include requirements for the implementation of the watershed protection management approach.

d. The Regional Water Board may modify, or revoke and reissue, this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/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 District 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.

g. This Order may be reopened and modified, to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of a WQO, the adoption of a site specific objective, or the adoption of a TMDL for the Los Angeles River Watershed.

h. 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.

i. This Order may be reopened and modified to revise the chronic toxicity effluent limitation, to the extent necessary, to be consistent with State Water Board precedential decisions, new policies, new laws, or new regulations.

j. This Order may be reopened to modify final effluent limits, if at the conclusion of necessary studies conducted by the Discharger, the Regional Water Board determines that dilution credits, attenuation factors, water effects ratio, site specific objectives, or metal translators are warranted.

k. This Order may be reopened to modify copper effluent limitations consistent with the *LA River Metals TMDL* and its implementation plan.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Special Study – Constituents of Emerging Concern in the Effluent

i. The Discharger shall conduct a special study to investigate the CECs in the effluent discharge. Within six months of the effective date of this Order, the Discharger shall submit to the Executive Officer a CECs Special Study Work Plan (Work Plan) for approval. Upon approval, the Discharger shall implement the Work Plan.

ii. The Discharger shall follow the requirements of the Special Study Work Plan as discussed in the MRP and the Fact Sheet.

b. Toxicity Reduction Requirements

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE workplan 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 workplan within 60 days from the date in which it was received, the workplan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal), or most current version as guidance. At a minimum, the initial investigation TRE workplan must contain the provisions in Attachment G. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

i. 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.

ii. 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,

iii. 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).

If the effluent toxicity test result exceeds the limitation, then the Discharger shall immediately implement accelerated toxicity testing that consists of six additional tests, approximately every two weeks, over a 12-week period. Effluent sampling for the first test of the six additional tests shall commence within 5 days of receipt of the test results exceeding the toxicity limitation.

If the results of any two of the six tests (any two tests in a 12-week period) exceed the limitation, the Discharger shall initiate a TRE.

If results of the implementation of the facility's initial investigation TRE workplan (as described above) indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 15 days of completion of the initial investigation TRE.

Detailed toxicity testing and reporting requirements are contained in Section V of the MRP, (Attachment E).

c. Treatment Facility Capacity

The Discharger 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 Discharger's senior administrative officer shall sign a letter, which transmits that report and certifies that the discharger'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 previously submitted, such report shall be filed within 90 days of the issuance of this Order.

3. Best Management Practices and Pollution Prevention

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

b. Spill Clean-Up Contingency Plan (SCCP)

Within ninety days of the effective date of this Order, the Discharger is required to submit a Spill Clean-up Contingency Plan, which describes the activities and protocols, to address clean-up of spills, overflows, and bypasses of untreated or partially treated wastewater from the Discharger'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 Discharger shall review and amend the Plan as appropriate after each spill from the facility or in the service area of the facility. The Discharger 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

Reporting protocols in the MRP, Attachment E, section IX.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 (RML) and Method Detection Limit (MDL) are provided in Attachment A. These reporting protocols and definitions are used in determining the need to conduct a Pollution Minimization Program (PMP) as follows:

The Discharger shall develop 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, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

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.

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, 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 priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

ii. Quarterly monitoring for the reportable priority 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 priority pollutant(s) in the effluent at or below the effluent limitation;

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

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

(i). All PMP monitoring results for the previous year;

(ii). A list of potential sources of the reportable priority pollutant(s);

(iii). A summary of all actions undertaken pursuant to the control strategy; and,

(iv). 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 chapter 3, subchapter 14, title 23 of the California Code of Regulations (section 13625 of the CWC).

b. The Discharger 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 discharger shall halt, reduce, or otherwise

control all discharges upon the reduction, loss, or failure of the primary source of power.

c. The Discharger 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 (Biosolids) Disposal Requirements (Not Applicable)

The Tillman WRP returns the sludge generated by the treatment process back to the sewer for transport and treatment at the Hyperion Plant.

b. Pretreatment Program Requirements – Refer to Attachment P

i. This Order includes the Discharger's Pretreatment Program as previously submitted to this Regional Water Board. 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.

ii. The Discharger shall enforce the requirements promulgated under sections 307(b), 307(c), 307(d), and 402(b) of the CWA with timely, appropriate, and effective enforcement actions. The Discharger shall require industrial users to comply with Federal Categorical Standards and shall initiate enforcement actions against those users who do not comply with the standards. The Discharger shall require industrial users subject to the Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

iii. The Discharger shall perform the pretreatment functions as required in 40 CFR part 403 including, but not limited to:

(i). Implement the necessary legal authorities as provided in 40 CFR part 403.8(f)(1);

(ii). Enforce the pretreatment requirements under 40 CFR parts 403.5 and 403.6;

(iii). Implement the programmatic functions as provided in 40 CFR part 403.8(f)(2); and,

(iv). Provide the requisite funding of personnel to implement the Pretreatment Program as provided in 40 CFR part 403.8(f)(3).

iv. The Discharger shall submit semiannual and annual reports to the Regional Water Board, with copies to the State Water Board, and USEPA Region 9, describing the Discharger's pretreatment activities over the period. The annual and semiannual reports shall contain, but not be limited to, the information required in the attached *Pretreatment Reporting Requirements* (Attachment P), or an approved revised version thereof. If the Discharger is not in compliance with any conditions or requirements of this Order, the Discharger shall include the reasons for noncompliance and shall state how and when the Discharger will comply with such conditions and requirements.

v. The Discharger shall be responsible and liable for the performance of all control authority pretreatment requirements contained in 40 CFR part 403, including subsequent regulatory revisions thereof. Where 40 CFR part 403 or subsequent revision places mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall complete the required actions within six months from the effective date of this Order or the effective date of 40 CFR part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the Regional Water Board, USEPA, or other appropriate parties, as provided in the CWA. The Regional Water Board or USEPA may initiate enforcement action against an industrial user for noncompliance with acceptable standards CWC.

The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (40 CFR part 122.41(e)). The Discharger 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 Attachment D, subsections I.D, V.E, V.H, and I.C., and the following section (Spill Reporting Requirements) of this Order.

c. Spill Reporting Requirements for POTWs

i. 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 have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. For spills, overflows, and bypasses from its POTW, the Discharger shall make notifications as required below:

(i). In accordance with the requirements of Health and Safety Code section 5411.5, the Discharger 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 not later than two (2) hours after becoming aware of the release.

(ii). In accordance with the requirements of CWC section 13271, the Discharger shall provide notification to the California Emergency Management Agency (Cal EMA) 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 (2) hours after becoming aware of the release. The California Code of Regulations, Title 23, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting releases to Cal EMA is (800) 852-7550.

(iii). The Discharger shall notify the Regional Water Board of any unauthorized release of sewage from its POTW that causes, or probably will cause, a discharge to any waters of the State as soon as possible, but not later than ***two (2)*** hours after becoming aware of the release. This initial notification does not need to be made if the Discharger has notified Cal EMA and the local health officer or the director of environmental health with jurisdiction over the affected water body. The phone number for reporting 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:

- The location, date and time of the release.
- The waters of the State that received or will receive the discharge.
- An estimate of the amount of sewage or other waste released and the amount that reached waters of the State at the time of notification.
- If ongoing, the estimated flow rate of the release at the time of the notification.
- The name, organization, phone number, and email address of the reporting representative.

vi. Monitoring

For spills, overflows, and bypasses reported under section VI.C.5.c.iii, the Discharger shall monitor as required below:

(i). To define the geographical extent of spill's impact the Discharger shall obtain grab samples (if feasible, accessible, and safe) for spills, overflows or bypasses of any volume that reach receiving waters. The Discharger shall analyze the samples for total and fecal coliforms or E. coli, and enterococcus, 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 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.

(ii). The Discharger shall obtain a grab sample (if feasible, accessible, and safe) for spills, overflows or bypasses of any volume that flowed to receiving waters, entered a shallow ground water aquifer, or have the potential for public exposure; and for all spills, overflows or bypasses of 1,000 gallons or more. The Discharger shall characterize the sample for total and fecal coliforms or E. coli, and enterococcus, and analyze relevant pollutants of concern depending on the area and nature of spills or overflows if feasible, accessible and safe.

vii. Twenty-four (24) Hour Reporting

The Regional Water Board initial notification required under section VI.C.5.c.i, above shall be followed by:

(i). As soon as possible, but not later than **twenty-four (24) hours** after becoming aware of an unauthorized discharge of sewage or other waste from its POTW to any waters of the State or of 1,000 gallons or more, the Discharger shall submit a report to the Regional Water Board by email at aanijielo@waterboards.ca.gov and the USEPA by telephone at (415) 972-3577 or facsimile at (415) 947-3545. If the discharge is 1,000 gallons or more, this report shall certify that the Cal EMA has been notified of the discharge in accordance with CWC section 13271 and section VI.C.5.c.i. This report shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water body has been notified of the discharge in accordance with Health and Safety Code section 5411.5 and section VI.C.5.c.i.

This report shall also include at a minimum the following information:

- Agency, NPDES No., Order No., and MRP CI No., if applicable.
- The location, date and time of the discharge.
- The waters of the State that received the discharge.
- A description of the level of treatment of the sewage or other waste discharged.
- An initial estimate of the amount of sewage or other waste released and the amount that reached waters of the State.
- The Cal EMA control number and the date and time that notification of the incident was provided to the Cal EMA.
- The name of the local health officer or director of environmental health notified (if contacted directly), the date and time of notification, and the method of notification (e.g., phone, fax, email).

(ii). A preliminary written report is due five (5) working days after disclosure of the incident reported under section VI.C.5.c.iii.(i). (submission to the Regional Water Board and USEPA of the log number of the SSO Database entry shall satisfy this requirement for a preliminary written report). Within 30 days after submitting this preliminary written report, the Discharger shall submit the final written report to the Regional Water Board and USEPA. The final written report shall document the information required in section VI.C.5.c.iv, below, and in the Standard Provisions of this Order 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 to the Regional Water Board.

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

viii. Records

The Discharger shall develop and maintain a record of all spills, overflows, or bypasses of raw or partially treated sewage from its POTW. This record shall be made available to the Regional Water Board and USEPA upon request and a 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 (including latitude and longitude);

(iii). The estimated volume of each spill, overflow, or bypass including gross volume, amount recovered and not recovered, and monitoring results required by section VI.C.5.c.ii;

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

(v). Whether each spill, overflow, or bypass entered a waters of the State and, if so, the name of the water body and whether it entered via a storm drain or other man-made conveyance;

(vi). Mitigation measures implemented;

(vii). 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.

ix. Activities Coordination

In addition, the Regional Water Board and USEPA expect that the POTW will coordinate its compliance activities for consistency and efficiency with other entities that have responsibilities under: this NPDES permit, including the Pretreatment Program; an MS4 NPDES permit that may contain spill prevention, sewer maintenance and reporting requirements; or the SSO WDR.

x. Consistency with Statewide General WDRs For Sanitary Sewer Systems (SSO WDR)

The CWA prohibits the discharge of pollutants from a point source to waters of the United States unless authorized under a NPDES permit. (33 USC sections 1311 and 1342). The State Water Board adopted Statewide General WDRs for Sanitary Sewer Systems, (Order No. 2006-0003-DWQ) on May 2, 2006, to provide a

consistent, Statewide regulatory approach to address Sanitary Sewer Overflows (SSOs). The SSO WDR requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO Database.

The requirements contained in this Order in sections VI.C.3.b. (Spill Clean-Up Contingency Plan), VI.C.4. (Construction, Operation and Maintenance Specifications), and VI.C.5.c. (Spill Reporting Requirements for POTWs) are intended to be consistent with the requirements of the SSO WDR and as outlined in the State Water Board letter dated September 9, 2008 (Modification to Monitoring and Reporting Program). The Regional Water Board recognizes that there may be some overlap between the provisions of this Order and SSO WDR requirements. The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of Order No. 2006-0003-DWQ). To encourage efficiency, the Regional Water Board will accept the documentation prepared by the Discharger under the SSO WDR for compliance purposes as satisfying the requirements in sections VI.C.3.b., VI.C.4., and VI.C.5.c provided that any additional or more stringent provisions enumerated in this Order are addressed. Pursuant to the SSO WDR, State Board Order No. 2006-0003-DWQ, 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.

Regardless of the coverage obtained under the SSO WDR, the Discharger's collection system is part of the Publicly Owned Treatment Works that is subject to this Order. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR part 122.41(e)), report any non-compliance (40 CFR parts 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)).

vii. The Discharger shall include a certification in the annual summary report (due according to the schedule in the Monitoring and Reporting Program) that states—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 Discharger's Preventative Maintenance Plan. Any deviations from or modifications to the Plan shall be discussed.

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 Discharger 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 "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger 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 Discharger 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 Discharger may be considered out of compliance for that calendar month. The Discharger 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

Discharger 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 Discharger 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 discharger 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 discharger 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 the 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 exceeds the MDEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day with respect to the MDEL.

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 discharger 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 discharger 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 discharger 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 discharger 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. Percent Removal.

The average monthly percent removal is the removal efficiency expressed in percentage across a treatment facility 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:

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

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

J. 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.

K. Compliance with Single Constituent Effluent Limitations

Dischargers 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 Reporting Level (RL).

L. Compliance with Effluent Limitations Expressed as a Sum of Several Constituents

Dischargers may be considered 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.

M. Mass Emission Rate.

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

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

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

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:

$$\text{Daily concentration} = \frac{1}{Q_t} \sum_{i=1}^{N} QiC\,i$$

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.

N. Bacterial Standards and Analysis.

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

   Geometric Mean = (C1 x C2 x … x Cn)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 , part 136 (revised March 12, 2007), 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 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.

O. Single Operational Upset

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

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

3. For purpose outside of CWC sections 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers 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 sections 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers 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) is 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) is 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 pollutants are 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.

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

Coefficient of Variation (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 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) are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

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) 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 USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

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 is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

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 California Water Code (CWC) 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 are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation is 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 is 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) means 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 is 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) 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 title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (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 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) are those sample results less than the laboratory's MDL.

Ocean Waters are the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Resources Control Board's (State Water Board's) California Ocean Plan.

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

Pollutant Minimization Program (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 Quality Control Board (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 CWC section 13263.3(d), shall be considered to fulfill the PMP requirements.

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 CWC 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 or Regional Water Board.

Reporting Level (RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. 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.

Satellite Collection System is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

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

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

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

where:

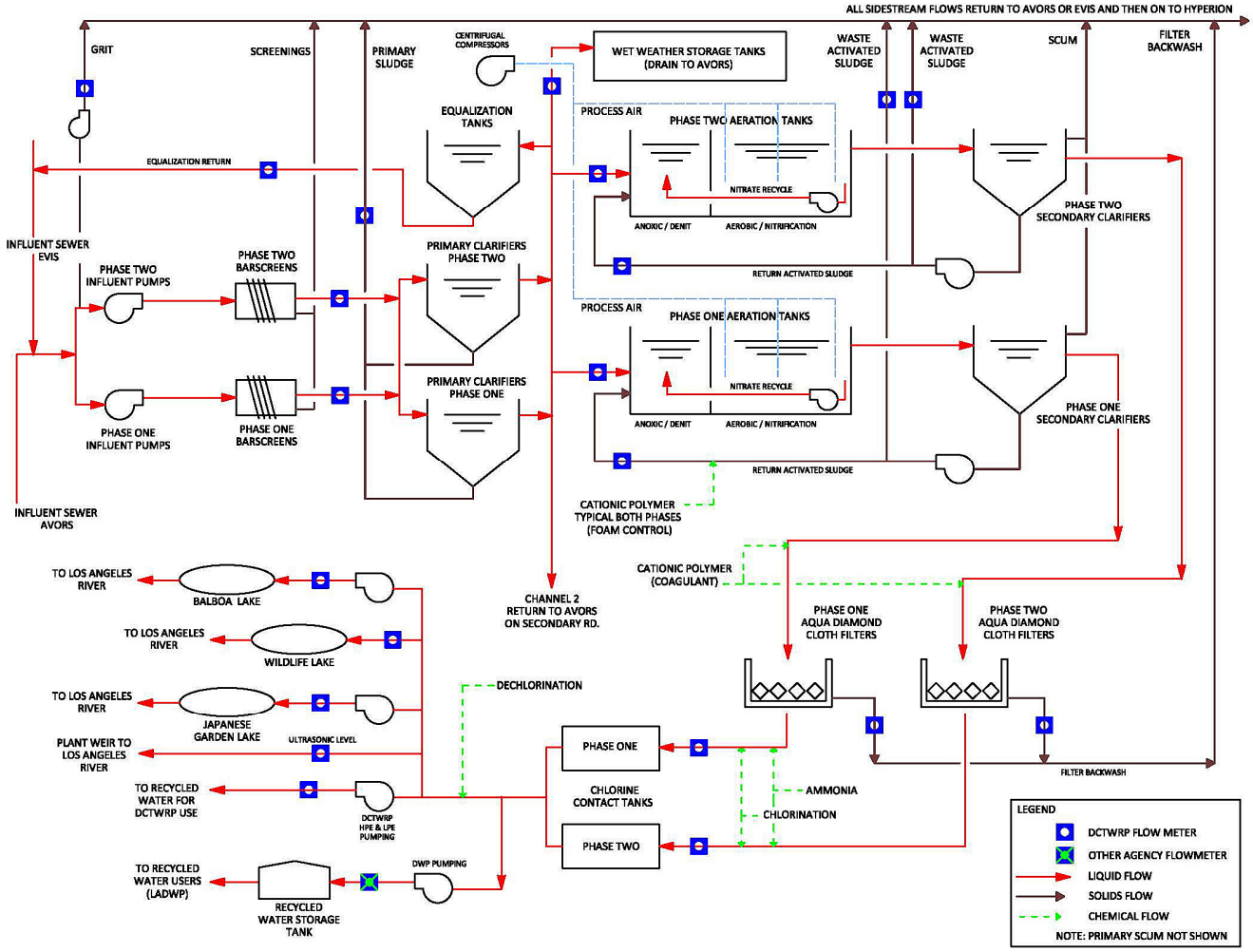
x is the observed value;

μ is the arithmetic mean of the observed values; and

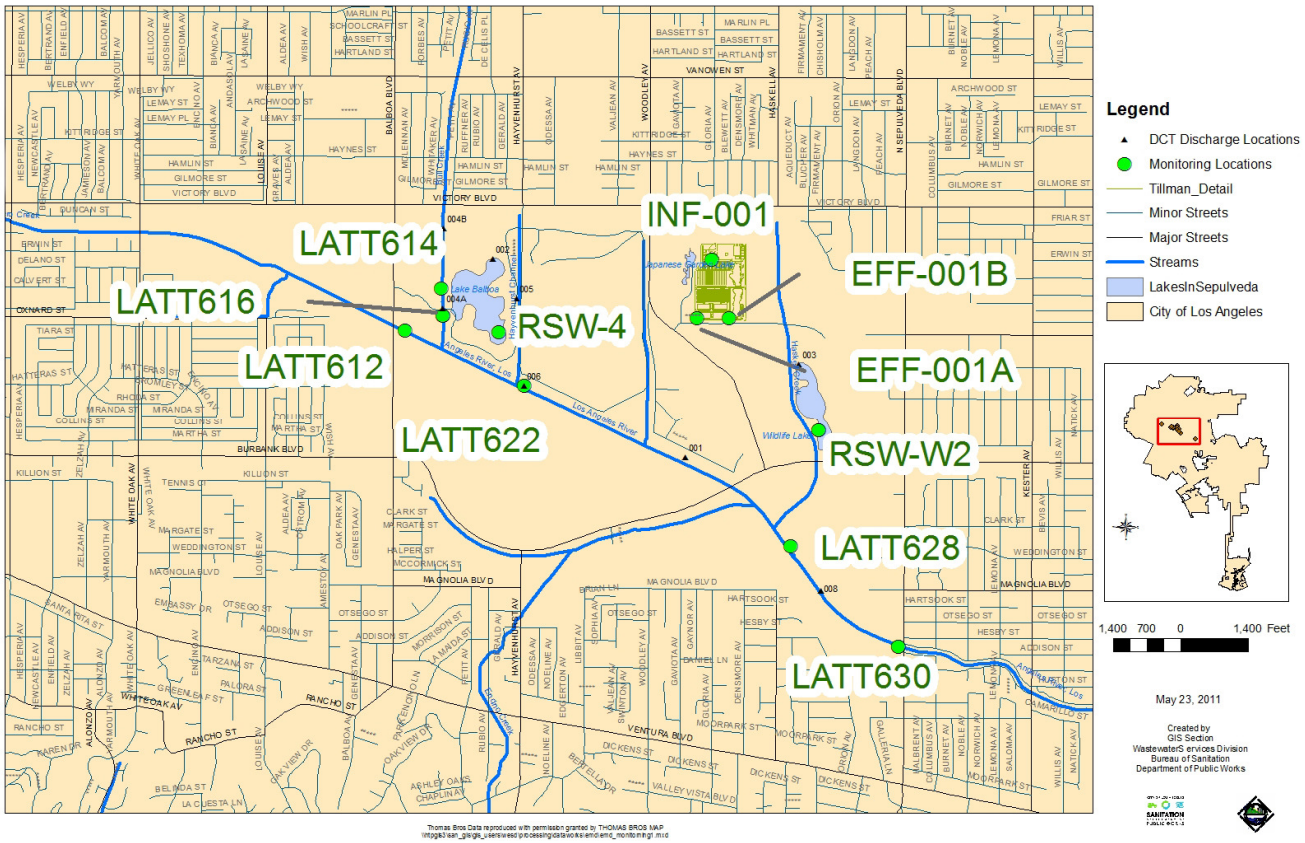
n is the number of samples.

Toxicity Reduction Evaluation (TRE) 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 – FLOW SCHEMATIC OF FACILITY



ATTACHMENT C – MAP



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR part 122.41(a).)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 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. (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 Discharger 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 Discharger 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 Discharger 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 Discharger 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 Discharger 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 Discharger shall allow the Regional Water Quality Control Board (Regional Water Board), State Water Resources Control Board (State Water Board), United States Environmental Protection Agency (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 the following (40 CFR part 122.41(i) and CWC section 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 CFR part 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR part 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR part 122.41(i)(3)); 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. (40 CFR part 122.41(i)(4).)

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 Discharger 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 Discharger for bypass, unless the following (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 Discharger 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 Discharger 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 Discharger 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 Discharger. 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 Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence of the following that (40 CFR part 122.41(n)(3)):

   a. An upset occurred and that the Discharger 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 Discharger 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 Discharger 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 Discharger 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 Discharger 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 Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger 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 Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC (40 CFR parts 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 under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR parts 122.41(j)(4) and 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger 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 the following items:

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 Discharger (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 Discharger 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 Discharger 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 section 13267.)

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. All permit applications 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 122.22(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 Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this 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 Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger 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 Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. The following notices are 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 Discharger'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 Discharger 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 General Order requirements. (40 CFR part 122.41(l)(2).)

H. Other Noncompliance

The Discharger 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 Discharger 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 Discharger 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 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTW)

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 POTWs from an indirect discharger 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 POTWs by a source introducing pollutants into the POTWs 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 POTWs as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTWs. (40 CFR part 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP), CI-5695

Title 40, Code of Federal Regulations (CFR), part 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code (CWC) sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California 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 Discharger 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 quarterly, semiannual, and annual analyses shall be reported in the monthly monitoring report following the analysis.

B. Pollutants shall be analyzed using the analytical methods described in 40 CFR parts 136.3, 136.4, and 136.5 (revised March 12, 2007); or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Resources Control Board (State Water Board). Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health 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 each time a new certification and/or renewal of the certification is obtained from ELAP.

C. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR part 136.3 (revised March 12, 2007). All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Discharger 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 Discharger 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 California Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP."

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 Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (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 minimum level.

H. The Discharger shall select the analytical method that provides a ML lower than the permit limit established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable 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 of the SIP, the Discharge must select the method with the lowest ML for compliance purposes. The Discharger shall include in the Annual Summary Report a list of the analytical methods employed for each test.

I. The Discharger 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 Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. In accordance with section J, below, the Discharger'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 discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Appendix 4 of the SIP;

2. When the discharger 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 (revised as of March 12, 2007);

3. When a discharger agrees to use an ML that is lower than those listed in Appendix 4;

4. When a discharger 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 discharger 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 discharger, 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 Discharger 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 Program 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 average effluent, receiving water, etc., limitations.

L. The Discharger shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment facility 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 (revised March 12, 2007), unless alternate methods have been approved in advance by the USEPA pursuant to 40 CFR part 136.

