# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

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# ORDER NO. R4-2010-XXX NPDES NO. CA0056014

# WASTE DISCHARGE REQUIREMENTS FOR THE LAS VIRGENES MUNICIPAL WATER DISTRICT, TAPIA WATER RECLAMATION FACILITY DISCHARGE TO MALIBU CREEK AND LOS ANGELES RIVER

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

**Table 1. Discharger Information** 

Discharger	Las Virgenes Municipal Water District			
Name of Facility	Tapia Water Reclamation Facility			
	731 Malibu Canyon Road			
Facility Address	Calabasas, CA 91302			
	Los Angeles County			
The LLC Environmental Protection Agency (LICEDA) and the Regional Water Quality Central Board have				

The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.

The discharge by the Las Virgenes Municipal Water District from the discharge point 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	Tertiary treated effluent	34 <sup>°</sup> 04' 55" N	-118 <sup>°</sup> 42' 28" W	Malibu Creek
002	Tertiary treated effluent	34 <sup>°</sup> 08' 40" N	-118 <sup>°</sup> 41' 50" W	Malibu Creek
003	Tertiary treated effluent	34 <sup>°</sup> 40' 40" N	-118 <sup>°</sup> 42' 03" W	Malibu Creek
005	Tertiary treated effluent	34 <sup>°</sup> 9′ 21"N	-118 <sup>°</sup> 38′ 34″ W	Los Angeles River

**Table 3. Administrative Information** 

This Order was adopted by the Regional Water Quality Control Board on:	June 3, 2010
This Order shall become effective on:	July 23, 2010
This Order shall expire on:	May 10, 2015
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 (Title 40, Code of Federal Regulations, part 122.21(d))

I, Tracy J. Egoscue, 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 June 3, 2010.

Tracy J. Egoscue, Executive Officer

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### I. FACILITY INFORMATION

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

**Table 4. Facility Information** 

Discharger	Las Virgenes Municipal Water District		
Name of Facility	Tapia Water Reclamation Facility		
	731 Malibu Canyon Road		
Facility Address	Calabasas, CA 91302		
	Los Angeles County		
Facility Contact, Title, and Phone	John R. Mundy, General Manager, (818) 251- 2100		
Mailing Address	4232 Las Virgenes Road Calabasas, CA 91302		
Type of Facility	Publicly Owned Treatment Works		
Facility Design Flow	16.1 million gallons per day (MGD)		

### **II. FINDINGS**

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

A. Background. Las Virgenes Municipal Water District (hereinafter Discharger or LVMWD) is currently discharging wastewater pursuant to Order No. R4-2005-0074 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0056014. The Discharger submitted a Report of Waste Discharge, dated December 7, 2009, and applied for an NPDES permit renewal to discharge up to 16.1 MGD of tertiary-treated wastewater from the Tapia Water Reclamation Facility (hereinafter Facility or Tapia WRF). The application was deemed complete on January 20, 2010.

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 and Triunfo Sanitation District (TrSD) jointly own the Tapia WRF, a publicly owned treatment works (POTW) operated by the Discharger. The Facility treats municipal wastewater to obtain California Title 22 recycled water. The design flow for the facility is 16.1 MGD. In 2008, on average, Tapia WRF processed 8.95 MGD and discharged 4.03 MGD to Malibu Creek (with no discharge in June and July) and less than 0.1 MGD to the Los Angeles River. Tapia WRF recycled the remainder of the tertiary-treated wastewater.

Treatment begins with coarse screening and grit removal. Screenings and grit are disposed of in a landfill. The influent wastewater is then pumped to the primary sedimentation tanks. Solids are scraped from the bottom of the tanks and floating solids are skimmed from the top of the water surface. These solids are transferred to the sludge wet well for further treatment.