2. Detection methods used for enterococcus shall be those presented in Table 1A of 40 CFR part 136 (revised March 12, 2007) 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 Discharger shall conduct the monitoring program at the following monitoring locations (see Attachment C) to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table 1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name[1]	Monitoring Location Description
Influent Monitoring Station		
INF-001	Influent Pump Station	Sampling station (34° 11' 01.0'' N, 118° 28' 45.8'' W) is established at point of inflow to the sewage treatment plant and located upstream of any in-plant return flows, where representative samples of the influent can be obtained.
Effluent Monitoring Station		
EFF-001A	Effluent Transfer Station Used for Point of Compliance for all Constituents but Bacteria	The effluent sampling stations (34° 10' 49.0'' N, 118° 28' 49.4'' W for composite samples) (34° 10' 48.9'' N, 118° 28' 48.4'' W for grab samples) are located downstream of any in-plant return flows and after the final dechlorination process, where representative samples of the effluent can be obtained from Donald C. Tillman WRP.
EFF-001B	Effluent Transfer Station Used for Point of Compliance for Bacteria	The effluent sampling station (34° 10' 49.0'' N, 118° 28' 41.5'' W) is located downstream of any in-plant return flows and after the final disinfection process, where representative samples of the effluent can be obtained from Donald C. Tillman WRP.
Receiving Water Monitoring Stations[2]		
---	RSW-LATT630 (R-7)	This sampling location (34° 09' 41.9'' N, 118° 27' 59.5'' W) is located in Los Angeles River, 1800 feet downstream of Discharge Point 008.
---	RSW-003D	TMDL Wet-Weather Flow Monitoring Station (34° 49' 8.4'' N, 118° 12' 20.0'' W) is located at the County of Los Angeles Department of Public Works' Wardlow Gage Station No. F319-R, in the Los Angeles River, just below Wardlow River Road.
---	RSW-LATT622 (D)	This sampling location (34° 10' 35.0'' N, 118° 28' 31.7'' W) is located at 100 yards downstream of the confluence of the Los Angeles River and Hayvenhurst Channel.
---	RSW-LATT612 (I)	This sampling location (34° 10' 46.1'' N, 118° 30' 01.1'' W) is located in Los Angeles River, upstream of Bull Creek.

[1] The new names of the receiving water monitoring stations replace those in parentheses used in the MRPs of Order Nos. R4-2006-0091 and R4-2010-0060.

[2] The receiving water monitoring stations with the exception of RSW-003D are based on the City of Los Angeles *Los Angeles River Regional Monitoring Program* (LARRMP) approved by this Regional Water Board on January 12, 2009. The LARRMP improves coordination and efficiency of receiving water monitoring by the Donald C. Tillman and Los Angeles – Glendale Water Reclamation Plants. The LARRMP streamlines monitoring efforts, reduces redundancies throughout the watershed, and provides more useful water quality data on both watershed and site-specific scales. Therefore, the receiving water monitoring stations of F, H, 1, 5, 7, W-D/R-2, W-C, W-1, and W-3 specified in the MRP of Order No. R4-2006-0091 has been deleted in the MRP of Order No. R4-2011-0196. See Section VIII.A of this MRP for detailed information.

Discharge Point Name	Monitoring Location Name[1]	Monitoring Location Description
Receiving Water Monitoring Stations[2]		
---	RSW-LATT616 (J)	This sampling location (34° 10' 49.3'' N, 118° 29' 51.8'' W) is located in Bull Creek, 100 ft. downstream of Lake Balboa weir outlet (Lake Balboa Storm Drain Nos. 1 and 2 outlets) (Discharge Serial No. 004).
---	RSW-LATT614 (K)	This sampling location (34° 10' 54.8'' N, 118° 29' 52.4'' W) is located in Bull Creek, upstream of Lake Balboa discharge (250 feet upstream of Lake Balboa upper discharge, near the corner of Victory Blvd. and Petit Ave).
---	RSW-LATT628 (W-E)	This sampling location (34° 10' 2.3'' N, 118° 28' 26.0'' W) is located in Los Angeles River, 300 ft downstream of the Haskell Flood Control Channel.
---	RSW-4 (4)	This sampling location (34° 10' 45.9" N, 118° 29' 38.1" W) is located in Lake Balboa, 400 feet from the outlet spillway
---	RSW-W2 (W-2)	This sampling location (34° 10' 26.1" N, 118° 28' 19.3" W) is located in the Wildlife Lake, south of the island, near the westerly lake shoreline at a 2 foot water depth

III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to:

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

A. Monitoring Location

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

Table 2. Influent Monitoring at INF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	recorder	continuous[3]	--
pH	pH units	grab	weekly	[4]
Total suspended solids	mg/L	24-hour composite	weekly	[4]

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

[4] 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 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
$BOD_{5@20^{o}C}$	mg/L	24-hour composite	weekly	[4]
Cadmium	µg/L	24-hour composite	quarterly	[4]
Copper	µg/L	24-hour composite	quarterly	[4]
Lead	µg/L	24-hour composite	quarterly	[4]
Mercury	µg/L	24-hour composite	quarterly	[4]
Selenium	µg/L	24-hour composite	quarterly	[4]
Zinc	µg/L	24-hour composite	quarterly	[4]
Cyanide	µg/L	grab	quarterly	[4]
2,4-D	µg/L	24-hour comp.	semiannually	[4]
2,4,5-TP (Silvex)	µg/L	24-hour comp.	semiannually	[4]
Pesticide[5]	µg/L	24-hour composite	semiannually	[4]
Remaining USEPA priority pollutants[6] excluding asbestos	µg/L	24-hour composite/ grab for VOCs & chromium	semiannually	[4]

IV. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

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

A. Monitoring Location EFF-001A

The Discharger shall monitor flow at EFF-001A as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML:

[5] Pesticides are, for purposes of this order, those six constituents referred to in 40 CFR part 125.58 (p) (demeton, guthion, malathion, methoxychlor, mirex, and parathion). Where 40 CFR part 136-approved methods are not available for these compounds, USEPA Method 8141A shall be used.

[6] 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.

Table 3A. Effluent Monitoring at EFF-001A (Effluent Transfer Station)

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total waste flow	MGD	recorder	continuous[7]	[4]
Turbidity	NTU	recorder	Continuous[7]	[4]
Total residual chlorine	mg/L	recorder	Continuous[7,8,9]	[4]
Total residual chlorine	mg/L	grab	daily[10,11]	[4]
Temperature[12]	°F	grab	daily[11]	[4]
pH	pH units	grab	daily[11]	[4]
Settleable solids	ml/L	grab	daily[11]	[4]
Total suspended solids	mg/L	24-hour comp.	daily[11]	[4]
$BOD_{5@20^oC}$[13]	mg/L	24-hour comp.	weekly	[4]
Oil and grease	mg/L	grab	weekly	[4]
Dissolved oxygen	mg/L	grab	monthly	[4]
Total dissolved solids	mg/L	24-hour comp.	monthly	[4]
Chloride	mg/L	24-hour comp.	monthly	[4]
Sulfates	mg/L	24-hour comp.	monthly	[4]
Boron	mg/L	24-hour comp.	quarterly	[4]
Fluoride	mg/L	24-hour comp.	quarterly	[4]
Ammonia nitrogen	mg/L	24-hour comp.	monthly	[4]

[7] 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 five turbidity units, flow-proportioned average daily value. A grab sample can be used to determine compliance with the 10 NTU limit.

[8] Total residual chlorine (TRC) shall be continuously recorded. The recorded charts shall be maintained by the Permittee for at least five years. The maximum daily peak, minimum daily peak, and daily average total residual chlorine shall be reported on the monthly monitoring reports.

[9] Continuous monitoring of TRC at the current location shall serve as an internal trigger for increased TRC end of pipe grab sampling if either of the following occur, except as noted in footnote 10c:
a. TRC concentration excursions of up to 0.3 mg/L lasting greater than 15 minutes; or
b. TRC concentration peaks in excess of 0.3 mg/L lasting greater than 1 minute.
c. Additional end of pipe 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.

[10] Grab samples shall be collected at end-of-pipe during peak flow.

[11] Daily samples shall be collected Monday through Friday only, except for holiday; and not on weekends.

[12] The Discharger has the option of collecting grab temperature samples on a daily basis or using a recorder to take continuous temperature readings.

[13] If any result of a weekly BOD analysis yields a value greater than the 30-day average limitation, 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 7-day and 30-day average BOD limitations is demonstrated; after which the frequency shall revert to weekly.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nitrate nitrogen	mg/L	24-hour comp.	monthly	[4]
Nitrite nitrogen	mg/L	24-hour comp.	monthly	[4]
Organic nitrogen	mg/L	24-hour comp.	monthly	[4]
Total nitrogen	mg/L	24-hour comp.	monthly	[4]
Surfactants (MBAS)[14]	mg/L	24-hour comp.	monthly	[4]
Surfactants (CTAS)[14]	mg/L	24-hour comp.	monthly	[4]
Total hardness ($CaCO_3$)	mg/L	24-hour comp.	monthly	[4]
Acute toxicity[15]	% Survival	24-hour comp.	monthly	[4]
Chronic toxicity[16]	TUc	24-hour comp.	monthly	[4]
Chronic toxicity (narrative effluent limit reporting)[17]	Passed/Triggered	24-hour comp.	monthly	[4]
Perchlorate[18]	µg/L	grab	semiannually	[4]
1,4-Dioxane[19]	µg/L	grab	semiannually	[4]
1,2,3-Trichloropropane[20]	µg/L	grab	semiannually	[4]
MTBE[21]	µg/L	grab	semiannually	[4]
Antimony	µg/L	24-hour comp.	quarterly	[4]
Arsenic	µg/L	24-hour comp.	quarterly	[4]
Beryllium	µg/L	24-hour comp.	quarterly	[4]
Cadmium	µg/L	24-hour comp.	monthly	[4]
Total Chromium	µg/L	grab	quarterly	[4]
Chromium III	µg/L	calculation	quarterly	[4]
Chromium VI	µg/L	grab	quarterly	[4]
Copper	µg/L	24-hour comp.	monthly	[4]

[14] MBAS is Methylene blue active substances and CTAS is cobalt thiocyanate active substances. Reaches of the Los Angeles River are unlined in several reaches downstream of the points of wastewater discharge and are designated with the beneficial use of groundwater recharge (GWR) in the Basin Plan. Monitoring is required to assess compliance with the Title 22-based limitation prescribed to protect underlying groundwater quality with the MUN beneficial use.

[15] See Section V.A.

[16] See Section V.B.

[17] For narrative chronic toxicity effluent limit reporting, "Passed" is reported when chronic toxicity effluent results do not trigger accelerated testing by exceeding the monthly median trigger of 1.0 TU_c = 100/NOEC. "Triggered" is reported when chronic toxicity effluent results trigger accelerated testing by exceeding the monthly median trigger of 1.0 TU_c = 100/NOEC.

[18] Perchlorate shall be analyzed using the USEPA 314 test method.

[19] 1,4-Dioxane shall be analyzed using the USEPA 8270M test method.

[20] 1,2,3-Trichloropropane shall be analyzed using the USEPA 504.1 or 8260B test method.

[21] Methyl tert-butyl ether (MTBE) shall be analyzed using USEPA test method 8260B.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Lead	µg/L	24-hour comp.	monthly	[4]
Mercury	µg/L	24-hour comp.	monthly	[4]
Nickel	µg/L	24-hour comp.	quarterly	[4]
Selenium	µg/L	24-hour comp.	monthly	[4]
Silver	µg/L	24-hour comp.	quarterly	[4]
Thallium	µg/L	24-hour comp.	quarterly	[4]
Zinc	µg/L	24-hour comp.	monthly	[4]
Cyanide	µg/L	grab	monthly	[4]
2,3,7,8-TCDD (Dioxin)[22]	pg/L	24-hour comp.	semiannually	[4]
Diazinon[23]	µg/L	24-hour comp.	quarterly	[4]
2,4-D	µg/L	24-hour comp.	semiannually	[4]
2,4,5-TP (Silvex)	µg/L	24-hour comp.	semiannually	[4]
Pesticide[5]	µg/L	24-hour comp.	semiannually	[4]
Remaining USEPA priority pollutants[7] excluding asbestos	µg/L	24-hour composite/ grab for VOCs	semiannually	[4]
Radioactivity[24]	PCi/L	24-hour comp.	semiannually	[4]

B. Monitoring Location EFF-001B

The Discharger shall monitor flow at EFF-001B as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

[22] In accordance with the SIP, the Discharger shall conduct monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in receiving water station R-9, located upstream of the Discharge Point. 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:

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

[23] Diazinon is on the California 2008-2010 Integrated Report Section 303(d) List of Impaired Waters requiring TMDLs for the Los Angeles Region.

[24] 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 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.

Table 3B. Effluent Monitoring at EFF-001B (Effluent Transfer Station)

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total coliform[25]	MPN[26]/100 ml	grab	daily[11]	[4]
Fecal coliform[25]	MPN[26]/100 ml	grab	daily[11]	[4]
E.coli[25]	MPN[26]/100 ml	grab	weekly[27]	[4]

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity Testing

1. Definition of Acute Toxicity

   Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) effluent.

   a. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static renewal bioassay tests shall be at least 90%, and

   b. No single test shall produce less than 70% survival.

2. Acute Toxicity Effluent Monitoring Program

   a. **Method –** The Discharger shall conduct acute toxicity tests on 24-hr composite 100% effluent and receiving water grab samples by methods specified in 40 CFR part 136, which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October, 2002 (EPA-821-R-02-012) or a more recent edition to ensure compliance.

   b. **Test Species –** The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish discharges. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Discharger may have the option of using the inland silverslide, *Menidia beryllina*, instead of the topsmelt. The method for topsmelt is found in USEPA's *Methods for Measuring the*

[25] Coliform, E.coli, and turbidity samples shall be obtained at some point in the treatment process at a time when wastewater flow and characteristics are most demanding on the treatment facilities, filtration, and disinfection procedures.

[26] Units specified for bacteria tests are either CFU or MPN for the bacteria tests through the entire permit testing cycle.

[27] 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.

Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, October, 2002 (EPA-821-R-02-012).

c. **Alternate Reporting –** In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test, but only if the Discharger uses USEPA's October 2002 protocol (EPA-821-R-02-013) and fathead minnow is used to conduct the chronic toxicity test.

d. **Acute Toxicity Accelerated Monitoring –** If either of the effluent or receiving water acute toxicity requirements in Section IV.A.4.f.a.(i) and (ii), and Section V.A.17.c., respectively, of this Order is not met, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that results of a failing acute toxicity test are received by the Discharger within 24 hours of completion of the test and the additional tests shall begin within 5 business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing.

However, if the extent of the acute toxicity of the receiving water upstream of the discharge is greater than the downstream and the results of the effluent acute toxicity test comply with acute toxicity limitation, the accelerated monitoring need not be implemented for the receiving water.

e. **Toxicity Identification Evaluation (TIE)**

i. If the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a TIE. The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

ii. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately implement Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan. Once the sources are identified the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.

B. Chronic Toxicity Testing

1. Definition of Chronic Toxicity

Chronic toxicity is a measure of adverse sub-lethal effects in plants, animals, or invertebrates in a long-term test. The effects measured may include lethality or decreases in fertilization, growth, and reproduction.

2. Chronic Toxicity Effluent Monitoring Program

a. **Test Methods –** The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100 % effluent samples and receiving water grab samples in accordance with USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, October 2002 (EPA-821-R-02-013) or USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, October 2002 (EPA-821-R-02-014), or current version. The Discharger shall conduct static renewal tests in accordance with the 2002 freshwater chronic methods manual for water flea and fathead minnow. For Selenastrum, use a static non-renewal test protocol.

b. **Frequency**

i. **Screening and Monitoring –** The Discharger shall conduct the first chronic toxicity test screening for three consecutive months starting in 2012. The Discharger shall conduct short-term tests with the cladoceran, water flea (*Ceriodaphnia dubia* - survival and reproduction test), the fathead minnow (*Pimephales promelas* - larval survival and growth test), and the green algae (*Selenastrum capricornutum* - growth test) as an initial screening process for a minimum of three, but not to exceed, five suites of tests to account for potential variability of the effluent/receiving water. After this screening period, monitoring shall be conducted using the most sensitive species.

ii. **Re-screening –** Re-screening is required every 24 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive then the re-screening 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 Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites

iii. **Regular toxicity tests –** After the screening period, monitoring shall be conducted monthly using the most sensitive species.

c. **Toxicity Units –** The chronic toxicity of the effluent shall be expressed and reported in Chronic Toxic Unit (TUc), where,

$$TU_c = \frac{100}{NOEC}$$

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.

3. Accelerated Monitoring

If the chronic toxicity of the effluent or the receiving water downstream the discharge exceeds the monthly trigger median of 1.0 TU_c, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 5 business days of the receipt of the result. However, if the chronic toxicity of the receiving water upstream of the discharge is greater than the downstream and the TUc of the effluent chronic toxicity test is less than or equal to a monthly median of 1.0 TU_c trigger, then accelerated monitoring need not be implemented for the receiving water.

a. If any three out of the initial test and the six additional tests results exceed 1.0 TU_c the Discharger shall immediately implement the Initial Investigation TRE workplan.

b. If implementation of the initial investigation TRE workplan indicates the source of toxicity (e.g., a temporary Facility upset, etc.), then the Discharger shall return to the normal sampling frequency required in Table 3B of this MRP.

c. If all of the six additional tests required above do not exceed 1.0 TUc, then the Discharger may return to the normal sampling frequency.

d. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

C. Quality Assurance

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).

2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manual (EPA-821-R-02-012 and/or EPA-821-R-02-013), then the Discharger must re-sample and re-test within 14 days.

3. Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

D. Preparation of an Initial Investigation TRE Workplan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE workplan 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 workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the TRE Workplan must contain the provisions in Attachment G. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

1. 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.

2. 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,

3. 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). See MRP Section V.E.3. for guidance manuals.

E. Steps in TRE and TIE

1. If results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 15 days of completion of the initial investigation TRE. The detailed workplan shall include, but not be limited to:

   a. Further 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.

2. The following section summarizes the stepwise approach used in conducting the TRE:

   a. Step 1 includes basic data collection.

   b. Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and selection and use of in-facility process chemicals.

   c. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity.

   d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options.

e. Step 5 evaluates in-facility treatment options.

f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity violations.

3. The Discharger shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.

4. If a TRE/TIE is initiated prior to completion of the accelerated testing required in Section V.B.3. of this program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer .

5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance, if appropriate.

6. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

a. If all the results of the six additional tests are in compliance with the chronic toxicity limitation, the Discharger may resume regular monthly testing.

b. If the results of any of the six accelerated tests exceed the acute toxicity limitation, or the chronic toxicity trigger, then the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. At that time, the Discharger may resume regular monthly testing.

c. If the results of two of the six tests exceed the 1.0 TUc trigger, the Discharger shall initiate a TRE.

d. If implementation of the initial investigation TRE workplan (see item V.B.3.b. above) indicates the source of toxicity (e.g., a temporary facility

upset, etc.), then the Discharger shall return to the regular testing frequency.

F. 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 Discharger 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.

G. Reporting

The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month, as required by this permit. Test results shall be reported in percent survival (% survival) for Acute Toxicity or TUc for Chronic Toxicity, as required, with the self-monitoring report (SMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Section V.A.2.d. and V.B.3., then those results also shall be submitted with the SMR for the period in which the Investigation occurred.

1. The full report shall be received by the Regional Water Board by the 15th day of the third month following sampling.

2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the toxicity limit; and, (4) printout of the toxicity program (ToxCalc or CETIS).

3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test, as appropriate:

   a. sample date(s)

   b. test initiation date

   c. test species

   d. end point value(s) for each dilution (e.g. number of young, growth rate, percent survival)

   e. NOEC values in percent effluent

   f. TUc value(s), where $TU_c = \frac{100}{NOEC}$

   g. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable)

   h. NOEC and LOEC (Lowest Observable Effect Concentration) values for reference toxicant test(s)

   i. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).

4. The Discharger shall provide a compliance summary that includes a summary table of toxicity data from at least eleven of the most recent samples.

5. The Discharger shall notify this Regional Water Board immediately of any toxicity exceedance and in writing 14 days after the receipt of the results of an effluent limit. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. RECLAMATION MONITORING REQUIREMENTS

Current Reclaimed Project for Irrigation & Industrial Use – The production, distribution, and reuse of recycled water are presently regulated under Waste Discharge Requirements Order No. R4-2007-0008 and Water Recycling Requirements Order No. R4-2007-0009, both adopted by this Regional Water Board on January 11, 2007.

VII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Surface Water

1. Monitoring Locations – RSW-LATT630

The following analyses, which constitute the receiving water monitoring program, shall be conducted on grab samples obtained at Station RSW-LATT630. Samples shall be taken at one-foot depth.

Table 4. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	pH units	grab	weekly	[4]
Temperature	°F	grab	weekly	[4]
Dissolved oxygen	mg/L	grab	weekly	[4]
Total residual chlorine	mg/L	grab	weekly	[4]
Total coliform	MPN[26]/100 ml	grab	weekly	[4]
Fecal coliform	MPN[26]/100 ml	grab	weekly	[4]
E.coli	MPN[26]/100 ml	grab	Weekly[27]	[4]
Turbidity	NTU	grab	quarterly	[4]
Total dissolved solids	mg/L	grab	quarterly	[4]
Conductivity	μmhos/cm	grab	quarterly	[4]
Chloride	mg/L	grab	quarterly	[4]
Sulfates	mg/L	grab	quarterly	[4]
Ammonia nitrogen	mg/L	grab	weekly[28]	[4]
Nitrate nitrogen	mg/L	grab	weekly[28]	[4]
Nitrite nitrogen	mg/L	grab	weekly[28]	[4]
Organic nitrogen	mg/L	grab	weekly[28]	[4]
Total nitrogen	mg/L	grab	weekly[28]	[4]
Total phosphorus	mg/L	grab	quarterly	[4]
Orthophosphate-P	mg/L	grab	quarterly	[4]
Surfactants (MBAS)	mg/L	grab	quarterly	[4]
Surfactants (CTAS)	mg/L	grab	quarterly	[4]
$BOD_{5@20^{o}C}$	mg/L	grab	quarterly	[4]

[28] Regional Water Board Resolution No. 2003-009, Amendment to the Basin Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River (Nitrogen Compounds TMDL), requires weekly receiving water monitoring to ensure compliance with the water quality objective (WQO).

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total organic carbon	mg/L	grab	quarterly	[4]
Oil and grease	mg/L	grab	monthly	[4]
Chronic toxicity	TU_c	grab	quarterly	[4]
Acute toxicity	%survival	grab	quarterly	[4]
Boron	mg/L	grab	semiannually	[4]
Fluoride	mg/L	grab	semiannually	[4]
Chemical oxygen demand	mg/L	grab	quarterly	[4]
Settleable solids	ml/L	grab	quarterly	[4]
Total suspended solids	mg/L	grab	quarterly	[4]
Total hardness ($CaCO_3$)	mg/L	grab	quarterly	[4]
MTBE	µg/L	grab	semiannually	[4]
Perchlorate	µg/L	grab	semiannually	[4]
1,4-Dioxane	µg/L	grab	semiannually	[4]
1,2,3-Trichloropropane	µg/L	grab	semiannually	[4]
Cadmium	µg/L	grab	quarterly	[4]
Copper	µg/L	grab	quarterly	[4]
Lead	µg/L	grab	quarterly	[4]
Mercury	µg/L	grab	monthly	[4]
Selenium	µg/L	grab	monthly	[4]
Zinc	µg/L	grab	quarterly	[4]
Cyanide	µg/L	grab	monthly	[4]
Diazinon[23]	µg/L	grab	quarterly	[4]
2,4-D	µg/L	grab	semiannually	[4]
2,4,5-TP	µg/L	grab	semiannually	[4]
Pesticide[5]	µg/L	grab	semiannually	[4]
Remaining USEPA priority pollutants[6] excluding asbestos	µg/L	grab	semiannually	[4]

2. Monitoring Locations – RSW-LATT622, RSW-LATT612, RSW-LATT616, RSW-LATT614, and RSW-LATT628

The receiving water monitoring program for the Recreation Lake (Lake Balboa) and the Wildlife Lake shall be conducted during the discharge through Discharge Points 002 and 003, respectively. The following analyses shall be conducted on grab samples obtained at Stations RSW-LATT622, RSW-

LATT612, RSW- LATT616, RSW-LATT614, and RSW-LATT628. Samples shall be taken at one-foot depth.

Table 5. Downstream of Lake Balboa and Wildlife Lake Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total flow	cfs		weekly	
pH	pH units	grab	weekly	[4]
Temperature	°F	grab	weekly	[4]
Dissolved oxygen	mg/L	grab	weekly	[4]
Total residual chlorine	mg/L	grab	weekly	[4]
Total coliform	MPN[25]/100 ml	grab	weekly	[4]
Fecal coliform	MPN[25]/100 ml	grab	weekly	[4]
E.coli	MPN[25]/100 ml	grab	Weekly[26]	[4]
Turbidity	NTU	grab	quarterly	[4]
$BOD_{5@20^oC}$	mg/L	grab	quarterly	[4]
Total dissolved solids	mg/L	grab	quarterly	[4]
Conductivity	µmhos/cm	grab	quarterly	[4]
Chloride	mg/L	grab	quarterly	[4]
Sulfates	mg/L	grab	quarterly	[4]
Boron	mg/L	grab	semiannually	[4]
Fluoride	mg/L	grab	semiannually	[4]
Ammonia nitrogen	mg/L	grab	weekly[27]	[4]
Nitrate nitrogen	mg/L	grab	weekly[27]	[4]
Nitrite nitrogen	mg/L	grab	weekly[27]	[4]
Organic nitrogen	mg/L	grab	weekly[27]	[4]
Total nitrogen	mg/L	grab	weekly[27]	[4]
Total phosphorus	mg/L	grab	quarterly	[4]
Orthophosphate-P	mg/L	grab	quarterly	[4]
Surfactants (MBAS)	mg/L	grab	quarterly	[4]
Surfactants (CTAS)	mg/L	grab	semiannually	[4]
Chemical oxygen demand	mg/L	grab	semiannually	[4]
Oil and grease	mg/L	grab	monthly	[4]
Settleable solids	ml/L	grab	quarterly	[4]
Total suspended solids	mg/L	grab	quarterly	[4]
Total hardness ($CaCO_3$)	mg/L	grab	quarterly	[4]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chronic toxicity	TU_c	grab	quarterly	[4]
Acute toxicity	%survival	grab	quarterly	[4]
Perchlorate[18]	µg/L	grab	semiannually	[4]
1,4-Dioxane[19]	µg/L	grab	semiannually	[4]
1,2,3-Trichloropropane[20]	µg/L	grab	semiannually	[4]
MTBE[21]	µg/L	grab	semiannually	[4]
Cadmium	µg/L	grab	quarterly	[4]
Copper	µg/L	grab	quarterly	[4]
Lead	µg/L	grab	quarterly	[4]
Mercury	µg/L	grab	monthly	[4]
Selenium	µg/L	grab	monthly	[4]
Zinc	µg/L	grab	quarterly	[4]
Cyanide	µg/L	grab	monthly	[4]
Diazinon[23]	µg/L	grab	quarterly	[4]
2,4-D	µg/L	grab	semiannually	[4]
2,4,5-TP (Silvex)	µg/L	grab	semiannually	[4]
Pesticide[5]	µg/L	grab	semiannually	[4]
Remaining USEPA priority pollutants[6] excluding asbestos	µg/L	grab	semiannually	[4]

3. Monitoring Locations – RSW-4 and RSW-W2

The following analyses, which constitute the receiving water monitoring program for the Lake Balboa (Recreation Lake), shall be conducted on grab samples obtained at Station RSW-4. In addition, the monitoring program for the Wildlife Lake shall be conducted, during the discharge through Discharge Point 003, on grab samples obtained at the Stations No. RSW-W2. Samples shall be taken from one-foot depth:

Table 6. Lake Balboa and Wildlife Lake Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	pH units	grab	weekly	[4]
Temperature	°F	grab	weekly	[4]
Dissolved oxygen	mg/L	grab	weekly	[4]
Total nitrogen	mg/L	grab	weekly[28]	[4]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia nitrogen	mg/L	grab	weekly[28]	[4]
Organic nitrogen	mg/L	grab	weekly[28]	[4]
Nitrate nitrogen	mg/L	grab	weekly[28]	[4]
Nitrite nitrogen	mg/L	grab	weekly[28]	[4]
Total phosphorus	mg/L	grab	seasonally[29]	[4]
Organic phosphorus	mg/L	grab	Seasonally[29]	[4]
Condensed phosphorus	mg/L	grab	Seasonally[29]	[4]
Orthophosphorus	mg/L	grab	Seasonally[29]	[4]

4. Monitoring Location – RSW-4

The following analyses, which constitute the receiving water monitoring program for the Lake Balboa (Recreation Lake), shall be conducted on grab samples obtained at Stations No. RSW-4. Sample shall be taken at one-foot depth.

Table 7. Lake Balboa Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total coliform	MPN[26]/100 ml	grab	monthly	[4]
Fecal coliform	MPN[26]/100 ml	grab	monthly	[4]
E.coli	MPN[26]/100 ml	grab	Monthly[27]	[4]
Suspended solid	mg/L	grab	monthly	[4]
Conductivity	µmhos/cm	grab	monthly	[4]

B. Sediment

1. Monitoring Location – RSW-4 and RSW-W2

Representative sediment/bottom samples shall be collected at Lake Balboa (Recreation Lake) Station No. RSW-4 and Wildlife Lake Station No. RSW-W2.

Table 8. Sediment Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total organic nitrogen	mg/Kg	grab	quarterly	[4]

[29] This chemical shall be analyzed monthly during the quiescent months of December to May and weekly during the biologically productive months of June to November.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total organic carbon	mg/Kg	grab	quarterly	[4]
Sediment grain size distribution	weight % vs. grain size in phi units	grab	quarterly	[4]
Cadmium	mg /Kg	grab	quarterly	[4]
Copper	mg /Kg	grab	quarterly	[4]
Lead	mg /Kg	grab	quarterly	[4]
Mercury	mg /Kg	grab	quarterly	[4]
Selenium	mg /Kg	grab	quarterly	[4]
Zinc	mg /Kg	grab	quarterly	[4]
Cyanide	mg /Kg	grab	quarterly	[4]
Diazinon[23]	µg/Kg	grab	quarterly	[4]
Pesticide[5]	µg/Kg	grab	semiannually	[4]
Remaining USEPA priority pollutants[6] excluding asbestos	mg/Kg for metals, BNAs, and VOCs; µg/Kg for pesticides and PCBs	grab	semiannually	[4]

C. Bioassessment Requirements

1. The Bioassessment Monitoring Program shall be conducted annually in the spring/summer period 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 ten random monitoring stations designated by the Los Angeles River Regional Monitoring Program.

   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 Discharger. 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 Discharger 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.

2. The Discharger must provide a copy of their Standard Operation Procedures (SOPs) for the Bioassessment Monitoring Program to the Regional 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.

3. 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 Discharger or an independent auditor. These visits shall report on all aspects of the field procedure with corrective action occurring immediately.

4. 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 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 Discharger 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 be arranged through the California Department of Fish and Game's Aquatic Bioassessment Laboratory located in Rancho Cordova, California.

D. Other Requirements

1. In the event of a spill or bypass of raw or partially treated sewage from the Tillman WRP into the Los Angeles River, total and fecal coliform analyses shall be made on grab samples collected at all potentially affected downstream receiving water stations and at least one unaffected upstream receiving water station.

   Coliform samples shall be collected at each station on the date of the spill or bypass, and daily on each of the following four days or until coliform levels in the receiving water are within normal range and the bypass or spill has ceased. Monitoring Provisions for SSOs are outlined in the Order under section VI.C.5.c.

2. At the same time the receiving waters are sampled, observations shall be made in the reach bounded by the receiving monitoring stations RSW-LATT614, RSW-LATT622, and RSW-LATT628, and a log shall be maintained thereof.

   a. Attention shall be given to the presence and extent, or absence of:

i. oil, grease, scum, or solids of waste origin;

ii. sludge deposits;

iii. discoloration of surface waters;

iv. algal blooms;

v. odors;

vi. foam; and,

vii. other significant observations in immediate vicinity (i.e. storm drain flows, etc.).

b. The following shall also be noted in the log:

i. date and time of observation;

ii. weather days conditions (including air temperature);

iii. flow measurement (estimate);

iv. exact sampling location;

v. users of water in the River (i.e. people washing, swimming and playing in the river, etc.);

vi. non-contact users (i.e. bikers, joggers, etc.); and,

vii. wildlife (i.e. birds, mammals, reptiles, estimated amount of vegetation).

c. A summary of these observations noted in the log shall be submitted with the monitoring reports.

3. The Discharger shall monitor the receiving water downstream of the discharge, during any day that the filters are bypassed, for $BOD_{5@20^{o}C}$, total suspended solids, settleable solids, and oil and grease, until it is demonstrated that the filter "bypass" has not caused an adverse impact on the receiving water. The Discharger shall submit a written report to the Regional Water Board, according to the corresponding monthly self- monitoring report schedule. The report shall include, the results from the daily receiving water monitoring. However, if the results are not available in time to be submitted with the corresponding monthly report, then, the results shall be submitted to the Regional Water Board as soon as the results become available.

4. Receiving water samples shall not be taken during or within 72 hours following the flow of rainwater runoff into the Los Angeles River system.

5. Sampling may be rescheduled at receiving water stations, if weather and flow conditions would endanger personnel collecting receiving water samples. The monthly monitoring report shall note such occasions.

6. The Discharger shall report the maximum daily flow in the Los Angeles River, downstream of the discharge, at the LA County Department of Public Works' Gage Station No. F319-R Los Angeles River below Wardlow. For the purposes of this permit, this station is also known as RSW-003D. This information is necessary to determine the wet-weather condition of the river, as defined in the Los Angeles River Metals TMDL. If the gauging station is not operational, an estimated maximum daily flow may be submitted.

Table 9. Los Angeles River Daily Flow Monitoring Requirements

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

VIII. OTHER MONITORING REQUIREMENTS

A. Special Study – Constituents of Emerging Concern in Effluent

1. CEC Special Study Requirements

The Discharger shall conduct a special study to investigate the CECs in the effluent discharge. Within six months of the effective date of this Order, the Discharger shall submit to the Executive Officer a CECs Special Study Work Plan (Work Plan) for approval. Upon approval, the Discharger shall implement the Work Plan.

This Special Study Work Plan shall include, but not limited to, the following:

a. Identification of CECs to be monitored in the effluent, sample type (e.g. 24-hour composite), sampling frequency, proposed sampling month, and sampling methodology. Table 10 identifies the minimum parameters to be monitored.

Table 10. CECs in the Effluent

Parameter	Unit	Sample Type	Minimum Sampling Frequency	Analytical Test Method and (Minimum Level, units)
17α-Ethinyl Estradiol	ng/L	To be proposed	Annually	To be proposed
17β-Estradiol	ng/L	To be proposed	Annually	To be proposed
Estrone	ng/L	To be proposed	Annually	To be proposed
Bisphenol A	ng/L	To be proposed	Annually	To be proposed

Parameter	Unit	Sample Type	Minimum Sampling Frequency	Analytical Test Method and (Minimum Level, units)
Nonylphenol & Nonylphenol polyethoxylates	ng/L	To be proposed	Annually	To be proposed
Octylphenol & octylphenol polyethoxylates	ng/L	To be proposed	Annually	To be proposed
Polybrominated diphenyl ethers	ng/L	To be proposed	Annually	To be proposed
Acetaminophen	ng/L	To be proposed	Annually	To be proposed
Amoxicillin	ng/L	To be proposed	Annually	To be proposed
Azithromycin	ng/L	To be proposed	Annually	To be proposed
Carbamazepine	ng/L	To be proposed	Annually	To be proposed
Caffeine	ng/L	To be proposed	Annually	To be proposed
Ciprofloxacin	ng/L	To be proposed	Annually	To be proposed
DEET	ng/L	To be proposed	Annually	To be proposed
Dilantin	ng/L	To be proposed	Annually	To be proposed
Gemfibrozil	ng/L	To be proposed	Annually	To be proposed
Ibuprofen	ng/L	To be proposed	Annually	To be proposed
Lipitor (Atorvastain)	ng/L	To be proposed	Annually	To be proposed
Iodinated contrast media (i.e. iopromide)	ng/L	To be proposed	Annually	To be proposed
Sulfamethoxazole	ng/L	To be proposed	Annually	To be proposed
Trimethoprim	ng/L	To be proposed	Annually	To be proposed
Salicylic acid	ng/L	To be proposed	Annually	To be proposed
TCEP	ng/L	To be proposed	Annually	To be proposed
Triclosan	ng/L	To be proposed	Annually	To be proposed

i. Once the SCCWRP's recommended list of CECs monitoring in ambient waters, including ocean waters, is finalized, the above list of minimum parameters to be monitored by the Discharger and the sampling frequency may be re-evaluated and modified by the Executive Officer. At such time, upon request by the Executive Officer, the Discharger shall monitor the requested CECs parameters at the specified frequency. In the Special Study Work Plan, the Discharger may also propose, for consideration and approval by the Executive Officer, surrogate or indicator CECs that may contribute towards a better understanding of CECs in its effluent.

ii. Sample Type – The Discharger shall propose in the Work Plan the appropriate sample type (e.g. grab or composite) for each constituent.

iii. Sampling Period – At minimum, the Discharger shall monitor the specified CECs once per year. The Work Plan shall propose the

appropriate sampling month or quarter for each year, consistent with the goals of the analyses. The rationale for selecting the particular sampling month or quarter shall be explained in the Work Plan.

iv. Proposed Sampling Month – The Discharger may choose a fixed month for sampling or vary the sampling month over the duration of the special study in order to examine possible temporal associations.

v. Analytical Test Methodology – The Discharger shall review and consider all available analytical test methodologies, including but not limited to those listed in USEPA Methods 1694 and 1698, and methodologies approved or utilized by U.S. Geologic Survey, California Department of Public Health, and other federal or State agencies. Based on its review, the Discharger shall propose the most appropriate analytical methodology, considering sensitivity, accuracy, availability, and cost.

b. Characterization of existing CEC data (data collected previous to Special Study). The Discharger shall propose a characterization of all existing CEC data (associated with its effluent or receiving water) that have been collected for various purposes in the past. At minimum, the characterization shall include:

i. An identification of all CECs monitored to date (outside of this Special Study);

ii. Monitoring duration, frequency, and date(s) (for example, from 2000-present, annually);

iii. Analytical methodologies employed;

iv. RL, MLs and MDLs achieved for each methodology used; and,

v. If detected, temporal/seasonal trend analyses (using both statistical and graphical demonstration) of CECs.

c. Evaluation of CEC data collected as part of this Special Study. The Discharger shall propose an evaluation of CEC data (associated with its effluent) to be collected as part of this special study. At minimum, the characterization shall include:

i. An identification of CECs that have been monitored;

ii. Monitoring duration, frequency, and date(s);

iii. RL, MLs and MDLs achieved for each methodology used;

iv. A brief update on any improvements (or change) in the analytical methodologies and associated RL, MLs and MDLs achieved for each methodology used; and,

v. If detected, temporal/seasonal trend analyses (using both statistical and graphical demonstration) of cumulative CEC data collected as part of this special study.

d. Reporting – By April 15th of each year (starting April 15, 2013), the Discharger shall submit to the Executive Officer of this Regional Water Board, an annual report summarizing the monitoring results from the previous year. For example, the annual report due April 15, 2013, shall include CECs monitoring data from January to December 2012. Each annual report shall include a compilation of effluent monitoring data of CECs listed in the approved Work Plan, MLs, sample type, analytical methodology used, sampling date/time, QA/QC information, and an evaluation of cumulative CECs data collected to date as part of this special study (see above for further details on CECs data evaluation). In addition, the first annual report due April 15, 2013, shall include a characterization of existing CECs data, i.e., all data collected outside of this special study (see above for further details on existing CECs data characterization).

B. Los Angeles River Watershed Monitoring Program[30] (LARWMP)

1. Pursuant to 40 CFR parts 122.41(j) and 122.48(b), the monitoring program for a discharger receiving an NPDES permit must be designed to determine compliance with NPDES permit terms and conditions, and demonstrate that State water quality standards are met.

   Since compliance monitoring focuses on the effects of a point source discharge, it is not designed to assess impacts from other sources of pollution (e.g., non-point source run-off, aerial fallout) or to evaluate the current status of important ecological resources on a regional basis.

   The Los Angeles River Watershed Monitoring Program (LARWMP) was developed for the Los Angeles River Watershed by the City of Los Angeles in cooperation with Los Angeles Regional Board and USEPA staff, as well as several other local stakeholders. The LARRMP was approved by the Executive Officer on August 8, 2008.

   The goals of the comprehensive watershed-wide monitoring program include evaluating or assessing: compliance with receiving water objectives, trends in surface water quality, impacts to beneficial uses, the health of the biological community, data needs for modeling contaminants of concern, and attaining the goals of the TMDLs under implementation in the Los Angeles River.

[30] Formerly, Los Angeles River Regional Monitoring Program (LARRMP)

2. The Discharger shall participate in the implementation of the LARWMP as indicated in that plan. In coordination with interested stakeholders in the Los Angeles River Watershed, LARWMP shall conduct instream bioassessment monitoring once a year, during the spring/summer period (unless an alternate sampling period is approved by the Executive Officer). Over time, bioassessment monitoring will provide a measurement of the physical condition of the waterbody and the integrity of its biological communities.

3. Changes to the compliance monitoring program may be required over time to fulfill the goals of the watershed-wide monitoring program, while retaining the compliance monitoring component required to evaluate compliance with the NPDES permit. Revisions to the Discharger's program will be made under the direction of the Regional Board's Executive Officer, as necessary, to accomplish the goal, and- may include a reduction or increase in the number of parameters .to be monitored, the frequency of monitoring, and/or the number of samples collected.

B. Tertiary Filter Treatment Bypasses

1. During any day that filters are bypassed, the Tillman WRP shall monitor the effluent for $BOD_{5@20^{\circ}C}$, total suspended solids, settleable solids, and oil and grease, on daily basis, until it is demonstrated that the filter “bypass” has not caused an adverse impact on the receiving water.

2. The Tillman WRP shall maintain chronological log of tertiary filter treatment process bypasses, to include the following:

   a. Date and time of bypass start and end;

   b. Total duration time; and,

   c. Estimated total volume bypassed

3. The Tillman WRP shall notify Regional Water Board staff by telephone within 24 hours of the filter bypass event.

4. The Tillman WRP shall submit a written report to the Regional Water Board, according to the corresponding monthly self monitoring report schedule. The report shall include, at a minimum, the information from the chronological log. Results from the daily effluent monitoring, required by VIII.B.1. above, shall be submitted to the Regional Water Board as the results become available.

IX. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger 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 Discharger 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 WQOs at RSW-LATT630. Any exceedances of an ammonia WQO shall be noted in the "Summary of Non-Compliance" section of the monitoring report.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through VIII. The Discharger shall submit monthly, quarterly, semiannual, annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order (other than for process/operational control, startup, research, or equipment testing), 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 11. 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 ~ March 31 April 1 ~ June 30 July 1 ~ September 30 October 1 ~ 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 ~ June 30 July 1 ~ December 31	September 15 March 15
Annually	January 1 following (or on) permit effective date	January 1 ~ December 31	April 15
Annually (CECs)	July 1, 2011	2nd half of calendar year	June 30

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML), for those constituents where the SIP specifies MLs, and the applicable reported Reporting Limit (RL), for all other constituents as appropriate, and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.

   The Discharger 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 reported ML 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 as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). 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. Dischargers 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 Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. The Discharger shall submit SMRs in accordance with the following requirements:

a. The Discharger 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 Discharger 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 Discharger shall electronically submit the data in a tabular format as an attachment.

b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations 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. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below: (Reference the reports to Compliance File No. 5695 to facilitate routing to the appropriate staff and file.)

California Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Attention: Information Technology Unit

C. Discharge Monitoring Reports (DMRs)

1. As described in Section IX.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge

Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

STANDARD MAIL	FEDEX/UPS/OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15th Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of EPA Form 3320-1.

D. Other Reports

1. Annual Summary Report

By April 15 of each year, the Discharger shall submit an annual report containing a discussion of the previous year's influent/effluent analytical results and receiving water bacterial monitoring data. The annual report shall also contain an overview of any plans for upgrades to the treatment facility's collection system, the treatment processes, or the outfall system. The Discharger shall submit a hard copy annual report to the Regional Water Board in accordance with the requirements described in subsection IX.B.5 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; and,

e. The date and time of sample collection.

2. The Discharger 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.

3. The Regional Water Board requires the Discharger 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 II 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 dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to the City of Los Angeles (City or Discharger). Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the Donald C. Tillman Water Reclamation Plant (Tillman WRP or Facility).

Table 1. Facility Information

WDID	4B190106004
Discharger	City of Los Angeles
Name of Facility	Donald C. Tillman Water Reclamation Plant
Facility Address	6100 Woodley Avenue, Van Nuys, CA 91406
Facility Contact, Title and Phone	Hiddo Netto, Plant Manager, (818) 778-4121
Authorized Person to Sign and Submit Reports	Enrique C. Zaldivar, Director, (213) 473-7999
Mailing Address	1149 S. Broadway 9th Floor, Los Angeles, CA 90015
Billing Address	SAME
Type of Facility	Publicly-Owned Treatment Work
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Y
Reclamation Requirements	Producer
Facility Permitted Flow	80 Million Gallons per Day
Facility Design Flow	80 Million Gallons per Day
Watershed	Los Angeles River Watershed
Receiving Water	Los Angeles River
Receiving Water Type	Inland surface water

A. The City's Department of Public Works, Bureau of Sanitation is the owner and operator of the Tillman WRP, a Publicly-Owned Treatment Works (POTW).

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

B. The Facility discharges wastewater to Los Angeles River, water of the United States, and is currently regulated by Order Nos. R4-2006-0091[1] and R4-2010-0060[2], which expire on November 10, 2011. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.

C. The Discharger filed a report of waste discharge (ROWD) and submitted an application for renewal of its WDRs and NPDES permit on April 18, 2011. The revised ROWD was received on April 26, 2011. A site visit was conducted on May 2, 2011, to observe operations and collect additional data to develop permit limitations and conditions. The Regional Water Quality Control Board (Regional Water Board) issued a letter to the Discharger on July18, 2011, indicating that the application for the NPDES permit renewal and ROWD were complete.

II. FACILITY DESCRIPTION

The Tillman WRP is located at 6100 Woodley Avenue, Van Nuys, California. Attachment B is the vicinity map for the Tillman WRP. The Tillman WRP consists of two identical treatment trains, each with a dry weather average design capacity of 40 million gallons per day (MGD), for a total 80 MGD. In 2010, the average treated tertiary-treated municipal wastewater was approximately 47 MGD. The influent wastewater is a mixture of domestic and industrial wastewater that is pre-treated pursuant to title 40, Code of Federal Regulations (CFR), part 403.

The Tillman WRP is part of the City's integrated network of facilities, known as the Hyperion Service area (HAS), which includes four treatment plants. The upstream treatment plants (Tillman WRP, Los Angeles-Glendale WRP, and Burbank WRP) discharge solids to the Hyperion Treatment Plant. This system also allows biosolids, solids, and excess flows to be diverted from the upstream plants to the Hyperion Wastewater Treatment Plant for treatment and disposal. All solids removed from the

[1] Order No. R4-2006-0091 adopted by this Regional Water Board on December 14, 2006, regulates the tertiary-treated wastewater discharged from the Tillman WRP.

[2] On January 25, 2010, the Regional Water Board entered into a settlement agreement with the City in an effort to resolve lawsuits and petitions challenging the 1998 Permit (Order No. 98-046) and 2006 Permit (Order No. R4-2006-0091). The settlement agreement required that a variety of negotiated modifications to Order No. R4-2006-0091 be brought before the Regional Water Board for its consideration. The settlement agreement did not bind the Regional Water Board's judgment in consideration of those modifications, but the modifications did reflect staff recommendations. Order No. R4-2010-0060 adopted by this Regional Water Board on April 1, 2010, modifying Order No. R4-2006-0091, was the result of the public hearing on staff's proposals pursuant to the settlement agreement.

Tillman WRP treatment process are returned untreated to the Additional Valley Outfall sewer (AVORS) for downstream treatment at the Hyperion Wastewater Treatment Plant.