After primary sedimentation, the primary flows into the biological nutrient reduction (BNR) basins (also called aeration basins). There are six BNR basins, which are operated in two parallel trains of three tanks, flowing in a serpentine fashion. Primary effluent is mixed with return activated sludge (RAS) to form mixed liquor. The mixed liquor enters the first tank of the train, which is operated in an anoxic mode. The anoxic zones have no air added to keep solids in suspension, so they are mixed mechanically by floating mixers. The mixed liquor passes into the second tank of the train where it is aerated to promote nitrification. After passing through the aerated zone of the second tank, the mixed liquor then passes through another anoxic zone before it is either pumped back into the first tank of the treatment train by a recirculated into the first BNR basin of the train, undergoes gentrification in the anoxic environment. The mixed liquor, which is not recirculated, passes into the third tank of the treatment train flowing through another anoxic zone followed by another aerobic zone before exiting the BNR basins. An

alternate option of running these basins in parallel mode is used when one or more tanks are taken offline.

Flow exiting the BNR basins enters into the secondary sedimentation tanks. In these tanks, the solids settle out from the liquid portion of the treated water where they are collected and sent to the RAS reaeration basins. In the RAS reaeration basins the solids undergo further treatment in anoxic and aerobic zones to enhance the removal of nitrogen and condition the biomass to provide an enhanced treatment in the BNR basins. The majority of the RAS is then pumped back to the BNR basins to be mixed with the primary effluent. Excess biomass is wasted (wasted activated sludge or WAS). The WAS is mixed with the primary sludge in the sludge wet well.

The liquid portion of the treated wastewater from the secondary clarifiers flows to the tertiary filters where chlorine and aluminum sulfate are added and the water is filtered through anthracite media. Influent flow to the tertiary filters can be flow-balanced on a daily basis. The water then flows into the chlorine contact channel where sodium hypochlorite is added for disinfection. Sodium bisulfite is added after dechlorination. The resulting effluent is then reused or recycled for beneficial purposes, and excess effluent is discharged to Malibu Creek or the Los Angeles River. Attachment B provides a map of the area around the Tapia WRF. Attachment C provides a flow schematic of the facility.

A portion of the waste activated sludge (WAS) is aerobically digested and screened at Tapia and pumped to the Rancho Las Virgenes Farm, a 91-acre site located at 3240 Las Virgenes Road, for subsurface biosolids injection. The fields are planted with a variety of pasture grasses to agronomically remove nutrients from the injection operation. The subsurface biosolids injection is regulated under separate WDRs contained in Order No. 79-107, adopted by this Regional Water Board on June 25, 1979. If no biosolids injection is being done at the Rancho Las Virgenes Farm (the last injection was performed in 2003), the waste activated sludge is sent instead to Rancho Las Virgenes Composting Facility (Rancho Facility). The majority of the WAS is treated at Rancho Facility and recycled as compost. The composting and farm facilities eliminate the need for hauling and disposal of biosolids to landfills.

Primary and secondary solids or sludges from the Tapia WRF are dosed with ferric chloride before they are pumped through an 8-inch force main to the Rancho Las Virgenes Composting Facility, also operated by LVMWD, located at 3700 Las Virgenes Road, approximately three miles north of Tapia WRF. At Rancho Facility, the sludge is digested in one of two mesophilic anaerobic digesters before being dewatered by centrifugation. The liquid generated by centrifugation (centrate) is sent to a centrate treatment facility where it is treated to reduce ammonia and nitrogen levels before being returned to Tapia WRF via the sanitary sewer. The solids (cake) generated during centrifugation are mixed with small woodchips or sawdust (amendment) and recycled compost, which acts as a seed), to begin the composting process.

The amendment/cake mixture is transferred to the compost reactor building where it is deposited in bays and mechanically mixed and transported through the building using the within-vessel composting method to further reduce pathogens. After this period, it is transferred to a cure building where it undergoes static pile aeration for another 30-day period. Upon completion of the process, the compost is tested and given away or sold to the customers for land application as a class "A" (exceptional quality) product.