The City maintains and operates the Hyperion Treatment System, which collects, treats, and processes municipal wastewater from domestic, commercial, and industrial sources from the entire City (except the Terminal Island Service Area surrounding the Los Angeles Harbor area) and from a number of other cities and agencies under contractual agreements, including the communities of Chatsworth, Granada Hills, Mission Hills, Northridge, Pacoima, Tarzana, Van Nuys, Sylmar, Woodland Hills, Canoga Park; the City of San Fernando; the Las Virgenes Municipal Water District; Veterans Memorial Park; and the Triunfo Canyon Sanitation District. Sewage enters the Tillman WRP via both the Additional Valley Outfall Relief Sewer (AVORS) and the East Valley Interceptor Sewer (EVIS). There are approximately 4 million people living in the Hyperion Service Area with approximately 1.1 million people in the San Fernando Valley, which is served by the Tillman WRP.

In case of the Tillman WRP operational problems or a need for the Tillman WRP shutdown, wastewater can be diverted back to the AVORS for treatment at the Hyperion Treatment Plant.

A. Description of Wastewater and Biosolids Treatment or Controls

1. The treatment system at the Tillman WRP currently consists of grit removal, screening, flow equalization, primary sedimentation, nitrification and denitrification (NDN) activated sludge biological treatment with fine pore aeration, secondary clarification, coagulation, aqua diamond cloth filtration, disinfection by chlorination with the addition of ammonium hydroxide, and dechlorination. No facilities are provided for solids processing at the Tillman WRP. Solids from the Facility are returned to the collection system for processing at the Hyperion Treatment Plant. Solids returned to the sewer consist of grit, primary and secondary sludge and skimmings, and filter backwash (approximately 10 MGD). Attachment B is the schematic of wastewater flow.

   In order to achieve compliance with the ammonia water quality objectives (WQOs) specified in the *Water Quality Control Plan for the Los Angeles Region* (Basin Plan), the City tested different NDN treatments, including Modified Ludzack-Ettinger (MLE) Process, Enhanced Modified Ludzack-Ettinger (eMLE) Process, and Step-Feed Process. The City completed construction of the NDN treatment facility with the MLE Process in September 2007, and took 90 days to optimize operation of the NDN facilities.

   a. **Grit removal –** Grit removal is used to remove as much sand and silt as possible to prevent wear on pumps; accumulations in aeration tanks, clarifiers, and digesters; and clogging of sludge piping.

   b. **Screen –** Screens are used in the wastewater treatment plant to remove coarse solids, such as wood, plastic materials, and rags.

c. **Flow equalization –** Flow equalization basins provide a relatively constant flow rate to the subsequent treatment operations and processes, enhancing the degree of treatment. Not only does equalization dampen the daily variation in the flow rate, but it also dampens the variation in the concentration of effluent five-day biochemical oxygen demand at 20°C ($BOD_{5@20^{\circ}C}$), total suspended solids (TSS), and so on, through the day.

d. **Primary sedimentation –** The main objective of primary sedimentation is to remove solids from the wastewater by gravity. The heavier solids (settleable solids) precipitate and are scraped out of the primary sedimentation basin. The lighter solids float to the top and are skimmed off. However, some solids remain in suspension.

e. **NDN activated sludge biological treatment –** Air generated from six compressors and delivered via pipe ducts to the aeration basin provides oxygen for the nitrification process. Activated sludge converts non-settleable and dissolved organic contaminants into biological floc, which can then be removed from the wastewater with further treatment.

f. **Secondary sedimentation with coagulation –** The main objective of secondary sedimentation is to remove biological floc from the wastewater. Chemicals, such as aluminum sulfate (alum) and polymer, may be added as part of the treatment process to enhance solids removal. Alum causes the biological floc to combine into larger clumps (coagulate), thus making them easier to remove.

g. **Aqua diamond cloth filtration –** The filtration process is used to remove or reduce suspended or colloidal matter from a liquid stream by passing the water through cloth media. Cloth media is completely submerged during filtration. Solids are deposited on the outside of the cloth as the influent wastewater flows through. The filtered effluent is collected inside the diamond lateral to discharge. Cloth media remove the solids that the secondary sedimentation process did not remove, thus, improving the efficiency and reliability of the following disinfection process.

h. **Chlorination with ammonium hydroxide added –** Sodium hypochlorite and ammonium hydroxide are used as disinfectants at the Tillman WRP. Ammonium hydroxide reacts with sodium hypochlorite to form chloramine. This disinfection process reduces the formation of trihalomethanes and cyanide. Disinfectant is added into the effluent of aqua diamond cloth filtration (prior to the chlorine contact basin) in order to destroy bacteria, pathogens and viruses.

i. **Dechlorination –** Sodium bisulfate is added to neutralize the chlorine prior to the discharge of treated water to the Los Angeles River.

B. Discharge Points and Receiving Waters

1. The Tillman WRP is located within the Sepulveda Dam Basin. The 100-year flood water surface elevation under the "*U.S. Corps of Engineers Modified Spillway Gate Operating Plan*" for the Sepulveda Dam Basin is 714.4 feet. The City's Department of Public Works completed construction of a berm surrounding the Tillman WRP in 1994 to a finished elevation of 715 feet. The berm and new outfall (Discharge Point 008, see below for more information) were measured necessary to protect the Tillman WRP from flood conditions within the Sepulveda Flood Control Basin. The Tillman WRP discharges tertiary-treated wastewater via Wildlife Lake, Lake Balboa, Bull Creek, Hayvenhurst Channel, and Haskell Channel, to the Los Angeles River, above the Estuary. The receiving water is located within the Los Angeles River Watershed. Existing points of discharge (see Attachment B) are located within Los Angeles River Reach 5 Sepulveda Basin and are as follows:

   a. **Discharge Point 001 (Discharge to Los Angeles River) –** Discharge Point 001 was formerly used as an outfall for the Tillman WRP and, though inactive, is still in place.

   b. **Discharge Point 002 (Discharge to Los Angeles River via Lake Balboa, Bull Creek, and Hayvenhurst Channel) –** The City of Los Angeles Department of Recreation and Parks has used up to 17 MGD of treated effluent as recycled water in the 27.5-acre Lake Balboa. The treated effluent is discharged from the Tillman WRP to the Lake at the southeast corner of Victory and Balboa Boulevards, Los Angeles (Discharge Point 002). The treated effluent flows through the Lake and eventually discharges through weirs, spillways and a bottom drain to three Outfalls: at Bull Creek (Discharge Points 004A and 004B), Hayvenhurst Channel (Discharge Point 005), and the Los Angeles River (Discharge Point 006). Bull Creek and Hayvenhurst Channel are tributaries to the Los Angeles River above the Estuary.

   c. **Discharge Point 003 (Discharge to Los Angeles River via Wildlife Lake, Haskell Channel) –** The Department of Recreation and Parks uses approximately 5 MGD of treated effluent as recycled water for Wildlife Lake and approximately 2 MGD in Haskell Flood Control Channel between September and May. The treated effluent flows by gravity to Wildlife Lake located northeast of Burbank Boulevard and Woodley Avenue (Discharge Point 003). The treated effluent flows through the 10-acre Wildlife Lake and is discharged to the Haskell Flood Control Channel (Discharge Point 007), thence to the Los Angeles River, above the Estuary.

      During the summer months, Wildlife Lake may be drained (for maintenance and to minimize nuisance resulting from mosquito breeding), resulting in as increased discharge of treated effluent to Haskell Flood Control Channel.

d. **Discharge Point 008 (Discharge to Los Angeles River) –** The Tillman WRP discharges tertiary-treated effluent to the upper Los Angeles River, at Discharge Point 008, which was completed construction in 1993 and replaced Discharge Point 001. Discharge Point 008 is located 878 feet downstream of the Sepulveda Dam Spillway,

2. The City is currently using treated effluent to maintain the Japanese Garden, Lake Balboa, and Wildlife Lake. The Wildlife Lake and Lake Balboa are operated and maintained by the City's Department of Recreation and Parks. The Department of Recreation and Parks has developed management plans for these lakes, which include measures to be implemented in the operation, maintenance, and monitoring of the lakes.

3. During dry weather (May 1 – October 31), the primary sources of water flow in Los Angeles River downstream of the Discharge Points are the Tillman WRP, the Burbank WRP, 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*, NPDES Permit No. CAS004001.

4. The Los Angeles County Flood Control District channelized portions of the Los Angeles River to convey and control floodwater, and to prevent damage to homes located adjacent to the river. Although not its main purpose, the Los Angeles River conveys treated wastewater along with floodwater, and urban runoff. The Los Angeles River is unlined further downstream of its confluence with the Burbank Western Channel, in what is known as the Glendale Narrows. Groundwater recharge occurs incidentally, in these unlined areas of the Los Angeles River. At times when the groundwater table is high, groundwater rises and contributes flow to the Los Angeles River. Natural springs feed the river and support willows, sycamores, and cottonwood trees. South of the Glendale Narrows, the Los Angeles River is concrete-lined down to Willow Street, in Long Beach.

5. As described in the State of the Watershed Report, the Los Angeles River Watershed is one of the largest in the Los Angeles Region. It is also one of the most diverse in terms of land use patterns. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The rest of the watershed is highly developed. The river flows through the San Fernando Valley past heavily developed residential and commercial areas. From the Arroyo Seco, north of downtown Los Angeles, to the confluence with the Rio Hondo, the river flows through industrial and commercial areas and is bordered by railyards, freeways, and major commercial and government buildings. From the Rio Hondo to the Pacific Ocean, the river flows through industrial, residential, and commercial areas, including major refineries and petroleum products storage facilities, major

freeways, rail lines, and railyards serving the Ports of Los Angeles and Long Beach.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

1. Effluent limitations contained in the existing Order for discharges from Effluent Transfer Stations EFF-001A and EFF-001B and representative monitoring data from the term of the previous Order are as follows:

Table 2. Historic Effluent Limitations and Monitoring Data at EFF-001A and EFF-001B

Parameter	Units	Effluent Limitation			Monitoring Data[3] (From 01/01/2008 To 03/31/2011)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge[4, 5]	Highest Daily Discharge
$BOD_{5@20^{o}C}$	mg/L	20	30	45	3	4	7
TSS	mg/L	15	40	45	1.2	1.3	2.1
Oil and Grease	mg/L	10	--	15	<3	--	3
Settleable Solids	ml/L	0.1	--	0.3	<0.1	--	<0.1
Residual Chlorine	mg/L	--	--	0.1	--	--	<0.1
Total Dissolved Solids	mg/L	950	--	--	734	--	734
MBAS	mg/L	0.5	--	--	0.25	--	0.25
Chloride	mg/L	190	--	--	156	--	156
Sulfate	mg/L	300	--	--	162	--	162
Fluoride	mg/L	2.0	--	--	1.03	--	1.03
Boron	mg/L	--	--	--	0.81	--	0.81
Nitrate-N	mg/L	7.2	--	--	7.19	--	7.19
Nitrite-N	mg/L	0.9	--	--	0.32	--	0.32
Nitrate + Nitrite as N	mg/L	7.2	--	--	7.46	--	7.46
Total Ammonia	mg/L	1.4	--	4.2	1.42	--	1.42
Antimony	µg/L	--	--	--	1.44	--	1.44
Arsenic	µg/L	--	--	--	4.1	--	4.1
Beryllium	µg/L	--	--	--	0.1	--	0.1
Cadmium	µg/L	4.1	--	8.2	0.85	--	0.85
Chromium III	µg/L	--	--	--	1.80	--	1.80

[3] These monitoring data include estimated concentrations, which are less than the reporting level, but greater than or equal to the respective laboratory's MDLs.
[4] The highest average weekly discharge concentration is reported for constituents that are monitored at weekly or more frequent intervals.
[5] Weekly averages are calculated as a calendar week average.

Parameter	Units	Effluent Limitation			Monitoring Data[3] (From 01/01/2008 To 03/31/2011)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge[4, 5]	Highest Daily Discharge
Chromium VI	µg/L	--	--	--	<2	--	<2
Copper	µg/L	23	--	34	26.1	--	26.1
Lead	µg/L	7.3	--	18	1.5	--	1.5
Mercury	µg/L	0.051	--	0.12	0.055	--	0.055
Nickel	µg/L	--	--	--	20	--	20
Selenium	µg/L	3.6	--	9.2	1.8	--	1.8
Silver	µg/L	--	--	--	0.2	--	0.2
Thallium	µg/L	--	--	--	0.16	--	0.16
Zinc	µg/L	193	--	257	135	--	135
Cyanide[6]	µg/L	3.8	--	9.4	6	--	6
Asbestos	µg/L	--	--	--	NA	--	NA
2,3,7,8-TCDD (Dioxin)	µg/L	--	--	--	0	--	0
Acrolein	µg/L	--	--	--	< 1.96	--	< 1.96
Acrylonitrile	µg/L	--	--	--	< 0.29	--	< 0.29
Benzene	µg/L	--	--	--	< 0.15	--	< 0.15
Bromoform	µg/L	--	--	--	3.37	--	3.37
Carbon Tetrachloride	µg/L	--	--	--	<0.45	--	<0.45
Chlorobenzene	µg/L	--	--	--	0.15	--	0.15
Dibromochloromethane	µg/L	--	--	--	21.8	--	21.8
Chloroethane	µg/L	--	--	--	0.21	--	0.21
2-chloroethyl vinyl ether	µg/L	--	--	--	< 1	--	< 1
Chloroform	µg/L	--	--	--	56.1	--	56.1
Dichlorobromomethane	µg/L	--	--	--	45	--	45
1,1-Dichloroethane	µg/L	--	--	--	< 0.36	--	< 0.36
1,2-Dichloroethane	µg/L	--	--	--	< 0.23	--	< 0.23
1,1-Dichloroethylene	µg/L	--	--	--	< 0.41	--	< 0.41
1,2-Dichloropropane	µg/L	--	--	--	< 0.51	--	< 0.51
1,3-Dichloropropylene	µg/L	--	--	--	< 0.39	--	< 0.39
Ethylbenzene	µg/L	--	--	--	< 0.39	--	< 0.39
Methyl bromide	µg/L	--	--	--	1.27	--	1.27

[6] Limitations were adopted in Order R4-2006-0091 and removed in Order No. R4-2010-0060. There were no limitations after April 1, 2010.

Parameter	Units	Effluent Limitation			Monitoring Data[3] (From 01/01/2008 To 03/31/2011)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge[4, 5]	Highest Daily Discharge
Methyl chloride	µg/L	--	--	--	<0.33	--	<0.33
Methylene chloride	µg/L	--	--	--	0.34	--	0.34
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	< 0.29	--	< 0.29
Tetrachloroethylene[7]	µg/L	5	--	--	1.92	--	1.92
Toluene	µg/L	--	--	--	<0.37	--	<0.37
Trans 1,2-Dichloroethylene	µg/L	--	--	--	< 0.57	--	< 0.57
1,1,1-Trichloroethane	µg/L	--	--	--	< 0.29	--	< 0.29
1,1,2-Trichloroethane	µg/L	--	--	--	< 0.31	--	< 0.31
Trichloroethylene	µg/L	--	--	--	< 0.48	--	< 0.48
Vinyl Chloride	µg/L	--	--	--	< 0.37	--	< 0.37
2-chlorophenol	µg/L	--	--	--	< 0.26	--	< 0.26
2,4-dichlorophenol	µg/L	--	--	--	< 0.27	--	< 0.27
2,4-dimethylphenol	µg/L	--	--	--	< 0.24	--	< 0.24
4,6-Dinitro-o-Resol (2-Methyl-4,6-Dinitrophenol)	µg/L	--	--	--	< 1.16	--	< 1.16
2,4-Dinitrophenol	µg/L	--	--	--	< 1.09	--	< 1.09
2-Nitrophenol	µg/L	--	--	--	< 0.45	--	< 0.45
4-Nitrophenol	µg/L	--	--	--	1.08	--	1.08
3-Methyl-4-Chlorophe	µg/L	--	--	--	0.49	--	0.49
Pentachlorophenol	µg/L	--	--	--	1.06	--	1.06
Phenol	µg/L	--	--	--	< 0.4	--	< 0.4
2,4,6-Trichlorophenol	µg/L	--	--	--	0.29	--	0.29
Acenaphthene	µg/L	--	--	--	< 0.13	--	< 0.13
Acenaphthylene	µg/L	--	--	--	< 0.13	--	< 0.13
Anthracene	µg/L	--	--	--	< 0.11	--	< 0.11
Benzidine	µg/L	--	--	--	< 5	--	< 5
Benzo(a)Anthracene	µg/L	--	--	--	< 0.14	--	< 0.14
Benzo(a)Pyrene	µg/L	--	--	--	<0.03	--	<0.03
Benzo(b)Fluoranthene	µg/L	--	--	--	<0.14	--	<0.14
Benzo(ghi)Perylene	µg/L	--	--	--	< 0.03	--	< 0.03
Benzo(k)Fluoranthene	µg/L	--	--	--	<0.11	--	<0.11

Parameter	Units	Effluent Limitation			Monitoring Data[3] (From 01/01/2008 To 03/31/2011)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge[4, 5]	Highest Daily Discharge
Bis(2-Chloroethoxy) Methane	µg/L	--	--	--	< 0.35	--	< 0.35
Bis(2-Chloroethyl)Ether	µg/L	--	--	--	< 0.18	--	< 0.18
Bis(2-Chloroisopropyl) Ether	µg/L	--	--	--	< 0.35	--	< 0.35
Bis(2-Ethylhexyl) Phthalate[6]	µg/L	4	--	16	1	--	1
4-Bromophenyl Phenyl Ether	µg/L	--	--	--	< 0.15	--	< 0.15
Butylbenzyl Phthalate	µg/L	--	--	--	< 0.26	--	< 0.26
2-Chloronaphthalene	µg/L	--	--	--	< 0.3	--	< 0.3
4-Chlorophenyl Phenyl Ether	µg/L	--	--	--	< 0.28	--	< 0.28
Chrysene	µg/L	--	--	--	< 0.12	--	< 0.12
Dibenzo(a,h)Anthracene	µg/L	--	--	--	< 0.02	--	< 0.02
1,2-Dichlorobenzene	µg/L	--	--	--	14	--	14
1,3-Dichlorobenzene	µg/L	--	--	--	< 0.23	--	< 0.23
1,4-Dichlorobenzene	µg/L	--	--	--	<0.24	--	<0.24
3-3'-Dichlorobenzidine	µg/L	--	--	--	< 2.78	--	< 2.78
Diethyl Phthalate	µg/L	--	--	--	<0.62	--	<0.62
Dimethyl Phthalate	µg/L	--	--	--	0.29	--	0.29
Di-n-Butyl Phthalate	µg/L	--	--	--	0.12	--	0.12
2-4-Dinitrotoluene	µg/L	--	--	--	< 0.21	--	< 0.21
2-6-Dinitrotoluene	µg/L	--	--	--	< 0.21	--	< 0.21
Di-n-Octyl Phthalate	µg/L	--	--	--	< 0.82	--	< 0.82
1,2-Diphenylhydrazine	µg/L	--	--	--	< 0.21	--	< 0.21
Fluoranthene	µg/L	--	--	--	< 0.02	--	< 0.02
Fluorene	µg/L	--	--	--	< 0.02	--	< 0.02
Hexachlorobenzene	µg/L	--	--	--	< 0.18	--	< 0.18
Hexachlorobutadiene	µg/L	--	--	--	< 0.23	--	< 0.23
Hexachlorocyclopentadiene	µg/L	--	--	--	< 3.83	--	< 3.83
Hexachloroethane	µg/L	--	--	--	< 0.25	--	< 0.25
Indeno(1,2,3-cd)Pyrene	µg/L	--	--	--	< 0.02	--	< 0.02

Parameter	Units	Effluent Limitation			Monitoring Data[3] (From 01/01/2008 To 03/31/2011)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge[4, 5]	Highest Daily Discharge
Isophorone	µg/L	--	--	--	0.14	--	0.14
Naphthalene	µg/L	--	--	--	< 0.13	--	< 0.13
Nitrobenzene	µg/L	--	--	--	< 0.33	--	< 0.33
N-Nitrosodimethylamine	µg/L	--	--	--	< 0.5	--	< 0.5
N-Nitrosodi-n-Propylamine	µg/L	--	--	--	< 0.36	--	< 0.36
N-Nitrosodiphenylamine	µg/L	--	--	--	< 0.86	--	< 0.86
Phenanthrene	µg/L	--	--	--	< 0.01	--	< 0.01
Pyrene	µg/L	--	--	--	< 0.02	--	< 0.02
1,2,4-Trichlorobenzene	µg/L	--	--	--	< 0.42	--	< 0.42
Aldrin	µg/L	--	--	--	< 0.004	--	< 0.004
Alpha-BHC	µg/L	--	--	--	< 0.004	--	< 0.004
Beta-BHC	µg/L	--	--	--	< 0.003	--	< 0.003
Gamma-BHC[6] (Lindane)	µg/L	0.063	--	0.17	0.006	--	0.006
delta-BHC	µg/L	--	--	--	< 0.004	--	< 0.004
Chlordane	µg/L	--	--	--	< 0.056	--	< 0.056
4,4'-DDT	µg/L	--	--	--	< 0.007	--	< 0.007
4,4'-DDE	µg/L	--	--	--	< 0.004	--	< 0.004
4,4'-DDD	µg/L	--	--	--	< 0.004	--	< 0.004
Dieldrin	µg/L	--	--	--	< 0.005	--	< 0.005
Alpha-Endosulfan	µg/L	--	--	--	< 0.008	--	< 0.008
Beta-Endosulfan	µg/L	--	--	--	< 0.007	--	< 0.007
Endosulfan Sulfate	µg/L	--	--	--	< 0.008	--	< 0.008
Endrin	µg/L	--	--	--	< 0.005	--	< 0.005
Endrin Aldehyde	µg/L	--	--	--	< 0.004	--	< 0.004
Heptachlor	µg/L	--	--	--	< 0.003	--	< 0.003
Heptachlor Epoxide	µg/L	--	--	--	< 0.003	--	< 0.003
PCB 1016	µg/L	--	--	--	< 0.039	--	< 0.039
PCB 1221	µg/L	--	--	--	< 0.49	--	< 0.49
PCB 1232	µg/L	--	--	--	< 0.1	--	< 0.1
PCB 1242	µg/L	--	--	--	< 0.2	--	< 0.2
PCB 1248	µg/L	--	--	--	< 0.1	--	< 0.1

Parameter	Units	Effluent Limitation			Monitoring Data[3] (From 01/01/2008 To 03/31/2011)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge[4, 5]	Highest Daily Discharge
PCB 1254	µg/L	--	--	--	< 0.04	--	< 0.04
PCB 1260	µg/L	--	--	--	< 0.07	--	< 0.07
Toxaphene	µg/L	--	--	--	< 0.1	--	< 0.1
Methoxychlor	µg/L	--	--	--	< 0.01	--	< 0.01
2,4-D	µg/L	--	--	--	< 1	--	< 1
2,4,5-TP (Sylvex)	µg/L	--	--	--	< 1	--	< 1

D. Compliance Summary

Table 3 lists the Tillman WRP's violations of subdivisions (h) and (i) of CWC section 13385, from January 1, 2008 through February 28, 2011. None of these violations were subject to the mandatory minimum penalty violations.

Table 3. List of Violations

Violation ID	Occurred Date	Violation Type	Violation Description
785577	05/11/2008	Water quality effluent	Total Coliform (68/>23 MPN >2x in 30 days)
785578	06/02/2008	Water quality effluent	NO2 + NO3 as N, monthly average (7.46/7.2 mg/L)
785580	05/30/2008	Water quality effluent	Total Coliform (26/>23 MPN >2x in 30 days)
894603	08/18/2009	Order conditions	The Facility has not been collecting oil and grease samples directly into a glass container.

E. Planned Changes

The Tillman WRP's treatment system has been upgraded with respect to nitrogen removal since September of 2007, in order to comply with the Basin Plan WQOs for ammonia nitrogen.

To better maintain storm flows and avoid sewer overflows, the City plans to construct an in-plant storage system consisting of lined concrete basins, associated structures and auxiliary piping to provide 15.2 million gallons (MG) of wet weather storage capacity. Additionally, piping and valve modifications to the existing Phase II primary sedimentation and aeration tanks will provide equalization capacity for diurnal flow and up to 4.8 MG additional wet weather storage capacity. The basins will be used only as temporary relief storage and will not provided additional treatment. Temporary relief storage will be used to relieve the sewer system during

significant storm events by diverting Tillman WRP primary effluent to open, lined basins for up to 12 hours, than discharge back into AVORS. The in-plant storage system is expected to be completed in May 2013.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is 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 California Water Code (CWC) (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. **Basin Plan.** The Basin Plan, adopted on June 13, 1994, designates beneficial uses, establishes WQOs, and contains implementation programs and policies to achieve those WQOs for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the receiving waters as follows:

Table 4A. Basin Plan Beneficial Uses – Surface Waters

Discharge Points	Receiving Water Name	Beneficial Use(s)
001 002 003 008	Los Angeles River Upstream to Figueroa Street (Hydro. Unit No. 405.21)	Existing: ground water recharge (GWR); contact water recreation (REC-1); non-contact water recreation (REC-2); warm freshwater habitat (WARM); wildlife habitat (WILD); and wetland habitat[7] (WET). Potential: municipal and domestic water supply[8] (MUN), and industrial service supply (IND).
	Los Angeles River Figueroa Street to Carson Street (Hydro. Unit No. 405.15)	Existing: GWR; REC-1[9]; REC-2; and WARM. Potential: MUN[8]; IND; and WILD.
	Los Angeles River Carson Street to Estuary (Hydro. Unit No. 405.12)	Existing: GWR; REC-1[9]; REC-2; WARM; marine habitat (MAR); WILD; and rare, threatened, or endangered species (RARE). Potential: MUN[8]; IND; industrial process supply (PROC); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN); and shellfish harvesting[9] (SHELL).
	Los Angeles River Estuary (Hydro. Unit No. 405.12)	Existing: IND; navigation (NAV); REC-1; REC-2; commercial and sport fishing (COMM); estuarine habitat (EST); MAR; WILD; RARE[10]; MIGR[11]; SPWN[11]; and WET[7]. Potential: SHELL.

[7] Waterbodies designated as WET may have wetlands habit associated with only a portion of the waterbody. Any regulatory action would require a detailed analysis of the area.

[8] The potential municipal and domestic supply beneficial uses for the water body is consistent with the State Water Board Order No. 88-63 and Regional Water Board Resolution No. 89-003; however, the Regional Water Board has only conditionally designated the MUN beneficial use and at this time cannot legally establish effluent limitations designed to protect the conditional designation.

[9] Access prohibited by Los Angeles County Department of Public Works.

[10] One or more rare species utilize estuaries and coastal wetlands for foraging and/or nesting.

[11] Aquatic organisms utilize estuary and coastal wetland, to a certain extent, for spawning and early development. This may include migration into areas, which are heavily influenced by freshwater inputs.

Table 4B. Basin Plan Beneficial Uses – Ground Waters

Discharge Point	Receiving Water Name	Beneficial Use(s)
001 002 003 008	San Fernando Basins (East and West of Highway 405) – DWR Basin No.[12] 4-12	Existing: MUN; IND; PROC; and, agricultural supply (AGR).
	Los Angeles Coastal Plain (Central and West Basins) – DWR Basin No. 4-11	Existing: MUN; IND; PROC; and AGR.

Requirements of this Order implement the Basin Plan and subsequent amendments.

a. **Ammonia WQOs –** Table 3-1 through Table 3-4 of the 1994 Basin Plan provided WQOs for ammonia to protect aquatic life. However, those ammonia WQOs were revised on April 25, 2002, by the Regional Water Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Lif*e. The ammonia Basin Plan amendment was approved by the State Water Board, Office of Administrative Law (OAL), and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. On December 1, 2005, Resolution No. 2005-014, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life,* was adopted by the Regional Water Board. Resolution No. 2005-014 was approved by the State Water Board, OAL, and USEPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively. On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005, *Amendments to the Water Quality Control Plan-Los Angeles Region-To Incorporate Site-Specific Objectives for Select Inland Surface Waters in the San Gabriel River, Los Angeles River and Santa Clara River Watersheds.* This amendment to the Basin Plan incorporates site-specific 30-day average objectives for ammonia along with corresponding site-specific early life stage implementation provisions for select waterbody reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River watersheds. The State Water Board, OAL, and USEPA approved this Basin Plan amendment on January 15, 2008, May 12, 2008, and March 30, 2009, respectively.

[12] Basins are numbered according to DWR (California Department of Water Resources) Bulletin No. 118-80 (DWR, 1980).

b. **Chloride WQOs** – Table 3-8 of the 1994 Basin Plan contained WQOs for chloride. However, the chloride WQOs for some waterbodies were revised by the Regional Water Board on January 27, 1997, with the adoption of Resolution No. 97-02, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters*. Resolution No. 97-02 was approved by the State Water Board, OAL, and USEPA on October 23, 1997, January 9, 1998, and February 5, 1998, respectively, and is now in effect. The chloride WQO was revised from 150 mg/L to 190 mg/L, for the Los Angeles River between Figueroa Street and Los Angeles River Estuary (Willow Street) and between Sepulveda Flood Control Basin and Figueroa Street (including Burbank Western Channel). The final effluent limitation for chloride prescribed in this Order is based on the revised chloride WQO and is applied at the end of pipe.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. Approximately forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

3. **State Implementation Policy (SIP).** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes (40 CFR part 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

5. **Antidegradation Policy.** 40 CFR part 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR part 131.12 and State Water Board Resolution No. 68-16.

6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR part 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Some effluent limitations in this Order are less stringent that those in the previous Order. As discussed in detail in the Fact Sheet this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

D. Impaired Water Bodies on Integrated Report

The State Water Board proposed the California 2008-2010 Integrated Report from a compilation of the adopted Regional Water Boards' Integrated Reports containing 303(d) List of Impaired Waters and 305(b) Reports following recommendations from the Regional Water Boards and information solicited from the public and other interested parties. The Regional Water Boards' Integrated Reports were used to revise their 2006 303 (d) List. On August 4, 2010, the State Water Board adopted the California 2008-2010 Integrated Report. On November 12, 2010, the USEPA approved California 2008-2010 Integrated Report Section 303(d) List of Impaired Waters requiring TMDLs for the Los Angeles Region.

Los Angeles River and their tributaries are on California 2010 Integrated Report. The following pollutants were identified as impacting the receiving waters:

1. **Los Angeles River Estuary (Queensway Bay) –** Calwater Watershed 40512000 (Hydro. Unit No. 405.12 in Basin Plan)

   Pollutants – Chlordane (sediment)[13], DDT (sediment)[13], PCBs (polychlorinated biphenyls) (sediment)[13], sediment toxicity[13], and trash[14]

2. **Los Angeles River Reach 1 (Estuary to Carson Street) –** Calwater Watershed 40512000 (Hydro. Unit No. 405.12 in Basin Plan)

[13] This pollutant requires TMDL.
[14] TMDL has been approved for this pollutant, which has being addressed by USEPA.

Pollutants – Ammonia[14], cadmium[14], coliform bacteria[13], copper[14], cyanide[13], diazinon[13], lead[14], nutrients (algae)[14], trash[14], zinc[14], and pH[14]

3. **Los Angeles River Reach 2 (Carson Street to Figueroa Street) –** Calwater Watershed 40515000 (Hydro. Unit No. 405.15 in Basin Plan)

   Pollutants – Ammonia[14], coliform bacteria[13], copper[14], lead[14], nutrients (algae)[14], oil[13], and trash[14]

4. **Angeles River Reach 3 (Figueroa Street to Riverside Drive) –** Calwater Watershed 40521000 (Hydro. Unit No. 405.21 in Basin Plan)

   Pollutants – Ammonia[14], copper[14], lead[14], nutrients (algae)[14], and trash[14]

5. **Los Angeles River Reach 4 (Riverside Drive to Sepulveda Dam) –** Calwater Watershed 40521000 (Hydro. Unit No. 405.21 in Basin Plan)

   Pollutants – Ammonia[14], coliform bacteria[13], copper[14], lead[14], nutrients (algae)[14], and trash[14]

6. **Los Angeles River Reach 5 (within Sepulveda Basin) –** Calwater Watershed 40521000 (Hydro. Unit No. 405.21 in Basin Plan)

   Pollutants – Ammonia[14], copper[14], lead[14], nutrients (algae)[14], oil[13], and trash[14]

E. Other Plans, Polices and Regulations

1. **Sources of Drinking Water Policy (SODW Policy)**. On May 19, 1988, the State Water Board adopted Resolution No. 88-63, *Sources of Drinking Water Policy*, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with State Water Board's SODW policy, on March 27, 1989, the Regional Water Board adopted Resolution No. 89-03, *Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans) – Santa Clara River Basin (4A)/ Los Angeles River Basin (4B).*

   Consistent with Regional Water Board Resolution No. 89-03 and State Water Board Resolution No. 88-63, in 1994 the Regional Water Board conditionally designated all inland surface waters in Table 2-1 of the 1994 Basin Plan as existing, intermittent, or potential for Municipal and Domestic Supply (MUN). However, the conditional designation in the 1994 Basin Plan included the following implementation provision: "no new effluent limitations will be placed in WDRs as a result of these [potential MUN designations made pursuant to the SODW policy and the Regional Water Board's enabling resolution] until the Regional Water Board adopts [a special Basin Plan Amendment that incorporates a detailed review of the waters in the Region that should be exempted from the potential MUN designations arising from SODW policy and the Regional Water Board's enabling resolution]." On February 15, 2002, the USEPA clarified its partial approval (May 26, 2000) of the 1994 Basin Plan

amendments and acknowledged that the conditional designations do not currently have a legal effect, do not reflect new water quality standards subject to USEPA review, and do not support new effluent limitations based on the conditional designations stemming from the SODW Policy until a subsequent review by the Regional Water Board finalizes the designations for these waters. This permit is designed to be consistent with the existing Basin Plan.

2. **Secondary Treatment Regulations**. 40 CFR part 133 establishes the minimum levels of effluent quality to be achieved by secondary treatment. These limitations, established by USEPA, are incorporated into this Order, except where more stringent limitations are required by other applicable plans, policies, or regulations or to prevent backsliding.

3. **Storm Water**. CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR part 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Water Board issued a statewide general permit, *General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities.* This permit was amended in September 1992 and reissued on April 17, 1997 in State Water Board Order No. 97-03-DWQ to regulate storm water discharges associated with industrial activity.

   General NPDES permit No. CAS000001 (Order No. 97-03-DWQ) is applicable to storm water discharges from the Tillman WRP's premises. The City developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP).

4. **Sanitary Sewer Overflows (SSOs).** The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 USC section 1311, 1342). The State Water Board adopted Statewide General WDRs for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 on May 2, 2006, to provide a consistent, statewide regulatory framework to address SSOs. The WDR requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database.

   The requirements contained in this Order in Sections VI.C.3.b. (Spill Clean-Up Contingency Plan), VI.C.4. (Construction, Operation and Maintenance Specifications), and VI.C.5.c. (Spill Reporting Requirements for POTWs) are intended to be consistent with the requirements of the SSOs WDR. The Regional Water Board recognizes that there may be some overlap between the NPDES permit provisions and SSOs WDR requirements, at least as related to the collection systems. The requirements of the SSOs WDR are considered the minimum thresholds (see Finding 11 of State Board Order No. 2006-0003-

DWQ). To encourage efficiency, the Regional Water Board will accept the documentation prepared by the Discharger under the SSOs WDR for compliance purposes, as satisfying the requirements in Sections VI.C.3.b., VI.C.4., and VI.C.5.c. provided the monitoring requirements contained in this Order in sections IV.9.B.d. and IV.9.B.e. are also addressed. Pursuant to the SSO WDR, State Board Order No. 2006-0003-DWQ, 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.

5. **Watershed Management.** This Regional Water Board has been implementing a Watershed Management Approach (WMA) to address water quality protection in the Los Angeles Region following the USEPA guidance in *Watershed Protection: A Project Focus* (EPA841-R-95-003, August 1995). The objective of the WMA is to provide a more comprehensive and integrated strategy resulting in water resource protection, enhancement, and restoration while balancing economic and environmental impacts within a hydrologically-defined drainage basin or watershed. The WMA emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with the resources available. The accompanying Order fosters the implementation of this approach by protecting beneficial uses in the watershed and requiring the Discharger to participate with stakeholders, in implementation of a watershed-wide monitoring program. The Monitoring and Reporting Program (MRP) (see section VIII.A. of the accompanying MRP) requires the Discharger to participate in the implementation of the Watershed-wide Monitoring Program for the Los Angeles River, which was approved by the Regional Water Board on January 12, 2009.

6. **Relevant TMDLs.** Section 303(d) of the CWA requires states to identify water bodies that do not meet water quality standards and then to establish TMDLs for each waterbody for each pollutant of concern. TMDLs identify the maximum amount of pollutants that can be discharged to waterbodies without causing violations of water quality standards.

   a. **Nitrogen Compounds TMDL –** On July 10, 2003, the Regional Water Board adopted Resolution No. 2003-009, *Amendment to the Basin Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River (Nitrogen Compounds TMDL*). On November 19, 2003, the State Water Board approved the *Nitrogen Compounds TMDL*. However, on December 4, 2003, the Regional Water Board revised the Nitrogen Compound TMDL by adopting Resolution No. 2003-016*, Revision of Interim Effluent Limitations for Ammonia in the Amendment to the Water Quality Control Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River*. Resolution No. 2003-016 only revised the portion of the Nitrogen Compounds TMDL containing interim limitations for total ammonia as nitrogen for the Glendale and Tillman

WRPs. All other portions of the TMDL remained unchanged. The *Nitrogen Compounds TMDL* went into effect on March 23, 2004, when the Regional Water Board filed the Certificate of Fee Exemption with the California Department of fish and Game.

On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005, *Amendments to the Water Quality Control Plan-Los Angeles Region-To Incorporate Site-Specific Objectives for Select Inland Surface Waters in the San Gabriel River, Los Angeles River and Santa Clara River Watersheds.* This amendment to the Basin Plan incorporates site-specific 30-day average objectives for ammonia along with corresponding site-specific early life stage implementation provisions for select waterbody reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River watersheds. In accordance with Implementation Table, Task 8 of the *LA River Nitrogen Compounds TMDL*, "…If a site specific objective is adopted by the Regional Board, and approved by relevant approving agencies, this TMDL will need to be revised, readopted, and reapproved to reflect the revised water quality objectives."

b. **Trash TMDL –** On September 19, 2001, the Regional Water Board adopted Resolution No. 2001-013, *Amendment to the Basin Plan for the Los Angeles Region to Incorporate a TMDL for Trash in the Los Angeles River (LA River Trash TMDL)*.

The TMDL was subsequently approved by the State Water Board on February 19, 2002, and by OAL on July 16, 2002. Since the State Water Board and OAL failed to approve the TMDL in time to meet the relevant federal consent decree; therefore, USEPA promulgated its own Trash TMDL in order to meet the consent decree timeline of March 23, 2002. Then, upon approval of the Regional Water Board's TMDL by OAL, USEPA approved the Regional Water Board's *LA River Trash TMDL* on August 1, 2002, and deemed it to have superceeded the TMDL promulgated by USEPA.

The City and the County of Los Angeles both filed petitions and complaints in the Los Angeles Superior Court challenging the *LA* River *Trash TMDL*. Subsequent negotiations led to a settlement agreement, which became effective on September 23, 2003. Twenty-two other cities sued the Regional Water Board to set aside the TMDL, on several grounds. On January 26, 2006, the Court of Appeal rejected the claims litigated by the cities but found that the Regional Water Board did not adequately complete the environmental checklist. The Court therefore affirmed a writ of mandate issued by the trial court ordering the Regional Water Board to set aside and not implement the *LA River Trash TMDL* until it has been brought into compliance with CEQA.

On June 8, 2006, the Regional Water Board set aside the *LA River Trash TMDL* and Resolution No. 01-013 which established it, pursuant to the writ

of mandate. On August 9, 2007, the Regional Water Board approved the *LA River Trash TMDL* based on a revised CEQA analysis as Resolution No. 2007-012. The *LA River Trash TMDL* was approved by the State Water Board on April 15, 2008, and USEPA on July 24, 2008. The *LA River Trash TMDL* became effective on September 23, 2008, when the Certificate of Fee Exemption was filed with the California Department of Fish and Game.

c. **Metals TMDL –** On June 2, 2005, the Regional Water Board adopted Resolution No. R05-006, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Metals for the Los Angeles River and its Tributaries* (*LA River Metals TMDL*). The *LA River Metals TMDL* contains WLAs for cadmium, copper, lead, and zinc. On October 20, 2005, the State Water Board approved the *LA River Metals TMDL* by adopting Resolution No. 2005-0077. On December 9, 2005 and December 22, 2005, respectively, OAL and USEPA approved the *LA River Metals TMDL*. It went into effect on January 11, 2006, when the Certificate of Fee Exemption was filed with the California Department of Fish and Game.

On February 16, 2006, the cities of Bellflower, Carson, Cerritos, Downey, Paramount, Santa Fe Springs, Signal Hill, and Whittier (Cities) filed a petition for a writ of mandate challenging many aspects of the *LA River Metals TMDL* and the *Ballona Creek Metals TMDL*. (*Cities of Bellflower et al v. SWRCB et al,* Los Angeles Superior Court No. BS101732.) On May 24, 2007, the Los Angeles County Superior Court adopted the third of three rulings with respect to the writ petition. Collectively, all challenges to the *LA River Metals TMDL* were rejected, except for one CEQA claim. The Court ruled that the State and Regional Water Boards (Water Boards) should have adopted and circulated an alternatives analysis that analyzed alternatives to the project. The Court issued its writ of mandate, directing the Water Boards to adopt an alternative analysis and to reconsider the *LA River Metals TMDL* accordingly.

After considering the alternative analysis, the Regional Water Board found that the *LA River Metals TMDL* as originally proposed and adopted was appropriate. The Regional Water Board further found that nothing in the alternatives analysis nor any of the evidence generated presented basis for the Regional Water Board to conclude that it would have acted differently when it adopted the TMDLs had the alternative analysis been prepared and circulated at that time. Thus, on September 6, 2007, the Regional Water Board adopted Resolution No. R2007-014, which reestablished the *LA River Metals TMDL* in substantially its original form.

On May 7, 2009, the Regional Water Board adopted Resolution No. 09-003, which voided and set aside Resolution No. R05-006 as required by the writ of mandate in the matter of *Cities of Bellflower et al v. SWRCB*.

On May 6, 2010 the Regional Water Board adopted Resolution No. R10-003, an amendment to the Basin Plan to revise the *LA River Metals TMDL*. The amendment revises the TMDL to adjust the numeric targets for copper in Reaches 1-4 of the Los Angeles River and the Burbank Western Channel and the corresponding WLAs for the Tillman, Los Angeles-Glendale and Burbank WRPs based on a water effect ratio (WER). The revision includes language stating that regardless of the WER, the WRPs must perform at a level that can be attained by existing treatment technologies at the time of permit issuance, reissuance or modification. On April 19, 2011, the State Water Board adopted Resolution No. 2011-0021, approving the revised *LA River Metals TMDL*. At this hearing, the State Water Board made it clear that should the performance of the facility's treatment technologies change for reasons beyond the facility's control, the permit may be reopened to revise the effluent limitations considering the applicability of the copper WER or other performance-based measure such that the effluent limitations ensure that effluent concentrations and mass discharges do not exceed the levels of water quality that can be attained by performance of this facility's treatment technologies existing at the time of permit issuance, reissuance, or modification. On July 27, 2011, the *LA River Metals TMDL* was approved by the OAL. The *LA River Metals TMDL* (Resolution No. R10-003) must still be approved by the USEPA before it becomes effective.

d. **Bacteria TMDL –** On July 8, 2010, the Regional Water Board adopted Resolution No. R10-007, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Indicator Bacteria in the Los Angeles River Watershed* (*LA River Bacteria TMDL*). The *LA River Bacteria TMDL* contains WLAs for Tillman, Los Angeles-Glendale, and Burbank WRPs, which are set equal to a 7-day median of 2.2 MPN/100 mL of E. coli and/or a daily max of 235 MPN/100mL to ensure zero days of allowable exceedances. No exceedances of the geometric mean TMDL numeric target of 126/100 mL E.coli are permitted. The *LA River Bacteria TMDL* must still be approved by the State Water Board, OAL, and USEPA before it becomes effective.

7. **Title 22 of the California Code of Regulations (Title 22).** The California Department of Public Health (CDPH) established primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water. These MCLs are codified in Title 22. The Basin Plan (Chapter 3) incorporates Title 22 primary MCLs by reference. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect. Title 22 primary MCLs have been used as bases for effluent limitations in WDRs and NPDES permits to protect groundwater recharge beneficial use when that receiving groundwater is designated as MUN. Also, the Basin Plan specifies that "Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses."

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in 40 CFR, part 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR, part 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

Effluent and receiving water limitations in this Regional Water Board Order are based on the Federal CWA, Basin Plan, State Water Board's plans and policies, USEPA's guidance and regulations, and best practicable waste treatment technology. This order authorizes the discharge of tertiary-treated wastewater from Discharge Points 001, 002, 003, and 008 only. It does not authorize any other types of discharges.

B. Technology-Based Effluent Limitations (TBELs)

1. Scope and Authority

TBELs require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the discharger to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level--referred to as "secondary treatment" --that all POTWs were required to meet by July 1, 1977. More specifically, Section 301(b)(1)(B) of the CWA required that USEPA develop secondary treatment standards for POTWs as defined in Section 304(d)(1). Based on this statutory requirement, USEPA developed national secondary treatment regulations which are specified in 40 CFR part 133. These technology-based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of $BOD_{5@20^{\circ}C}$, TSS, and pH.

2. Applicable TBELs

This Facility is subject to the technology-based regulations for the minimum level of effluent quality attainable by secondary treatment in terms of $BOD_{5@20^{\circ}C}$, TSS, and pH. However, all TBELs from the previous Order Nos. R4-2006-0091 and R4-2010-0060 are based on tertiary-treated wastewater treatment standards. These effluent limitations have been carried over from the previous Order to avoid backsliding. Further, mass-based effluent limitations are based on a design flow rate of 80 MGD. The following Table summarizes the TBELs applicable to the Facility:

Summary of Technology-based Effluent Limitations
Effluent Transfer Station EFF-001A

Table 5. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
$BOD_{5@20^oC}$	mg/L	20	30	45	--	--
	lbs/day[15]	13,340	20,020	30,020	--	--
TSS	mg/L	15	40	45	--	--
	lbs/day[15]	10,010	26,690	30,020	--	--
pH	standard units	--	--	--	6.5	8.5
Removal Efficiency for $BOD_{5@20^oC}$ and TSS	%	85	--	--	--	--

However, this Facility is also subject to TBELs contained in similar NPDES permits, for similar facilities, based on the treatment level achievable by tertiary-treated wastewater treatment systems. These effluent limitations are consistent with the State Water Board precedential decision, State Water Board Order No. WQ 2004-0010 for the City of Woodland.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and 40 CFR part 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirement, more stringent than secondary treatment requirements that are necessary to meet applicable water quality standards. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements or other provisions, is discussed starting from the following Section IV.C.2.

40 CFR part 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established

[15] The mass emission rates are based on the combined plant design flow rate of 80 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.

using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR part 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable WQOs and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

a. The Basin Plan establishes the beneficial uses for surface water bodies in the Los Angeles region. The beneficial uses of the Los Angeles River affected by the discharge have been described previously in this Fact Sheet.

b. The Basin Plan also specifies narrative and numeric WQOs applicable to surface water as shown in the following discussions.

i. **$BOD_{5@20^{\circ}C}$ and TSS**

$BOD_{5@20^{\circ}C}$ is a measure of the quantity of the organic matter in the water and, therefore, the water's potential for becoming depleted in dissolved oxygen. As organic degradation takes place, bacteria and other decomposers use the oxygen in the water for respiration. Unless there is a steady resupply of oxygen to the system, the water will quickly become depleted of oxygen. Adequate dissolved oxygen levels are required to support aquatic life. Depressions of dissolved oxygen can lead to anaerobic conditions resulting in odors, or, in extreme cases, in fish kills.

40 CFR part 133 describes the minimum level of effluent quality attainable by secondary treatment, for $BOD_{5@20^{\circ}C}$ and TSS, as:

(i). The 30-day average shall not exceed 30 mg/L; and,

(ii). The 7-day average shall not exceed 45 mg/L.

The Tillman WRP permit provides tertiary treatment requirements, such as the $BOD_{5@20^{\circ}C}$ and TSS limits, which are more stringent than secondary treatment requirements, based on Best Professional Judgment. The Facility achieves solids removal that are better than secondary-treated wastewater by adding a polymer (Alum) to enhance the precipitation of solids, and by filtering the effluent.

The monthly average, the 7-day average, and the daily maximum limits cannot be removed because none of the antibacksliding exceptions apply. Those limits were all included in the previous permits (Order Nos. R4-2006-0091 and R4-2010-0060) and the Tillman WRP has been able to meet all three limits (monthly average, the 7-day average, and the daily maximum) for both $BOD_{5@20^{\circ}C}$ and TSS.