**Water Recycling**. Approximately 40 percent of the treated wastewater is used on an annual basis for landscaping irrigation. Recycled water is also used at Tapia WRF, Pepperdine University, Rancho Las Virgenes Composting Facility and Rancho Las Virgenes Farm. The use of reclaimed water is regulated under Water Reclamation Requirements contained in Order No. 87-086. Order No. 87-086 was readopted on May 12, 1997, through the General Order No. 97-072.

Discharge of Excess Tertiary-Treated Effluent. Excess tertiary-treated effluent, after meeting the demands of water recycling, is disposed of through one of several ways. Primarily, it is discharged to Malibu Creek via Discharge Point 001 from November 16<sup>th</sup> to April 14<sup>th</sup> of each calendar year. Also, the excess effluent may be pumped over the Calabasas grade and discharged into the Arroyo Calabasas via Discharge Point 005. Arroyo Calabasas is a tributary to the Los Angeles River. There are two other discharge points, which are rarely used. A discharge point above the county gauging station on Malibu Creek (R-13 in Order No. 2005-0075) is only used as an additional outlet during extremely high flow conditions. The LVMWD's recycled water reservoir overflow (Discharge Point 002), located behind LVMWD headquarters, infrequently discharges during rain events. Additionally, excess effluent may be used for irrigating the farm fields at the Rancho Las Virgenes Composting 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 U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).
- **D.** Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through K are also incorporated into this Order.
- **E. California Environmental Quality Act (CEQA).** Under California Water Code (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.** Section 301(b) of the CWA and implementing USEPA permit regulations at part 122.44, title 40 of the Code of Federal Regulations, 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 part 133 and Best Professional Judgment (BPJ) in accordance with Part 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- **G. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and 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 for BOD, TSS, and pH, 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, is discussed in the Fact Sheet.

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, water quality-based effluent limitations (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 Part 122.44(d)(1)(vi).

H. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (hereinafter Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (hereinafter, the State Water Board or SWRCB) 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 Point	Receiving Water Name	Beneficial Use(s)
002	Las Virgenes Creek (Hydro Unit 404.22)	Existing: Water contact recreation (REC-1) <sup>[1]</sup> ; noncontact water recreation (REC-2); warm freshwater habitat (WARM); wild life habitat (WILD); rare, threatened, or endangered species (RARE); and wetland habitat (WET) <sup>[3]</sup> Potential: Municipal and domestic water supply (MUN) <sup>[4]</sup> ; cold freshwater habitat (COLD); migration of aquatic organisms (MIGR) <sup>[2]</sup> ; and spawning, reproduction, and/or early development (SPWN).
001-003	Malibu Creek (Hydro Unit 404.21)	Existing: REC-1 <sup>[1]</sup> ; REC-2; WARM; COLD; WILD; RARE; MIGR <sup>[2]</sup> ; SPWN; and WET <sup>[3]</sup> Potential: MUN <sup>[4]</sup> .
001-003	Malibu Lagoon (Hydro Unit 404.21)	Existing: Navigation (NAV); REC-1 <sup>[1]</sup> ; REC-2; estuarine habitat (EST); marine habitat (MAR); WILD; RARE <sup>[5]</sup> ; MIGR <sup>[2]</sup> ; SPWN; and WET <sup>[3]</sup> .
001-003	Malibu Beach (Surfrider Beach) (Hydro Unit 404.21)	Existing: NAV; REC-1 <sup>[1]</sup> ; REC-2; commercial and sport fishing (COMM); MAR; WILD; MIGR <sup>[2]</sup> ; SPWN <sup>[6]</sup> ; and shellfish harvesting (SHELL) <sup>[7]</sup> .
005	Los Angeles River upstream of Figueroa Street (Hydro Unit 405.21)	Existing: groundwater recharge (GWR); REC-1 <sup>[1]</sup> ; REC-2; WARM; WILD; and WET <sup>[3]</sup> .  Potential: MUN <sup>[4]</sup> ; and industrial service supply (IND).
005	Los Angeles River downstream of Figueroa Street (Hydro Unit 405.15)	Existing: GWR; REC-1 <sup>[1]</sup> ; REC-2; and WARM  Potential: MUN <sup>[4]</sup> ; IND; and WILD.
005	Los Angeles River to Estuary (Hydro Unit 405.12)	Existing: GWR; REC-1 <sup>[1]</sup> ; REC-2; RARE; WARM; MAR; WILD; and RARE.  Potential: MUN <sup>[4]</sup> ; IND.; industrial process supply (PROC); MIGR; SPWN; and SHELL.
005	Los Angeles River Estuary (Hydro Unit 405.12)	Existing: IND; NAV; REC-1 <sup>[1]</sup> ; REC-2; COMM; EST; MAR; WILD; RARE <sup>[5]</sup> ; MIGR; SPWN; and WET.  Potential: SHELL.