In addition to having mass-based and concentration-based effluent limitations for $BOD_{5@20^{\circ}C}$ and TSS, the Order also contains a percent removal requirements for these two constituents. In accordance with 40 CFR parts 133.102(a)(3) and 133.102(b)(3), the 30-day average percent removal shall not be less than 85 percent. Percent removal is defined as a percentage expression of the removal efficiency across a treatment facility for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the Facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

ii. **pH**

The hydrogen ion activity of water (pH) is measured on a logarithmic scale, ranging from 0 to 14. Minor changes from natural conditions can harm aquatic life. In accordance with 40 CFR part 133.102(c), the effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the POTWs demonstrates that: (1) Inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0. The effluent limitation for pH in this permit requiring that the wastes discharged shall at all times be within the range of 6.5 to 8.5 is taken from the Basin Plan (page 3-15) which reads “the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge.”

iii. **Settleable Solids**

Excessive deposition of sediments can destroy spawning habitat, blanket benthic (bottom dwelling) organisms, and abrade the gills of larval fish. The limits for settleable solids are based on the Basin Plan (page 3-16) narrative, “Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses.” The numeric limits are empirically based on results obtained from the settleable solids 1-hour test, using an Imhoff cone.

It is impracticable to use a 7-day average limitation because short-term spikes of settleable solid levels that would be permissible under a 7-

day average scheme would not be adequately protective of all beneficial uses. The monthly average and the daily maximum limits cannot be removed because none of the antibacksliding exceptions apply. The monthly average and daily maximum limits were both included in the previous permits (Order Nos. R4-2006-0091 and R4-2010-0060) and the Tillman WRP has been able to meet both limits.

iv. **Oil and Grease**

Oil and grease are not readily soluble in water and form a film on the water surface. Oily films can coat birds and aquatic organisms, impacting respiration and thermal regulation, and causing death. Oil and grease can also cause nuisance conditions (odors and taste), are aesthetically unpleasant, and can restrict a wide variety of beneficial uses. The limits for oil and grease are based on the Basin Plan (page 3-11) narrative, "Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses."

The numeric limits are empirically based on concentrations at which an oily sheen becomes visible in water. It is impracticable to use a 7-day average limitation because spikes that occur under a 7-day average scheme could cause a visible oil sheen. A 7-day average scheme would not be sufficiently protective of beneficial uses. The monthly average and the daily maximum limits cannot be removed because none of the antibacksliding exceptions apply. Both limits were included in the previous permits (Order Nos. R4-2006-0091 and R4-2010-0060) and the Tillman WRP has been able to meet both limits.

v. **Residual Chlorine**

Disinfection of wastewaters with chlorine produces a chlorine residual. Chlorine and its reaction products are toxic to aquatic life. The limit for residual chlorine is based on the Basin Plan (page 3-9) narrative, "Chlorine residual shall not be present in surface water discharges at concentrations that exceed 0.1 mg/L and shall not persist in receiving waters at any concentration that causes impairment of beneficial uses."

It is impracticable to use a 7-day average or a 30-day average limitation, because it is not as protective as of beneficial uses as a daily maximum limitation is. Chlorine is very toxic to aquatic life and short term exposures of chlorine may cause fish kills.

vi. **Fluoride**

The existing permit effluent limitation of 2.0 mg/l for fluoride was developed based on the Basin Plan chemical constituent incorporation of Title 22, Drinking Water Standards. Fluoride is not a priority

pollutant. The discharge from the Tillman WRP does not exhibit reasonable potential to exceed the USEPA Quality Criteria for Water 1976 (EPA 440/9-76-023) limit of 2,000 µg/L. Therefore, the accompanying Order will not contain a limit for fluoride.

vii. **Total Dissolved Solids, Chloride, Sulfate, and Boron**

The limitations for total dissolved solids, chloride, and sulfate are 950 mg/L, 150 mg/L, and 300 mg/L, respectively, based on Basin Plan Table 3-8 (page 3-13), for the Los Angeles River watershed (between Ramona Boulevard and Firestone Boulevard). Limitations for boron were determined not to be applicable. The chloride limitation is no longer 150 mg/L, but 190 mg/L, which resulted from Regional Water Board Resolution No. 97-02, *Amendment to the Water Quality Control Plan to incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters*. Resolution 97-02 was adopted by Regional Water Board on January 27, 1997; approved by State Water Board (Resolution 97-94); and, approved by OAL on January 8, 1998; and served to revise the chloride WQO in the Los Angeles River and other surface waters. It is practicable to express these limitations as monthly averages, since they are not expected to cause acute effects on beneficial uses.

Limitations based upon the Basin Plan WQOs have been included in this Order because, based upon Best Professional Judgment, these constituents are always present in potable water which is the supply source of the wastewater entering the Facility. They may be present in concentrations which meet California drinking water standards but exceed the Basin Plan WQOs. Therefore, limitations are warranted to protect the beneficial uses of the receiving water.

viii. **Methylene Blue Activated Substances (MBAS)**

The existing permit effluent limitation of 0.5 mg/l for MBAS was developed based on the Basin Plan incorporation of Title 22, Drinking Water Standards, by reference, to protect the surface water MUN beneficial use. Given the nature of the Facility which accepts domestic wastewater into the sewer system and treatment Facility, and the narrative WQO for the prohibition of floating material such as foams and scums, therefore an effluent limitation is required.

ix. **Nitrogen Compounds/Nutrient Compounds**

(i). **Nitrate Nitrogen (NO_3-N), Nitrite Nitrogen (NO_2-N), and Total Inorganic Nitrogen (NO_2-N + NO_3-N)** – Total inorganic nitrogen is the sum of Nitrate-nitrogen and Nitrite-nitrogen. High nitrate levels in drinking water can cause health problems in humans. Infants are particularly sensitive and can develop methemoglobinemia (blue-baby syndrome). Nitrogen is also

considered a nutrient. Excessive amounts of nutrients can lead to other water quality impairments, ex. algae.

(ii). **Algae** – Excessive growth of algae and/or other aquatic plants can degrade water quality. Algal blooms sometimes occur naturally, but they are often the result of excess nutrients (i.e., nitrogen, phosphorus) from waste discharges or nonpoint sources. These algal blooms can lead to problems with tastes, odors, color, and increased turbidity and can depress the dissolved oxygen content of the water, leading to fish kills. Floating algal scum and algal mats are also an aesthetically unpleasant nuisance.

The WQO for biostimulatory substances are based on Basin Plan (page 3-8) narrative, "Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses," and other relevant information to arrive at a mass based-limit intended to be protective of the beneficial uses, pursuant to 40 CFR part 122.44(d). Total inorganic nitrogen will be the indicator parameter intended to control algae, pursuant to 40 CFR part 122.44(d)(1)(vi)(C).

Nutrients are among 303(d) List in the *California 2008-2010 Integrated Report for the Los Angeles River*. Since nutrients have WLAs in the *LA River Nutrient TMDL*, TMDL-based effluent limitations for nutrients are required in order to implement the provisions of the TMDL and to try and restore the water quality in that section of the receiving water.

(iii). **Concentration-Based Limit** – The proposed effluent limitations of 7.2 mg/L, 0.9 mg/L, and 7.2 mg/L for nitrate nitrogen, nitrite nitrogen, and total inorganic nitrogen, respectively, are based on the *LA River Nutrient TMDL* WLA. However, if the Los Angeles River becomes de-listed for nutrient, then the Basin Plan-based effluent limitation would apply, and the permit reopened.

Watershed-wide monitoring will track concentration levels of phosphorus and all nitrogen series pollutants present in the effluent and receiving waters, pursuant to 40 CFR part 122.44(d)(1)(vi)(C)(3).

(iv). **Mass-Based Limit** – There are no mass emission rates for nitrogen compounds because the *LA River Nutrient TMDL* did not specify a mass-based WLA.

x. Total Ammonia

(i). Ammonia is a pollutant routinely found in the wastewater effluent of POTWs, in landfill-leachate, as well as in run-off from agricultural fields where commercial fertilizers and animal manure are applied. Ammonia exists in two forms – un-ionized ammonia (NH_3) and the ammonium ion (NH_4^+). They are both toxic, but the neutral, un-ionized ammonia species (NH_3) is much more toxic, because it is able to diffuse across the epithelial membranes of aquatic organisms much more readily than the charged ammonium ion. The form of ammonia is primarily a function of pH, but it is also affected by temperature and other factors. Additional impacts can also occur as the oxidation of ammonia lowers the dissolved oxygen content of the water, further stressing aquatic organisms. Oxidation of ammonia to nitrate may lead to groundwater impacts in areas of recharge. There is groundwater recharge in these reaches. Ammonia also combines with chlorine (often both are present in POTWs treated effluent discharges) to form chloramines – persistent toxic compounds that extend the effects of ammonia and chlorine downstream.

(ii). Tables 3-1 through Tables 3-4 of the 1994 Basin Plan contain WQOs for ammonia to protect aquatic life. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board, with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of Aquatic Life*. Resolution No. 2002-011 was approved by the State Water Board, the OAL, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively, and is now in effect. On December 1, 2005, Resolution No. 2005-014, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life,* was adopted by the Regional Water Board. Resolution No. 2005-014 was approved by the State Water Board, the Office of Administrative Law, and USEPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively. On June 7, 2007, Resolution No. 2007-005, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate Site-Specific Objectives in Select Waterbodies in the Santa Clara, Los Angeles and San Gabriel River Watersheds,* was adopted by the Regional Water Board. Resolution No. 2007-005 was approved by the State Water

Board, OAL, and USEPA on January 15, 2008, May 12, 2008, and March 30, 2009, respectively.

Ammonia is among 303(d) List in the California 2008-2010 Integrated Report for the Los Angeles River. Since ammonia has a WLA in the *LA River Nutrient TMDL*, a TMDL-based effluent limitation for total ammonia as nitrogen is required in order to implement the provisions of the TMDL and to try and restore the water quality in that section of the receiving water.

(iii). **Concentration-Based Limit** – The proposed ammonia effluent limitations of 1.4 mg/L for monthly average and 4.2 mg/L for daily maximum are based on the *LA River Nutrient TMDL* WLA. However, if the Los Angeles River is eventually restored and the Los Angeles River becomes de-listed for ammonia, then the permit would be re-opened to include Basin Plan-based effluent limitations for ammonia. (The revised Ammonia Tables would then apply.)

(iv). **Mass-Based Limit** – There is no mass emission rate for total ammonia because the *LA River Nutrient TMDL* did not specify a mass-based WLA.

xi. **Coliform**

Total and fecal coliform bacteria are used to indicate the likelihood of pathogenic bacteria in surface waters. Given the nature of the facility, a wastewater treatment facility, pathogens are likely to be present in the effluent in cases where the disinfection process is not operating adequately. As such, the permit contains the following filtration and disinfection TBELs for coliform:

(i). Effluent Limitations

- The 7-day median number of total coliform bacteria at some point in the disinfected effluent must not exceed an MPN or CFU of 2.2 per 100 milliliters;
- The number of total coliform bacteria must not exceed an MPN or CFU of 23 per 100 milliliters in more than one sample within any 30-day period; and,
- No sample shall exceed an MPN of CFU of 240 total coliform bacteria per 100 milliliters.

These limits for coliform must be met at the point of the treatment train immediately following disinfection. Coliform is 303(d) listed in the Los Angeles River. The disinfection and filtration processes reduce the likelihood of having pathogens in

the discharger's effluent. Most of the time the coliform analyses results are reported as less than 1 MPN/100 mL. It is not likely that the 303(d) listing of coliform is due to the discharge of treated effluent from the Discharger. Therefore, the TBEL is also protective of water quality.

(ii). Receiving Water Limitations

- Geometric Mean Limitations
  - E.coli density shall not exceed 126/100 mL.
  - Fecal coliform density shall not exceed 200/100 mL.
- Single Sample Limitations
  - E.coli density shall not exceed 235/100 mL.
  - Fecal coliform density shall not exceed 400/100 mL.

These receiving water limitations are based on Resolution No. 01-018, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Bacteria Objectives for Water Bodies Designated for Water Contact Recreation*, adopted by the Regional Board on October 25, 2001. The Resolution was approved by State Water Board, OAL, and USEPA, on July 18, 2002, September 19, 2002, and September 25, 2002, respectively.

xii. **Turbidity**

Turbidity is an expression of the optical property that causes light to be scattered in water due to particulate matter such as clay, silt, organic matter, and microscopic organisms. Turbidity can result in a variety of water quality impairments. The effluent limitation for turbidity which reads, "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 wastewater does not exceed: (a) a daily average of 2 Nephelometric turbidity units (NTU); (b) 5 NTU more than 5 percent of the time (72 minutes) during any 24 hour period; and (c) 10 NTU at any time" is based on the Basin Plan (page 3-17) and Section 60301.320 of Title 22, Chapter 3, "Filtered Wastewater" of the California Code of Regulations.

xiii. **Radioactivity**

Radioactive substances are generally present in natural waters in extremely low concentrations. Mining or industrial activities increase the amount of radioactive substances in waters to levels that are

harmful to aquatic life, wildlife, or humans. Section 301(f) of the CWA contains the following statement with respect to effluent limitations for radioactive substances: "Notwithstanding any other provisions of this Act it shall be unlawful to discharge any radiological, chemical, or biological warfare agent, any high-level radioactive waste, or any medical waste, into the navigable waters." Chapter 5.5 of the CWC contains a similar prohibition under Section 13375, which reads as follows: "The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is hereby prohibited." However, rather than give a hard and fast absolute prohibition on radioactive substances, Regional Water Board staff have set the following effluent limit for radioactivity: The existing effluent limitation for radioactivity which reads, "Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the California Code of Regulations, or subsequent revisions." The limit is based on the Basin Plan incorporation of Title 22, *Drinking Water Standards,* by reference, to protect the surface water MUN beneficial use. However, the Regional Water Board has new information about the appropriate designated uses for the water body, and based on the current designated uses, a limit for Radioactivity is unnecessary and inappropriate unless discharge is to a reach used for groundwater recharge, where Title 22-based limits apply. Therefore, the accompanying Order will contain a limit for radioactivity to protect the GWR beneficial use.

xiv. **Temperature**

USEPA document, *Quality Criteria for Water 1986* [EPA 440/5-86-001, May 1, 1986], also referred to as the *Gold Book*, discusses temperature and its effects on beneficial uses, such as recreation and aquatic life.

(i). The Federal Water Pollution Control Administration in 1967 called temperature "a catalyst, a depressant, an activator, a restrictor, a stimulator, a controller, a killer, and one of the most important water quality characteristics to life in water." The suitability of water for total body immersion is greatly affected by temperature. Depending on the amount of activity by the swimmer, comfortable temperatures range from 20°C to 30°C (68 °F to 86 °F).

(ii). Temperature also affects the self-purification phenomenon in water bodies and therefore the aesthetic and sanitary qualities that exist. Increased temperatures accelerate the biodegradation of organic material both in the overlying water and in bottom deposits which makes increased demands on the dissolved oxygen resources of a given system. The typical situation is exacerbated by the fact that oxygen becomes less soluble as

water temperature increases. Thus, greater demands are exerted on an increasingly scarce resource which may lead to total oxygen depletion and obnoxious septic conditions. Increased temperature may increase the odor of water because of the increased volatility of odor-causing compounds. Odor problems associated with plankton may also be aggravated.

(iii). Temperature changes in water bodies can alter the existing aquatic community. Coutant (1972) has reviewed the effects of temperature on aquatic life reproduction and development. Reproductive elements are noted as perhaps the most thermally restricted of all life phases, assuming other factors are at or near optimum levels. Natural short-term temperature fluctuations appear to cause reduced reproduction of fish and invertebrates.

The Basin Plan lists temperature requirements for the receiving waters. Based on the requirements of the Basin Plan and a white paper developed by Regional Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, a maximum effluent temperature limitation of 86 °F is included in the Order. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. The new temperature effluent limitation is reflective of new information available that indicates that the 100°F temperature is not protective of aquatic organisms. A survey was completed for several kinds of fish and the 86°F temperature was found to be protective. It is impracticable to use a 7-day average or a 30-day average limitation for temperature, because it is not as protective as of beneficial uses as a daily maximum limitation is. A daily maximum limitation is necessary to protect aquatic life and is consistent with the fishable/swimmable goals of the CWA.

Section IV.A.2.b. of the Order contains the following effluent limitation for temperature:

> "The temperature of wastes discharged shall not exceed 86ºF as a result of external ambient temperature."

The above effluent limitation for temperature has been quoted in all recent NPDES permits adopted by this Regional Water Board.

Section V.A.1. of the WDR explains how compliance with the receiving water temperature limitation will be determined.

c. **CTR and SIP**

The CTR and SIP specify numeric objectives for toxic substances and the procedures whereby these objectives are to be implemented. The

procedures include those used to conduct a reasonable potential analysis (RPA) to determine the need for effluent limitations for priority and non-priority pollutants.

3. Determining the Need for WQBELs

The Regional Water Board developed WQBELs for cadmium, copper, lead, and zinc that have available WLAs under the Metals TMDL approved by USEPA on December 22, 2005. The effluent limitations for these pollutants were established regardless of whether or not there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. The Regional Water Board developed WQBELs for these four metals in this Order pursuant to the "Implementation" section specified in Page 12 of Resolution No. R2007-014, *Amendment to the Water Quality Control Plan for the Los Angeles River Metals TMDL*. The "Implementation" states:

> "Permit writers may translate applicable WLAs into effluent limits for the major, minor and general NPDES permits by applying the effluent limitation procedures in Section 1.4 of the State Water Resources Control Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2000)..."

Therefore, the Regional Water Board calculated final WQBELs for these four metals, based on Section 1.4 of SIP.

In accordance with Section 1.3 of the SIP, the Regional Water Board conducted a RPA for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Water Board analyzed effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that demonstrate reasonable potential, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, WQOs specified in the Basin Plan. To conduct the RPA, the Regional Water Board staff identified the maximum effluent concentration (MEC) and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger. The monitoring data covered the period from January 2008 to March 2011, when the NDN was completed and its treatment was optimal in January 2008.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limitation is needed.

Trigger 2 – If background water quality (B) > C and the pollutant is detected in the effluent, a limitation is needed.

Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, then best professional judgment is used to determine that a limit is needed.

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

In addition, RPA was performed for the priority pollutants regulated in the CTR for which data are available. Based on the RPA, pollutants that demonstrate reasonable potential are cadmium, copper, lead, and zinc because TMDLs are adopted for these metals. RPA showed that the concentrations of mercury and cyanide in the effluent exceed their WQOs in the CTR. RPA also showed that selenium concentration in the receiving water exceeds its WQO in the CTR. Therefore, a CTR-based effluent limitations for mercury, selenium, and cyanide have been prescribed in this permit. The following Table summarizes results from RPA.

Table 6. Summary of Reasonable Potential Analysis at EFF-001A

CTR No.	Constituent	Applicable Water Quality Criteria (C) (µg/L)	Max Effluent Conc. (MEC) (µg/L)	Maximum Detected Receiving Water Conc. (B) (µg/L)	RPA Result - Need Limitation ?	Reason
1	Antimony	4300	1.44	1.63	No	C>B, C>MEC
2	Arsenic	150	4.1	6	No	C>B, C>MEC
3	Beryllium	Narrative	0.1	0.04	No	C>B, C>MEC
4	Cadmium	3.5	0.85	2.26	Yes	Metal TMDL
5a	Chromium III	432.6	1.1	Total Cr	No	C>B, C>MEC
5b	Chromium VI	11	<2	Total Cr	No	C>B, C>MEC
6	Copper	26.1	18	72	Yes	Metal TMDL
7	Lead	10	1.5	<3	Yes	Metal TMDL
8	Mercury	0.051	0.055	<0.0036	Yes	MEC>C
9	Nickel	111.7	20	31	No	C>B, C>MEC
10	Selenium	5	1.8	6	Yes	B>C
11	Silver	19.1	0.2	0.52	No	C>B, C>MEC
12	Thallium	6.3	0.16	0.35	No	C>B, C>MEC

CTR No.	Constituent	Applicable Water Quality Criteria (C) (µg/L)	Max Effluent Conc. (MEC) (µg/L)	Maximum Detected Receiving Water Conc. (B) (µg/L)	RPA Result - Need Limitation ?	Reason
13	Zinc	257	135	242	Yes	Metal TMDL
14	Cyanide	5.2	6	<4	Yes	MEC>C
15	Asbestos	no data available	N/A	no data available	No	N/A
16	2,3,7,8-TCDD (Dioxin)	0.000000014	<0.0054	<0.0054	No	All ND
17	Acrolein	780	< 1.96	< 1.96	No	C>B, C>MEC
18	Acrylonitrile	0.66	< 27	< 0.27	No	C>B, C>MEC
19	Benzene	71	< 0.11	< 0.11	No	C>B, C>MEC
20	Bromoform	360	3.37	0.26	No	C>B, C>MEC
21	Carbon Tetrachloride	4.4	<0.27	< 0.27	No	C>B, C>MEC
22	Chlorobenzene	21,000	< 0.34	< 0.15	No	C>B, C>MEC
23	Dibromochloromethane	34	21.8	0.81	No	C>B, C>MEC
24	Chloroethane	No criteria	0.21	< 0.2	No	No criteria
25	2-chloroethyl vinyl ether	No criteria	< 1	< 0.48	No	No criteria
26	Chloroform	No criteria	56.1	3.16	No	No criteria
27	Dichlorobromomethane	46	45	1.38	No	C>B, C>MEC
28	1,1-dichloroethane	No criteria	< 0.36	< 0.15	No	No criteria
29	1,2-dichloroethane	99	< 0.23	< 0.1	No	C>B, C>MEC
30	1,1-dichloroethylene	3.2	< 0.41	< 0.2	No	C>B, C>MEC
31	1,2-dichloropropane	39	< 0.51	< 0.12	No	C>B, C>MEC
32	1,3-dichloropropylene	1,700	< 0.39	< 0.15	No	C>B, C>MEC
33	Ethylbenzene	29,000	< 0.39	< 0.17	No	C>B, C>MEC
34	Methyl bromide	4,000	1.27	< 1.02	No	C>B, C>MEC
35	Methyl chloride	No criteria	<0.33	< 0.16	No	No criteria
36	Methylene chloride	1,600	0.34	0.12	No	C>B, C>MEC
37	1,1,2,2-tetrachloroethane	11	< 0.29	< 0.14	No	C>B, C>MEC
38	Tetrachloroethylene	8.85	1.92	< 0.22	No	C>B, C>MEC
39	Toluene	200,000	<0.37	0.94	No	C>B, C>MEC
40	Trans 1,2-Dichloroethylene	140,000	< 0.57	< 0.2	No	C>B, C>MEC
41	1,1,1-Trichloroethane	No criteria	< 0.29	< 0.23	No	No criteria
42	1,1,2-Trichloroethane	42	< 0.31	< 0.1	No	C>B, C>MEC
43	Trichloroethylene	81	< 0.48	< 0.17	No	C>B, C>MEC

CTR No.	Constituent	Applicable Water Quality Criteria (C) (µg/L)	Max Effluent Conc. (MEC) (µg/L)	Maximum Detected Receiving Water Conc. (B) (µg/L)	RPA Result - Need Limitation ?	Reason
44	Vinyl Chloride	525	< 0.37	< 0.22	No	C>B, C>MEC
45	2-chlorophenol	400	< 0.26	< 0.26	No	C>B, C>MEC
46	2,4-dichlorophenol	790	< 0.27	< 0.27	No	C>B, C>MEC
47	2,4-dimethylphenol	2,300	< 0.24	< 0.24	No	C>B, C>MEC
48	4,6-dinitro-o-cresol (2-methyl-4,6-Dinitrophenol)	765	< 1.16	< 1.16	No	C>B, C>MEC
49	2,4-dinitrophenol	14,000	< 1.09	< 1.09	No	C>B, C>MEC
50	2-nitrophenol	No criteria	< 0.45	< 0.45	No	No criteria
51	4-nitrophenol	No criteria	1.08	< 0.56	No	No criteria
52	3-Methyl-4-Chlorophenol (P-chloro-m-cresol)	No criteria	0.49	< 0.45	No	No criteria
53	Pentachlorophenol	8.2	1.06	< 0.62	No	C>B, C>MEC
54	Phenol	4,600,000	< 0.4	<0.4	No	C>B, C>MEC
55	2,4,6-trichlorophenol	6.5	0.29	0.16	No	C>B, C>MEC
56	Acenaphthene	2,700	< 0.13	< 0.13	No	C>B, C>MEC
57	Acenaphthylene	No criteria	< 0.13	< 0.13	No	No criteria
58	Anthracene	110,000	< 0.11	< 0.11	No	C>B, C>MEC
59	Benzidine	0.00054	< 5	< 5	No	All ND
60	Benzo(a)Anthracene	0.049	< 0.14	< 0.14	No	All ND
61	Benzo(a)Pyrene	0.049	<0.13	< 0.13	No	All ND
62	Benzo(b)Fluoranthene	0.049	<0.14	<0.14	No	All ND
63	Benzo(ghi)Perylene	No criteria	< 0.03	< 0.03	No	No criteria
64	Benzo(k)Fluoranthene	0.049	<0.11	< 0.11	No	All ND
65	Bis(2-Chloroethoxy) methane	No criteria	< 0.35	< 0.16	No	No criteria
66	Bis(2-Chloroethyl)Ether	1.4	< 0.18	< 0.32	No	C>B, C>MEC
67	Bis(2-Chloroisopropyl) Ether	170,000	< 0.35	< 0.35	No	C>B, C>MEC
68	Bis(2-Ethylhexyl)Phthalate	5.9	1	<1	No	C>B, C>MEC
69	4-Bromophenyl Phenyl Ether	No criteria	< 0.22	< 0.15	No	No criteria
70	Butylbenzyl Phthalate	5,200	0.11	< 0.26	No	C>B, C>MEC
71	2-Chloronaphthalene	4,300	< 0.3	< 0.3	No	C>B, C>MEC
72	4-Chlorophenyl Phenyl Ether	No criteria	< 0.28	< 0.28	No	No criteria
73	Chrysene	0.049	< 0.12	<0.12	No	All ND

CTR No.	Constituent	Applicable Water Quality Criteria (C) (µg/L)	Max Effluent Conc. (MEC) (µg/L)	Maximum Detected Receiving Water Conc. (B) (µg/L)	RPA Result - Need Limitation ?	Reason
74	Dibenzo(a,h)Anthracene	0.049	< 0.02	< 0.02	No	All ND
75	1,2-Dichlorobenzene	17,000	14	< 0.27	No	C>B, C>MEC
76	1,3-Dichlorobenzene	2,600	< 0.23	< 0.23	No	C>B, C>MEC
77	1,4-Dichlorobenzene	2,600	<0.24	< 0.24	No	C>B, C>MEC
78	3-3'-Dichlorobenzidine	0.077	< 2.78	< 2.78	No	All ND
79	Diethyl Phthalate	120,000	<0.62	< 0.62	No	C>B, C>MEC
80	Dimethyl Phthalate	2,900,000	0.29	< 0.64	No	C>B, C>MEC
81	Di-n-Butyl Phthalate	12,000	0.12	< 0.5	No	C>B, C>MEC
82	2-4-Dinitrotoluene	9.1	< 0.21	< 0.21	No	C>B, C>MEC
83	2-6-Dinitrotoluene	No criteria	< 0.21	< 0.21	No	No criteria
84	Di-n-Octyl Phthalate	No criteria	< 0.82	< 0.82	No	No criteria
85	1,2-Diphenylhydrazine	0.54	< 0.21	< 0.21	No	C>B, C>MEC
86	Fluoranthene	370	< 0.02	< 0.02	No	C>B, C>MEC
87	Fluorene	14,000	< 0.02	< 0.02	No	C>B, C>MEC
88	Hexachlorobenzene	0.00077	< 0.18	< 0.18	No	C>B, C>MEC
89	Hexachlorobutadiene	50	< 0.23	< 0.23	No	C>B, C>MEC
90	Hexachlorocyclopentadiene	17,000	< 3.83	< 3.83	No	C>B, C>MEC
91	Hexachloroethane	8.9	< 0.25	< 0.25	No	All ND
92	Indeno(1,2,3-cd)Pyrene	0.049	< 0.02	<0.02	No	C>B, C>MEC
93	Isophorone	600	< 0.3	< 0.3	No	C>B, C>MEC
94	Naphthalene	No criteria	< 0.13	< 0.13	No	No criteria
95	Nitrobenzene	1,900	< 0.33	< 0.33	No	C>B, C>MEC
96	N-Nitrosodimethylamine	8.1	<0.5	<0.5	No	C>B, Effluent ND
97	N-Nitrosodi-n-Propylamine	1.4	< 0.36	< 0.36	No	C>B, C>MEC
98	N-Nitrosodiphenylamine	16	< 0.86	< 0.89	No	C>B, C>MEC
99	Phenanthrene	No criteria	< 0.01	<0.01	No	No criteria
100	Pyrene	11,000	< 0.02	< 0.02	No	C>B, C>MEC
101	1,2,4-Trichlorobenzene	No criteria	< 0.42	< 0.42	No	No criteria
102	Aldrin	0.00014	<0.004	<0.004	No	All ND
103	Alpha-BHC	0.013	<0.004	<0.004	No	C>B, C>MEC
104	Beta-BHC	0.046	<0.003	<0.003	No	C>B, C>MEC

CTR No.	Constituent	Applicable Water Quality Criteria (C) (µg/L)	Max Effluent Conc. (MEC) (µg/L)	Maximum Detected Receiving Water Conc. (B) (µg/L)	RPA Result - Need Limitation ?	Reason
105	Gamma-BHC (Lindane)	0.063	0.006	<0.005	No	C>B, C>MEC
106	delta-BHC	No criteria	<0.004	<0.004	No	No criteria
107	Chlordane	0.00059	<0.056	<0.056	No	All ND
108	4,4'-DDT	0.00059	<0.007	<0.007	No	All ND
109	4,4'-DDE	0.00059	<0.004	<0.004	No	All ND
110	4,4'-DDD	0.00084	<0.004	<0.004	No	All ND
111	Dieldrin	0.00014	<0.005	<0.005	No	All ND
112	Alpha-Endosulfan	0.056	<0.008	<0.008	No	C>B, C>MEC
113	Beta-Endosulfan	0.056	<0.007	<0.007	No	C>B, C>MEC
114	Endosulfan Sulfate	240	<0.008	<0.008	No	C>B, C>MEC
115	Endrin	0.036	<0.005	<0.005	No	C>B, C>MEC
116	Endrin Aldehyde	0.81	<0.004	<0.004	No	C>B, C>MEC
117	Heptachlor	0.00021	<0.003	<0.003	No	All ND
118	Heptachlor Epoxide	0.00011	<0.003	<0.003	No	All ND
119	PCB 1016	0.00017	<0.039	< 0.081	No	All ND
120	PCB 1221	0.00017	<0.048	< 0.49	No	All ND
121	PCB 1232	0.00017	<0.1	< 0.1	No	All ND
122	PCB 1242	0.00017	<0.2	< 0.23	No	All ND
123	PCB 1248	0.00017	<0.1	< 0.1	No	All ND
124	PCB 1254	0.00017	<0.028	< 0.04	No	All ND
125	PCB 1260	0.00017	<0.07	< 0.07	No	All ND
126	Toxaphene	0.0002	<0.1	<0.1	No	All ND

4. WQBEL Calculations

a. **Calculation Options** – Once RPA has been conducted using either the TSD or the SIP methodologies, WQBELs are calculated. Alternative procedures for calculating WQBELs include:

i. Use WLA from applicable TMDL;

ii. Use a steady-state model to derive Maximum Daily Effluent Limits and Average Monthly Effluent Limits; and,

iii. Where sufficient data exist, use a dynamic model which has been approved by the State Water Board.

b. ***LA River Metals TMDL* Calculation Procedure** –

The tertiary-treated wastewater produced at the Tillman WRP is discharged, via the Discharge Points 001, 002, 003, and 008, into the Los Angeles River Reach 4, as described by the *LA River Metals TMDL*. Reach 4 has wet-weather WLAs for cadmium, copper, lead, and zinc (4.7 µg/L, 26 µg/L, 10 µg/L, and 212 µg/L, respectively). Reach 3 has a dry-weather waste load allocation only for copper and lead (26 µg/L and 10 µg/L, respectively). Wet-weather allocations are based on dry-weather in-stream numeric targets because the POTWs exert the greatest influence over in-stream water quality during dry weather, and collectively they contribute minimally to the total wet-weather loading. During dry-weather, the concentration-based and mass-based WLAs apply. In wet weather, the mass-based waste load allocations do not apply when the influent flows exceed the design capacity of the treatment plants.

According to the *LA River Metals TMDL* implementation section, permit writers may translate applicable WLAs into effluent limits by applying the effluent limitation procedures in Section 1.4 of the SIP or other applicable engineering practices authorized under federal regulations.

i. Copper: Tier 1 and Tier 2 of the SIP RPA procedures were not triggered for copper. However, Tier 3 of the SIP RPA procedures was triggered because this constituent has established WLAs described in *LA River Metals TMDL*. Therefore, a water quality-based effluent limitation derived using CTR/SIP has been prescribed for copper. In this permit, the TMDL-established WLAs for copper (26 µg/L, see Table F-7), the TMDL hardness of 246 mg/L, and a 0.3 coefficient of variation were used to calculate the water quality-based effluent limitations based on SIP/CTR procedures. The TMDL copper criteria were derived by using the site-specific chronic copper conversion factor of 0.74 developed by Larry Walker Associates under contract with the City of Los Angeles.. This was explained on page 26-27 of the *LA River Metals TMDL* staff report. The final effluent limitations for copper apply to both wet and dry weather conditions. Therefore, the effluent limitations for copper apply all-year round. In the future, consistent with the *LA River Metals TMDL*, should the performance of the facility's treatment technologies change for reasons beyond the facility's control, the permit may be reopened to revise the effluent limitations considering the applicability of the copper WER or other

performance-based measure such that the effluent limitations ensure that effluent concentrations and mass discharges do not exceed the levels of water quality that can be attained by performance of this facility's treatment technologies existing at the time of permit issuance, reissuance, or modification.

ii. Lead: Tier 1 and Tier 2 of the SIP RPA procedures were not triggered for lead. However, Tier 3 was triggered because this constituent has established WLAs described in *LA River Metals TMDL*. In this permit, the TMDL-established WLAs for lead (10 µg/L, see Table F-7), the USEPA default conversion factors, the TMDL hardness of 246 mg/L, and a 0.6 coefficient of variation were used to calculate the water quality-based effluent limitations based on SIP/CTR procedures. The final effluent limitations for lead apply to both wet and dry weather conditions and shall apply all-year round.

iii. Cadmium: Tier 1 and Tier 2 of the SIP RPA procedures were not triggered for cadmium. However, Tier 3 was triggered because this constituent has established waste load allocations described in *LA River Metals TMDL*. In this permit, the TMDL-established WLA for cadmium (4.6 µg/L, see Table F-7), the USEPA default conversion factors, the TMDL hardness of 246 mg/L, and a 0.6 coefficient of variation were used to calculate the water quality-based effluent limitations based on SIP/CTR procedures. The final effluent limitations for cadmium apply to wet weather conditions only.

iv. Zinc: Tier 1 and Tier 2 of the SIP RPA procedures were not triggered for zinc. However, Tier 3 was triggered because this constituent has established waste load allocations described in *LA River Metals TMDL*. In this permit, the TMDL-established WLA for zinc (212 µg/L, see Table F-7), the USEPA default conversion factors, the TMDL hardness of 246 mg/L, and a 0.2 coefficient of variation were used to calculate the water quality-based effluent limitations based on SIP/CTR procedures. The final effluent limitations for zinc apply to wet weather conditions only.

The metals effluent limitations prescribed in this Order are consistent with the SIP Procedures and TMDL WLAs.

Table 7. *LA River Metals TMDL*-Established Acute and Chronic Criteria

Metal	Acute (µg/L)	Chronic (µg/L)
Cadmium	--	4.6
Copper	--	26
Lead	--	10
Zinc	--	212

c. **SIP Calculation Procedure** – Section 1.4 of the SIP 92005) requires the step-by-step procedure to "adjust" or convert CTR numeric criteria into Average Monthly Effluent Limitations (AMELs) and Maximum Daily Effluent Limitations (MDELs), for toxics.

Step 3 of Section 1.4 of the SIP (page 8) lists the statistical equations that adjust CTR criteria for effluent variability.

Step 5 of Section 1.4 of the SIP (page 10) lists the statistical equations that adjust CTR criteria for averaging periods and exceedance frequencies of the criteria/objectives. This section also reads, "For this method only, maximum daily effluent limitations shall be used for POTWs in place of average weekly limitations."

Sample calculation for Mercury

Step 1: Identify applicable water quality criteria.

From CTR, we can obtain the dissolved Criterion Maximum Concentration ($CMC_{Dissolved}$) and the dissolved Criterion Continuous Concentration ($CCC_{Dissolved}$).

Freshwater Aquatic Life Criteria:

CMC = NA µg/L (CTR page 31712, column B1) and
CCC = NA µg/L (CTR page 31712, column B1); and
Human Health Criteria for Organisms only = 0.051 µg/L (CTR page 31712, column D2).

Step 2: Calculate effluent concentration allowance (ECA)

ECA = Criteria in CTR, since no dilution is allowed.

Step 3: Determine long-term average (LTA) discharge condition

Calculate CV:

CV = Standard Deviation/Mean = 0.0102/0.0054 = 1.7698

ECA Multiplier acute = 0.1273 and,
ECA Multiplier chronic = 0.2277
LTA acute = ECA acute x ECA Multiplier acute
= NA µg/L x 0.6836 = NA µg/L
LTA chronic = ECA chronic x ECA Multiplier chronic
= NA µg/L x 0.8230 = NA µg/L

Step 4: Select the lowest LTA

In this case, the lowest LTA is not applicable.

Step 5: Calculate the Average Monthly Effluent Limitation (AMEL) & Maximum Daily Effluent Limitation (MDEL) for AQUATIC LIFE

Find the multipliers.

AMEL Multiplier = 2.6165
MDEL Multiplier = 7.8553

AMEL aquatic life = lowest LTA (from Step 4) x AMEL Multiplier
= NA µg/L x 2.6165 = NA µg/L
MDEL aquatic life = lowest LTA (from Step 4) x MDEL Multiplier
= NA µg/L x 7.8553 = NA µg/L

Step 6: Find the Average Monthly Effluent Limitation (AMEL) & Maximum Daily Effluent Limitation (MDEL) for HUMAN HEALTH

Find factors. Given CV = 1.7698 and n = 4.

For AMEL human health limit, there is no factor.
The MDEL/AMEL human health factor = 3.0022

i. AMEL human health = ECA = 0.051 µg/L

ii. MDEL human health = ECA x MDEL/AMEL factor
= 0.051 µg/L x 3.0022 = 0.1531 µg/L

Step 7: Compare the AMELs for Aquatic life and Human health and select the lowest. Compare the MDELs for Aquatic life and Human health and select the lowest

Lowest AMEL = 0.051 µg/L (Based on Human Health protection)
Lowest MDEL = 0.15 µg/L (Based on Human Health protection)

d. **Impracticability Analysis** – Federal NPDES regulations contained in 40 CFR part 122.45 for continuous dischargers states that all permit limitations, standards, and prohibitions, including those to achieve water quality standards, shall, unless impracticable, be stated as maximum daily and average monthly discharge limitations for all dischargers other than POTWs.

As stated by USEPA in its long-standing guidance for developing WQBELs, average alone limitations are not practical for limiting acute, chronic, or human health toxic effects.

For example, a POTW sampling for a toxicant to evaluate compliance with a 7-day average limitation could fully comply with this average limit but still be discharging toxic effluent on one, two, three, or up to four of these seven days and not be meeting 1-hour average acute criteria or 4-day average chronic criteria. For these reason, USEPA recommends daily maximum and 30-day average limits for regulating toxics in all NPDES

discharges. For the purposes of protecting the acute effects of discharges containing toxicants (CTR human health for the ingestion of fish), daily maximum limitations can be established in NPDES permits for substances such as mercury, because they are considered to be carcinogens, endocrine disruptors, and bioaccumulative.

A 7-day average alone would not protect one, two, three, or fours days of discharging pollutants in excess of the acute and chronic criteria. Fish exposed to these endocrine disrupting chemicals will be passed on to the human consumer. Endocrine disrupters alter hormonal functions by several means. These substances can:

i. Mimic or partly mimic the sex steroid hormones estrogens and androgens (the male sex hormone) by binding to hormone receptors or influencing cell signaling pathways.

ii. Block, prevent and alter hormonal binding to hormone receptors or influencing cell signaling pathways.

iii. Alter production and breakdown of natural hormones.

iv. Modify the making and function of hormone receptors.

e. **Mass Based Limits** – 40 CFR part 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR part 122.45(f)(2) allows the permit writer, at its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents.

Summary of Water Quality-based Effluent Limitations
Effluent Transfer Station EFF-001A

Table 8. Summary of Water Quality-Based Effluent Limitations at EFF-001A

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Cadmium[16] (wet[17] weather)	µg/L	3.4[18, 19]	--	8.4[18, 19]	--	--
	lbs/day[20]	2.3	--	5.6	--	--
Copper[16] (dry[21] and wet[17] weather)	µg/L	25[18, 19, 22]	--	31[18, 19, 22]	--	--
	lbs/day[20]	16	--	21	--	--
Lead[16] (dry[21] and wet[17] weather)	µg/L	9.0[18, 19]	--	14[18, 19]	--	--
	lbs/day[20]	6.0	--	9.3	--	--
Mercury[23]	µg/L	0.051[19]	--	0.15[19]	--	--
	lbs/day[20]	0.034	--	0.10	--	--
Selenium[23, 24]	µg/L	4.2[19]	--	7.8[19]	--	--
	lbs/day[20]	2.8	--	5.2	--	--
Zinc[16] (wet[17] weather)	µg/L	194[18, 19]	--	277[18, 19]	--	--
	lbs/day[20]	129	--	185	--	--
Cyanide[23]	µg/L	4.3	--	8.5	--	--
	lbs/day[20]	2.9	--	5.7	--	--

5. Whole Effluent Toxicity (WET)

Because of the nature of industrial discharges into the POTWs sewershed, it is possible that other toxic constituents could be present in the Tillman WRP effluent

[16] This constituent did not show numeric reasonable potential. The numeric limitations of this constituent is consistent with the SIP and the *LA River Metals TMDL* implementation procedure. Attachment J also shows the summary of calculation procedures. Calculating end of pipe effluent limitations will ensure that the in-stream concentrations of each metal meet water quality standards.

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

[18] Hardness value of 246 mg/L from the Los Angeles River Metal TMDL was used to assess compliance with CTR criteria.

[19] Concentration expressed as total recoverable.

[20] The mass emission rates for cadmium, copper, lead, and zinc are based on the combined plant design flow rate of 80 MGD, and are calculated as follows: Flow (MGD) x Concentration (µg/L) x 0.00834 (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.

[21] Dry weather effluent limitations apply when the maximum daily flow in the River is less than 500 cfs at the LA River Wardlow gage station."

[22] The Site-Specific Translator of 0.74 is used to convert copper chronic criterion.

[23] This constituent shows reasonable potential.

[24] Selenium concentrations in receiving water were greater than its WQO of 5 µg/L.

or could have synergistic or additive effects. Also, because numeric limits for certain toxic constituents that did not show RP have been removed, the acute toxicity limit may provide a backstop to preventing the discharge of toxic pollutants in toxic amounts.

The toxicity numeric effluent limitations are based on:

i. 40 CFR part 122.44(d)(v) – limits on whole effluent toxicity are necessary when chemical-specific limits are not sufficient to attain and maintain applicable numeric or narrative water quality standards;

ii. 40 CFR part 122.44(d)(vi)(A) – where a State has not developed a water quality criterion for a specific pollutant that is present in the effluent and has reasonable potential, the permitting authority can establish effluent limits using numeric water quality criterion;

iii. Basin Plan objectives and implementation provisions for toxicity;

iv. Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs Final May 31, 1996;

v. Whole Effluent Toxicity (WET) Control Policy July 1994; and,

vi. Technical Support Document (several chapters and Appendix B).

The circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential were under review by the State Water Board in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, at a public hearing, the State Water Board adopted Order No. 2003-0012 deferring the issue of numeric chronic toxicity effluent limitations until a subsequent Phase of the SIP is adopted. In the meantime, the State Water Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1.0 TUc trigger, in the Long Beach and Los Coyotes WRP NPDES permits. This permit contains a similar narrative chronic toxicity effluent limitation, with a numeric trigger for accelerated monitoring.

Phase II of the SIP has been adopted; however, the toxicity control provisions were not revised.

On January 17, 2006, the State Water Board Division of Water Quality held a CEQA scoping meeting to seek input on the scope and content of the environmental information that should be considered in the planned revisions of the Toxicity Control Provisions of the SIP. However, the Toxicity Control Provisions of the SIP continue unchanged.

This Order contains a reopener to allow the Regional Water Board to modify the permit, if necessary, consistent with any new policy, law, or regulation. Until such time, this Order will have toxicity limitations that are consistent with the State Water Board's precedential decision.

a. Acute Toxicity Limitation

The Dischargers may test for acute toxicity by using USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October 2002 (EPA-821-R-02-012). Acute toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate acute toxicity monitoring and take further actions to identify the source of toxicity and to reduce acute toxicity.

b. Chronic Toxicity Limitation and Requirements

Chronic toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate chronic toxicity monitoring and take further actions to identify the source of toxicity and to reduce chronic toxicity. The monthly median trigger of 1.0 TU_c for chronic toxicity is based on *USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs* Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8). In cases where effluent receives no dilution or where mixing zones are not allowed, the 1.0 TU_c chronic criterion should be expressed as a monthly median. The "median" is defined as the middle value in a distribution, above which and below which lie an equal number of values. For example, if the results of the WET testing for a month were 1.5, 1.0, and 1.0 TU_c, the median would be 1.0 TU_c.

The *USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs* Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8) recommends two alternatives for setting up maximum daily limit: using 2.0 TUc as the maximum daily limit; or using a statistical approach outlined in the TSD to develop a maximum daily effluent limitation. In this permit, a maximum daily limitation is not prescribed, a trigger for chronic toxicity is prescribed.

D. Final Effluent Limitations

1. Satisfaction of Anti-Backsliding Requirements

The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for fluoride, mercury, and zinc. The effluent limitations for these pollutants were deleted because they did not show reasonable potential to be in the effluent water. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

2. Satisfaction of Antidegradation Policy

On October 28, 1968, the State Water Board adopted Resolution No. 68-16, *Maintaining High Quality Water*, which established an antidegradation policy for State and Regional Water Boards. The State Water Board has, in State Water Board Order No. 86-17 and an October 7, 1987 guidance memorandum, interpreted Resolution No. 68-16 to be fully consistent with the federal antidegradation policy. Similarly, the CWA (section 304(d)(4)(B)) and USEPA regulations (40 CFR part 131.12) require that all permitting actions be consistent with the federal antidegradation policy. Together, the state and federal policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. Discharges in conformance with the provisions of this Order will not result in a lowering of water quality and therefore conform to the antidegradation policies.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The TBELs consist of restrictions on $BOD_{5@20^{\circ}C}$, TSS, pH, and percent removal of $BOD_{5@20^{\circ}C}$ and TSS. Restrictions on $BOD_{5@20^{\circ}C}$, TSS and pH are discussed in Section IV.B. of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards.

WQBELs have been scientifically derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and WQOs contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any WQOs and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21©(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA and the applicable water quality standards for purposes of the CWA.

Summary of Final Effluent Limitations
Effluent Transfer Station EFF-001

Table 9. Summary of Final Effluent Limitations at EFF-001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
$BOD_{5@20^{o}C}$	mg/L	20	30	45	--	--
	lbs/day[15]	13,340	20,020	30,020	--	--
Total Suspended Solids (TSS)	mg/L	15	40	45	--	--
	lbs/day[15]	10,010	26,690	30,020	--	--
pH	standard units	--	--	--	6.5	8.5
Oil and Grease	mg/L	10	--	15	--	--
	lbs/day[15]	6,670	--	10,010	--	--
Settleable Solids	mg/L	0.1	--	0.3	--	--
Total Residual Chlorine	mg/L	--	--	0.1[25]	--	--
	lbs/day[15]	--	--	66.8	--	--
Chloride	mg/L	190[26]	--	--	--	--
	lbs/day[15]	126,770	--	--	--	--
Total Dissolved Solids	mg/L	950[27]	--	--	--	--
	lbs/day[15]	633,840	--	--	--	--
Sulfate	mg/L	300[27]	--	--	--	--
	lbs/day[15]	200,160	--	--	--	--
MBAS	mg/L	0.5[28]	--	--	--	--
	lbs/day[15]	330	--	--	--	--
Nitrate (as N)	mg/L	7.2[29]	--	--	--	--
Nitrite (as N)	mg/L	0.9[29]	--	--	--	--
Nitrate + Nitrite (as N)	mg/L	7.2[29]	--	--	--	--
Ammonia Nitrogen (as N)	mg/L	1.4[29]	--	4.2[29]	--	--

[25] Determination of compliance with the final effluent limitation 0.10 mg/L for total residual chlorine will be based solely on end of pipe grab samples.