Footnote:

- [1]. The Los Angeles County Department of Public Works posted signs prohibiting access to the Los Angeles River. However, there is public contact in the downstream areas; hence, the quality of treated wastewater discharged to both Malibu Creek and the Los Angeles River must be such that no health hazard is created.
- [2]. 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.
- [3]. This wetland habitat may be associated with only a portion of the waterbody. Any regulatory action would require a detailed analysis of the area.
- [4]. The potential municipal and domestic supply (p\* MUN) beneficial use for the waterbody is consistent with the State Water Resources Control 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 of the surface water and at this time cannot establish effluent limitations designed to protect the conditional designation.
- [5]. One or more rare species utilize estuary and coastal wetlands for foraging and/or nesting.
- [6]. Most frequently used grunion spawning beaches. Other beaches may be used as well.
- [7]. Areas exhibiting large shelfish populations include Malibu, Point Dume, Point Fermin, white Point and Zuma Beach.

The beneficial uses of the receiving ground waters are as follows:

Table 5b. Basin Plan Beneficial Uses - Ground Waters

Discharge Point	Receiving Water Name	Beneficial Use(s)
001 - 003	Santa Monica Mountains-	Malibu Valley
	Southern Slopes	Existing Beneficial Uses:
	(DWR Basin No. <sup>[1]</sup> 4-22)	Agricultural supply (AGR).
		Potential Beneficial Uses:
		MUN; and IND.
005	San Fernando Valley Basin	West of Highway 405
	(DWR Basin No.[1] 4-12)	Existing Beneficial Uses:
		MUN, IND, PROC, and AGR.
		East of Highway 405 (overall)
		Existing Beneficial Uses:
		MUN; IND; PROC; and AGR.
		Narrows area (below confluence of Verdugo Wash with the Los Angeles River)
		Existing Beneficial Uses: MUN; IND; PROC; and AGR.
005	Los Angeles Coastal Plain	Central Basin
	(DWR Basin No. <sup>[1]</sup> 4-11)	Existing Beneficial Uses: MUN; IND; PROC; and AGR.
		West Coast Basin

Discharge Point	Receiving Water Name	Beneficial Use(s)
		Existing Beneficial Uses: MUN; IND; PROC; and AGR.

Footnote:

[1]. Basins are numbered according to DWR Bulletin No. 118-80 (DWR, 1980).

Requirements of this Order implement the Basin Plan.

Ammonia Water Quality Objective (WQO). The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives 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 Life. The ammonia Basin Plan amendment was approved by the State Water Board, the Office of Administrative Law, 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, the Office of Administrative Law, and USEPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with USEPA's 1999 ammonia criteria update.

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. Resolution No. 2007-005 became effective on April 23, 2009.