[26] In accordance with the Resolution 97-02, adopted by the Regional Water Board on January 27, 1997, the chloride limitation has been increased from 150 to 190 mg/L.

[27] Based on Table 3-8 of the Basin Plan.

[28] Based on the secondary drinking water standard (CDPH 1992).

[29] This is the WLA, according to the *Nitrogen Compounds TMDL* Resolution No. 2003-009, adopted by the Regional Water Board on July 10, 2003. The WLA serves as the effluent concentration limitation for the discharge. It became effective on March 23, 2004, after the USEPA approves the *Nitrogen Compounds TMDL,* and after the Regional Water Board filed the Notice of Decision with the California Resources Agency.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Cadmium[16] (wet[17] weather)	µg/L	3.4[18, 19]	--	8.4[18, 19]	--	--
	lbs/day[20]	2.3	--	5.6	--	--
Copper[16] (dry[21] and wet[17] weather)	µg/L	25[18, 19, 22]	--	31[18, 19, 22]	--	--
	lbs/day[20]	16	--	21	--	--
Lead[16] (dry[21] and wet[17] weather)	µg/L	9.0[18, 19]	--	14[18, 19]	--	--
	lbs/day[20]	6.0	--	9.3	--	--
Mercury[23]	µg/L	0.051[19]	--	0.15[19]	--	--
	lbs/day[20]	0.034	--	0.10	--	--
Selenium[23, 24]	µg/L	4.2[19]	--	7.8[19]	--	--
	lbs/day[20]	2.8	--	5.2	--	--
Zinc[16](wet[17] weather)	µg/L	194[18, 19]	--	277[18, 19]	--	--
	lbs/day[20]	129	--	185	--	--
Cyanide[23]	µg/L	4.3	--	8.5	--	--
	lbs/day[20]	2.9	--	5.7	--	--

E. Reclamation Specifications

1. **Current Reclaimed Project for Irrigation & Industrial Use –** The production, distribution, and reuse of recycled water are presently regulated under WDRs Order No. R4-2007-0008 and Water Recycling Requirements Order No. R4-2007-0009, both adopted by this Regional Water Board on January 11, 2007.

2. **Water Recycling Requirements for Groundwater Recharge –** The Los Angeles of Los Angeles is currently developing a master plan for the use of recycled water with a goal of recharging up to 30,000 acre feet per year of recycled water, treated with advanced wastewater treatment facilities, into the San Fernando Groundwater Basin. The master plan is not yet completed and is considering the use of other spreading facilities and not just the Hansen Spreading Grounds. In addition, the final plan may change based on California Department of Public Health requirements or the outcome of the environmental review process.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving water limitations are based on WQOs contained in the Basin Plan and are a required part of this Order.

B. Groundwater

Limitations in this Order must protect not only surface receiving water beneficial uses, but also, the beneficial uses of underlying groundwater where there is a recharge beneficial use of the surface water. In addition to a discharge to surface water, there is discharge that can impact groundwater. Sections of the Los Angeles River between Willow Street and Sepulveda Flood Control Basin are designated as GWR beneficial use. Surface water from the Los Angeles River percolates into the San Fernando Valley and the Central Los Angeles Coastal Plain Groundwater Basins. Since groundwater from these Basins is used to provide drinking water to the community, the groundwater aquifers should be protected.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 CFR part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The MRP, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

This Order carries forward the Facility's influent monitoring requirements.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP (Attachment E). This provision requires compliance with the MRP, and is based on 40 CFR parts 122.44(i), 122.62, 122.63, and 124.5. The MRP is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the CWC, and Regional Water Board policies. The MRP also contains sampling program specific for the Discharger's wastewater treatment facility. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with Section 1.3 of the SIP, a periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

Monitoring for those pollutants expected to be present in the discharge from the Facility, will be required as shown on the proposed MRP (Attachment E) and as

required in the SIP. Monitoring requirements are largely unchanged from the previous Order.

The changes in the effluent monitoring at EFF-001A and EFF011B are summarized in the following table.

Table 10. Effluent Monitoring Program Comparison Table

Parameter	Monitoring Frequency (2006 Permit)	Monitoring Frequency (2010 Permit)	Monitoring Frequency (2011 Permit)
Total waste flow	continuous	continuous	continuous
Turbidity	continuous	continuous	continuous
Total residual chlorine	continuous	continuous	continuous
Total residual chlorine	daily	daily	daily
Total coliform	daily	daily	daily
Fecal coliform	daily	daily	daily
E.coli	weekly	weekly	weekly
Temperature	daily	daily	daily
pH	daily	daily	daily
Settleable solids	daily	daily	daily
TSS	daily	daily	daily
$BOD_{5@20^{o}C}$	weekly	weekly	weekly
Oil and grease	weekly	weekly	weekly
Dissolved oxygen	monthly	monthly	monthly
Total dissolved solids	monthly	monthly	monthly
Chloride	monthly	monthly	monthly
Sulfates	monthly	monthly	monthly
Boron	monthly	monthly	quarterly[30]
Fluoride	monthly	monthly	quarterly[30]
Ammonia nitrogen	monthly	monthly	monthly
Nitrate nitrogen	monthly	monthly	monthly
Nitrite nitrogen	monthly	monthly	monthly
Organic nitrogen	monthly	monthly	monthly
Total nitrogen	monthly	monthly	monthly
Surfactants (MBAS)	monthly	monthly	monthly
Surfactants (CTAS)	monthly	monthly	monthly
Total hardness ($CaCO_3$)	monthly	monthly	monthly

[30] There is no RP.

Parameter	Monitoring Frequency (2006 Permit)	Monitoring Frequency (2010 Permit)	Monitoring Frequency (2011 Permit)
Chronic toxicity	monthly	monthly	monthly
Acute toxicity	monthly	monthly	monthly
Perchlorate	semiannually	semiannually	semiannually
1,4-Dioxane	semiannually	semiannually	semiannually
1,2,3-Trichloropropane	semiannually	semiannually	semiannually
MTBE	semiannually	semiannually	semiannually
Antimony	quarterly	quarterly	quarterly
Arsenic	quarterly	quarterly	quarterly
Beryllium	quarterly	quarterly	quarterly
Cadmium	quarterly	quarterly	monthly[31]
Total Chromium	quarterly	quarterly	quarterly
Chromium III	quarterly	quarterly	quarterly
Chromium VI	quarterly	quarterly	quarterly
Copper	monthly	monthly	monthly
Lead	monthly	monthly	monthly
Mercury	monthly	monthly	monthly
Nickel	quarterly	quarterly	quarterly
Selenium	monthly	monthly	monthly
Silver	quarterly	quarterly	quarterly
Thallium	quarterly	quarterly	quarterly
Zinc	quarterly	quarterly	monthly[31]
Cyanide	monthly	quarterly	monthly[32]
Tetrachloroethylene	monthly	quarterly	semiannually
Bis(2-ethylhexyl)phthalate	monthly	quarterly	semiannually
Gamma-BHC	monthly	quarterly	semiannually
Diazinon[33]	N.A.	N.A.	quarterly
2,4-D	semiannually	semiannually	semiannually
2,4,5-TP (Silvex)	semiannually	semiannually	semiannually
Pesticide[34]	semiannually	semiannually	semiannually

[31] *Los Angeles River Metals TMDL*.
[32] There is RP.
[33] Diazinon is on the *California 2008-2010 Integrated Report Section 303(d) List of Impaired Waters* requiring TMDLs for the Los Angeles Region.
[34] Pesticides are, for purposes of this order, those six constituents referred to in 40 CFR part 125.58(p) (demeton, guthion, malathion, methoxychlor, mirex, and parathion).

Parameter	Monitoring Frequency (2006 Permit)	Monitoring Frequency (2010 Permit)	Monitoring Frequency (2011 Permit)
Remaining USEPA priority pollutants[35] excluding asbestos	semiannually	semiannually	semiannually
Radioactivity[36]	semiannually	semiannually	semiannually

The reduction of monitoring frequencies for pollutants listed in the above Table is warranted because the previous monitoring data for these pollutants indicate that the discharge did not demonstrate reasonable potential to exceed water quality standards.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

This requirement establishes conditions and protocol by which compliance with the Basin Plan narrative WQO for toxicity will be demonstrated and in accordance with Section 4.0 of the SIP. Conditions include required monitoring and evaluation of the effluent for acute and chronic toxicity and numerical values for chronic toxicity evaluation to be used as 'triggers' for initiating accelerated monitoring and toxicity reduction evaluation(s).

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Basin Plan. Flow monitoring is required at the County of Los Angeles Department of Public Works' Wardlow Gage Station No. F319-R (RSW-003D) in the Los Angeles River to determine the wet-weather condition of the receiving water.

The receiving water monitoring program in this Order includes the following modifications to the existing receiving water monitoring program:

[35] 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.

[36] 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 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.

a. **RSW-LATT630**

i. For constituents (boron, fluoride, tetrachloroethylene, bis(2-ethylhexyl)phthalate, gamma-BHC, and heptachlor epoxide) currently monitored on a quarterly basis, shifting from quarterly to semiannually monitoring.

ii. Increasing quarterly monitoring frequency of cyanide to monthly.

iii. Adding quarterly monitoring frequency for diazinon.

b. **RSW-LATT612, RSW-LATT614, RSW-LATT616, RSW-LATT622, and RSW-LATT628**

i. Increasing semiannually monitoring frequency of cadmium, zinc, and cyanide to quarterly.

ii. Decreasing quarterly monitoring frequency of boron, fluoride, and heptachlor epoxide to semiannually.

iii. Adding quarterly monitoring frequency for diazinon.

c. **RSW-4 and RSW-W2 (Sediment)**

i. Increasing semiannually monitoring frequency of cadmium, zinc, and cyanide to quarterly.

ii. Decreasing quarterly monitoring frequency of heptachlor epoxide to semiannually.

iii. Adding quarterly monitoring frequency for diazinon.

d. Conducting bioassessment monitoring according to the LARRMP.

The proposed receiving water monitoring program will improve coordination and efficiency of receiving water monitoring for existing discharges in the Los Angeles River Watershed by streamlining monitoring efforts and reducing redundancies throughout the watershed and will provide more useful water quality data on both watershed and site-specific scales.

2. Groundwater

Not applicable.

E. Other Monitoring Requirements

1. Los Angeles River Regional Monitoring Program (LARRMP)

The goals of the LARRMP are to:

b. Determine compliance with receiving water limits;

c. Monitor trends in surface water quality;

d. Ensure protection of beneficial uses;

e. Provide data for modeling contaminants of concern;

f. Characterize water quality including seasonal variation of surface waters within the watershed;

g. Assess the health of the biological community; and,

h. Determine mixing dynamics of effluent and receiving waters in the estuary.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR part 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR part 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR part 122.42.

40 CFR parts 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR part 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR parts 122.41(j)(5) and (k)(2) because the enforcement authority under the CWC is more stringent. In lieu of these conditions, this Order incorporates by reference CWC section 13387(e).

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 CFR part 123.25. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Constituents of Emerging Concern in the Effluent

i. Background

Advancements in analytical technology over the last decade have dramatically increased the number of chemicals that can be detected and greatly decreased the concentrations at which chemicals can be detected. This new ability to detect trace levels of chemical concentrations has expanded the existing understanding of the kinds of contaminants present in the water and wastewater. Many man-made chemicals, particularly pesticides, pharmaceuticals and personal care products, have been found in waters across the United States.

Collectively, these compounds are referred to as Emerging Constituents (ECs) or Constituents of Emerging Concern (CECs) because their presence is starting to be revealed by rapid advances in analytical technology. Despite recent improvements in analytical science, there is still scarcity of data and lack of robust methodologies for measuring most CECs. CECs are part of the unregulated chemicals, for which no water quality standards have been established.

Recent publications and media reports on CECs have increased public awareness of the issue, providing an impetus for CEC investigations around the country, including local efforts by the City of Los Angeles and Southern California Coastal Water Research Project (SCCWRP). For instance, starting 2005, the City of Los Angeles has been conducting a special study as part of the Order No. 2005-0020, whose results suggest that the presence of natural and synthetic estrogen hormones has caused feminization of male fish (hornyhead turbot) in Santa Monica Bay, especially near the Hyperion Treatment Plant outfall. In January 2010, SCCWRP convened a workshop where 50 scientists, water quality managers, and stakeholders discussed and collaborated on developing an effective CEC monitoring and management strategy that is protective of water quality. Anticipated outcomes of this workshop include recommended lists of CECs for monitoring in recycled water (for groundwater concerns) by end of 2010, and for monitoring in ambient waters, including ocean waters, by summer 2011. The final report of *Monitoring Strategies for Chemicals of Emerging Concern (CECs) in Recycled Water* was published on June 25, 2010.

In recent years, this Regional Water Board has incorporated monitoring of a select group of CECs into the NPDES permits issued to POTWs.

ii. CEC Special Study Requirements

The Discharger shall initiate an investigation of CECs in the Discharger's effluent by conducting a special study. Specifically, within 6 months of the effective date of this Order, the Discharger shall develop a CEC Special Study Work Plan (Work Plan) and submit for approval by the Executive Officer of this Regional Water Board. Immediately upon approval of the Work Plan, the Discharger shall fully implement the Special Study.

This Special Study Work Plan shall include, but not limited to, the following:

(i). Identification of CECs to be monitored in the effluent, sample type (e.g. 24-hour composite), sampling frequency, proposed sampling month, and sampling methodology. Table 5 identifies the minimum parameters to be monitored.

Table 11. CECs in the Effluent

Parameter	Unit	Sample Type	Minimum Sampling Frequency	Analytical Test Method and (Minimum Level, units)
17α-Ethinyl estradiol	ng/L	To be proposed	Annually	To be proposed
17β-Estradiol	ng/L	To be proposed	Annually	To be proposed
Estrone	ng/L	To be proposed	Annually	To be proposed
Bisphenol A	ng/L	To be proposed	Annually	To be proposed
Nonylphenol & nonylphenol polyethoxylates	ng/L	To be proposed	Annually	To be proposed
Octylphenol & octylphenol polyethoxylates	ng/L	To be proposed	Annually	To be proposed
Polybrominated diphenyl ethers	ng/L	To be proposed	Annually	To be proposed
Acetaminophen	ng/L	To be proposed	Annually	To be proposed
Amoxicillin	ng/L	To be proposed	Annually	To be proposed
Azithromycin	ng/L	To be proposed	Annually	To be proposed
Carbamazepine	ng/L	To be proposed	Annually	To be proposed
Caffeine	ng/L	To be proposed	Annually	To be proposed
Ciprofloxacin	ng/L	To be proposed	Annually	To be proposed
DEET	ng/L	To be proposed	Annually	To be proposed
Dilantin	ng/L	To be proposed	Annually	To be proposed
Gemfibrozil	ng/L	To be proposed	Annually	To be proposed
Ibuprofen	ng/L	To be proposed	Annually	To be proposed
Lipitor (Atorvastain)	ng/L	To be proposed	Annually	To be proposed
Iodinated contrast media (i.e. iopromide)	ng/L	To be proposed	Annually	To be proposed
Sulfamethoxazole	ng/L	To be proposed	Annually	To be proposed

Parameter	Unit	Sample Type	Minimum Sampling Frequency	Analytical Test Method and (Minimum Level, units)
Trimethoprim	ng/L	To be proposed	Annually	To be proposed
Salicylic acid	ng/L	To be proposed	Annually	To be proposed
TCEP	ng/L	To be proposed	Annually	To be proposed
Triclosan	ng/L	To be proposed	Annually	To be proposed

- Once the SCCWRP's recommended list of CEC monitoring in ambient waters, including ocean waters, is finalized, the above list of minimum parameters to be monitored by the Discharger and the sampling frequency may be re-evaluated and modified by the Executive Officer. At such time, upon request by the Executive Officer, the Discharger shall monitor the requested CEC parameters at the specified frequency. In the Special Study Work Plan, the Discharger may also propose, for consideration and approval by the Executive Officer, surrogate or indicator CECs that may contribute towards a better understanding of CECs in its effluent.

- Sample Type – The Discharger shall propose in the Work Plan the appropriate sample type (e.g. grab or composite) for each constituent.

- Sampling Period – At minimum, the Discharger shall monitor the specified CECs once per year. The Work Plan shall propose the appropriate sampling month or quarter for each year, consistent with the goals of the analyses. The rationale for selecting the particular sampling month or quarter shall be explained in the Work Plan.

- Proposed Sampling Month – The Discharger may choose a fixed month for sampling or vary the sampling month over the duration of the special study in order to examine possible temporal associations.

- Analytical Test Methodology – The Discharger shall review and consider all available analytical test methodologies, including but not limited to those listed in USEPA Methods 1694 and 1698, and methodologies approved or utilized by U.S. Geologic Survey, California Department of Public Health, and other federal or State agencies. Based on its review, the Discharger shall propose the most appropriate analytical methodology, considering sensitivity, accuracy, availability, and cost.

(ii). Characterization of existing CEC data (data collected previous to Special Study). The Discharger shall propose a characterization of all existing CEC data (associated with its effluent or receiving water) that have been collected for various

purposes in the past. At minimum, the characterization shall include:

- An identification of all CECs monitored to date (outside of this Special Study);
- Monitoring duration, frequency, and date(s) (for example, from 2000- present, annually);
- Analytical methodologies employed;
- RL, MLs and MDLs achieved for each methodology used; and,
- If detected, temporal/seasonal trend analyses (using both statistical and graphical demonstration) of CECs.

(iii). Evaluation of CEC data collected as part of this Special Study. The Discharger shall propose an evaluation of CEC data (associated with its effluent) to be collected as part of this special study. At minimum, the characterization shall include:

- An identification of CECs that have been monitored;
- Monitoring duration, frequency, and date(s);
- RL, MLs and MDLs achieved for each methodology used;
- A brief update on any improvements (or change) in the analytical methodologies and associated RL, MLs and MDLs achieved for each methodology used; and,
- If detected, temporal/seasonal trend analyses (using both statistical and graphical demonstration) of cumulative CEC data collected as part of this special study.

(iv). Reporting – By April 15th of each year (starting April 15, 2013), the Discharger shall submit to the Executive Officer of this Regional Water Board, an annual report summarizing the monitoring results from the previous year. For example, the annual report due April 15, 2013 shall include CEC monitoring data from January to December 2012. Each annual report shall include a compilation of effluent monitoring data of CECs listed in the approved Work Plan, MLs, sample type, analytical methodology used, sampling date/time, QA/QC information, and

an evaluation of cumulative CEC data collected to date as part of this special study (see above for further details on CEC data evaluation). In addition, the first annual report (due April 15, 2013) shall include a characterization of existing CEC data, i.e., all data collected outside of this special study (see above for further details on existing CEC data characterization.

b. **Toxicity Reduction Requirements –** The Discharger shall prepare and submit a copy of the Discharger's initial investigation Toxicity Reduction Evaluation (TRE) workplan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. See Section VI.C.1.b. in the accompanying Order for detail.

c. **Antidegradation Analysis and Engineering Report for Proposed Plant Expansion –** This provision is based on the State Water Board Resolution No. 68-16, which requires the Regional Water Board in regulation the discharge of waste to maintain high quality waters of the State, the Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. This provision requires the Discharger to clarify it has increased plant capacity through the addition of new treatment system(s) to obtain alternative effluent limitations for the discharge from the treatment system(s). This provision requires the Discharger to report specific time schedules for the plants projects. This provision requires the Discharger to submit report to the Regional Water Board for approval.

d. **Operations Plan for Proposed Expansion –** This provision is based on section 13385(j)(1)(D) of the CWC and allows a time period not to exceed 90 days in which the Discharger may adjust and test the treatment system(s). This provision requires the Discharger to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting and testing to prevent violations.

e. **Treatment Plant Capacity –** The treatment plant capacity study required by this Order shall serve as an indicator for the Regional Water Board regarding Facility's increasing hydraulic capacity and growth in the service area.

3. Best Management Practices and Pollution Prevention

a. **Pollutant Minimization Program –** This provision is based on the requirements of Section 2.4.5 of the SIP.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR part 122.41(e) and the previous Order.

5. Special Provisions for Municipal Facilities (POTWs Only)

a. **Biosolids Requirements –** (Not applicable)

The Tillman WRP returns the biosolids generated by the treatment process back to the sewer for transport and treatment at the Hyperion Plant.

b. **Pretreatment Requirements –** This permit contains pretreatment requirements consistent with applicable effluent limitations, national standards of performance, and toxic and performance effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, 404, 405, and 501 of the CWA, and amendments thereto. This permit contains requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the CWA; 40 CFR parts 35 and 403; and/or Section 2233, Title 23, California Code of Regulations.

c. **Spill Reporting Requirements –** This Order established a reporting protocol for how different types of spills, overflow or bypasses of raw or partially treated sewage from its collection system or treatment facility covered by this Order shall be reported to regulatory agencies.

The State Water Board issued General WDRs for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006. The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. The Discharger must comply with both the General Order and this Order.

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for the Tillman WRP. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger 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.

Notification was provided by posting notices at the Tillman WRP, and at the City's Bureau of Sanitation office.

B. Written Comments

The Regional Water Board staff determinations are tentative. Interested persons are invited to submit written comments only on the changes contained within this revised tentative WDRs. The added text is underlined and the deleted text is in strikethrough. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by Regional Water Board staff and considered by the Regional Water Board, written comments on the tentative Order must be received at the Regional Water Board offices by **12:00 p.m. (noon) on November 4, 2011**.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Regional Water Board meeting on the following date and time and at the following location:

Date: December 8, 2011
Time: 9:00 AM
Location: Metropolitan Water District of Southern California
700 North Alameda Street
Los angles, California.

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/losangeles/ where you can access the current agenda for changes in dates and locations.

D. Nature Hearing

This will be a formal adjudicative hearing pursuant to section 648 et seq. of title 23 of the California Code of Regulations. Chapter 5 of the California Administrative Procedure Act (commencing with section 11500 of the Government Code) will not apply to this proceeding.

Ex Parte Communications Prohibited: As a quasi-adjudicative proceeding, no Regional Water Board member may discuss the subject of this hearing with any person, except during the public hearing itself. Any communications to the Regional Water Board must be directed to Regional Water Board staff.

E. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee

2. Regional Water Board staff

Any other persons requesting party status must submit a written or electronic request to staff not later than [20] business days before the hearing. All parties will be notified if other persons are so designated.

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments regarding the Tentative Order dated October 6, 2011, must be received no later than **12:00 p.m. (noon) on November 4, 2011**.

Comments or evidence received after that date will be submitted, ex agenda, to the Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

G. Hearing Procedure

The Board meeting, of which this hearing is a part, will start at 9:00 a.m. Interested persons are invited to attend. When the agenda item is called, staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to three minutes or less for each interested person, depending on the number of interested persons wishing to be heard.

Parties or interested persons with similar concerns or opinions are encouraged to choose one representative to speak and are encouraged to coordinate their presentations with each other. Parties will be advised after the receipt of public comments, but prior to the date of the hearing, of the amount of time each is allocated for presentations. That decision will be based upon the complexity and number of issues under consideration, the extent to which the parties have coordinated, the number of parties and interested persons anticipated, and the time available for the hearing. The parties are invited to contact staff not later than November 23, 2011, (two weeks prior to the hearing) to discuss how much time they believe is necessary for their presentations, and staff will endeavor to accommodate reasonable requests.

At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

The Board does not generally require the prior identification of witnesses, the cross examination of witnesses, or other procedures not specified in this notice. Parties or persons with special procedural requests or requests for alternative hearing procedures should contact staff, who will endeavor to accommodate reasonable requests. Objections to any procedure to be used during this hearing must be submitted in writing no later than close of business 15 business days prior to the date of the hearing. (Any objections related to the amount of time allocated for parties' presentations must be submitted within two business days of notice thereof, if that date is less than 15 business days before the hearing.) Absent such objections, any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the CCR. Procedural objections will not be entertained at the hearing

If there should not be a quorum on the scheduled date of this meeting, this matter will be automatically continued to the next scheduled meeting in February 2012. A continuance will not extend any time set forth herein.

H. WDRs Petitions

Any aggrieved person may petition the State Water Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

I. Information and Copying

The ROWD, related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576-6600.

J. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

K. Additional Information

Requests for additional information or questions regarding this order should be directed to Dr. Don Tsai at (213) 576-6665.