<u>Chloride WQO.</u> The 1994 Basin Plan contained water quality objectives for chloride in Table 3-8. However, the chloride objectives for some waterbodies were revised on January 27, 1997, by the Regional Board, 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 Board, the Office of Administrative

Law, and USEPA on October 23, 1997, January 9, 1998, and February 5, 1998, respectively, and are now in effect. The chloride WQO was revised from 150 mg/L to 190 mg/L, for the following segments of the Los Angeles River:

- a. Between Sepulveda Flood Control Basin and Figueroa Street (including Burbank Western Channel only), and
- b. Between Figueroa Street and the estuary (including Rio Hondo below Santa Ana Freeway only).

The final effluent limitations for chloride prescribed in this Order are based on the revised chloride WQOs and apply at the end of pipe.

On October 25, 2006, the State Water Board adopted a revised 303(d) list. The 2006 303(d) list was partially approved by the USEPA on November 30, 2006. However, on March 8, 2007, USEPA partially disapproved the State's 303(d) List, by disapproving the State's omission of impaired waters that met federal listing regulations or guidance. USEPA is adding 64 waters and 37 associated pollutants to the State's 303(d) list. On June 28, 2007, USEPA transmitted the final approved 2004-2006 Section 303(d) List, which serves as the State's most recent list of impaired waterbodies. The list (hereinafter referred to as the 303(d) List) was prepared in accordance with Section 303(d) of the Federal Clean Water Act to identify specific impaired waterbodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources.

### Malibu Creek:

Malibu Beach, Malibu Creek, Malibu Lagoon, Malibu Lagoon Beach (Surfrider Beach) are on the 2006 303 (d) List. The following pollutants/stressors, from point and non-point sources, were identified as impacting the receiving waters: (For footnotes, see page 15.)

- Malibu Beach Hydrologic Unit 404.21: DDT (Fish consumption advisory for DDT)<sup>[a]</sup>; and indicator bacteria<sup>[b]</sup>.
- 2. Malibu Creek Hydrologic Unit 404.21:

Coliform bacteria<sup>[b]</sup>; Fish barriers (Fish passage)<sup>[a]</sup>; nutrients (algae)<sup>[a]</sup>; scum/foam-unnatural<sup>[a]</sup>; sedimentation/siltation<sup>[a]</sup>; selenium<sup>[a]</sup>; sulfates<sup>[a]</sup>; and trash<sup>[a]</sup>.

3. Malibu Lagoon - Hydrologic Unit 404.21:

Benthic community effects<sup>[a]</sup>; coliform bacteria<sup>[b]</sup>; eutrophic<sup>[a]</sup>; pH (possible sources might be septic systems, storm drains, and birds) <sup>[a]</sup>; shellfish harvesting advisory; swimming restrictions<sup>[a]</sup>; and viruses (enteric)<sup>[a]</sup>.

4. Malibu Lagoon Beach (Surfrider Beach) - Hydrologic Unit 404.21:

Coliform bacteria<sup>[b]</sup>; DDT (Fish consumption advisory for DDT)<sup>[a]</sup>; and PCBs (Fish consumption advisory for PCBs)<sup>[a]</sup>.

### Los Angeles River:

Los Angeles River, Los Angeles River Estuary, and their tributaries are on the 2006 303(d) List. The following pollutants/stressors, from point and non-point sources, were identified as impacting the receiving waters:

- 1. Los Angeles River Reach 4 (Sepulveda Drive to Sepulveda Dam) Hydrologic Unit 405.21:
  - Ammonia<sup>[b]</sup>; coliform bacteria<sup>[a]</sup>; copper<sup>[b]</sup>; lead<sup>[b]</sup>; nutrients (algae)<sup>[b]</sup>; and trash<sup>[a]</sup>.
- 2. Los Angeles River Reach 3 (Figueroa Street to Riverside Drive) Hydrologic Unit 405.21:
  - Ammonia<sup>[b]</sup>; copper<sup>[b]</sup>; lead<sup>[b]</sup>; nutrients (algae) <sup>[b]</sup>; and trash<sup>[a]</sup>.
- **3**. Los Angeles River Reach 2 (Carson to Figueroa Street) Hydrologic Unit 405.15: Ammonia<sup>[b]</sup>; coliform bacteria<sup>[a]</sup>; copper<sup>[b]</sup>; lead<sup>[b]</sup>; nutrients (algae) <sup>[b]</sup>; oil<sup>[a]</sup>; and trash<sup>[a]</sup>.
- **4**. Los Angeles River Reach 1 (Estuary to Carson Street) Hydrologic Unit 405.12: Ammonia<sup>[b]</sup>; cadmium<sup>[b]</sup>; coliform bacteria<sup>[a]</sup>; copper, dissolved<sup>[b]</sup>; cyanide<sup>[a]</sup>; diazinon<sup>[a]</sup>; lead<sup>[b]</sup>; nutrients (algae) <sup>[b]</sup>; pH<sup>[a]</sup>; trash<sup>[a]</sup>; and zinc, dissolved<sup>[a]</sup>.
- **5.** Los Angeles River Estuary (Queensway Bay) Hydrologic Unit 405.12:

Chlordane (sediment; historical use of pesticides and lubricants)<sup>[a]</sup>; DDT (sediment; historical use of pesticides and lubricants)<sup>[a]</sup>; lead (sediment; historical use of pesticides and lubricants), PCBs (sediment; historical use of pesticides and lubricants)<sup>[a]</sup>; sediment toxicity<sup>[a]</sup>; trash<sup>[a]</sup>; and zinc (sediment)<sup>[a]</sup>.

The Regional Water Board adopted the 2008 303(d) list of impaired waterbdodies on July 16, 2009, and submitted the list to the State Water Board for approval.

### Footnotes:

- [a] TMDL requirements status: [a] is requiring TMDLs.
- [b] TMDL requirements status: [b] is being addressed by USEPA-approved TMDL.
- 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. About 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 Policy. 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 17, 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. The Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits, State Water Resources Control Board Resolution No. 2008-0025, allows compliance schedules and interim effluent limitations or discharge specifications be granted to allow time to implement a new, revised, or newly interpreted water quality objective.
- L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. § 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. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD, TSS, pH, and percent removal of BOD and TSS. Restrictions on BOD, 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.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives 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 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. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives 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 part 131.21(c)(1). For the most part, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

- N. Antidegradation Policy. 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 part 131.12 and State Water Board Resolution No. 68-16.
- O. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations 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 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.
- P. Endangered Species Act. 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 Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

- Q. Monitoring and Reporting. Part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- **R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with part 122.41, and additional conditions applicable to specified categories of permits in accordance with 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 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.
- S. Provisions and Requirements Implementing State Law. The provisions/requirements in subsection V.B 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.
- T. Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements 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.
- **U. 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 No. R4-2005-0074 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 California Water Code (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 a location different from that described in this Order is prohibited.
- **B.** The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision I.G. of Attachment D, Standard Provisions.
- **C.** The monthly average effluent dry weather discharge flow rate from the facility shall not exceed the design capacity.
- **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 determined in section 13050, subdivisions (I) and (m), of the California Water Code.
- F. The discharge of any substances 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. DISCHARGE PROHIBITION FOR MALIBU CREEK

- A. Santa Monica Bay Watershed includes Santa Monica Bay and the surrounding land area that drains naturally into the Bay, including the Malibu Creek Watershed. The Creek flows through a steep-sided canyon to Malibu Lagoon and Surfrider Beach. The Santa Monica Bay Restoration Commission, formerly known as the Santa Monica Bay Restoration Project (SMBRP) developed the Santa Monica Bay Restoration Plan (BRP) that serves as the blueprint for the restoration and enhancement of the Bay. The Regional Water Board plays a leading role in the implementation of the plan. Two of the proposed priorities of the plan are reduction of pollutants of concern at the source (which includes municipal wastewater treatment plants) and implementation of mass emission caps on some of the pollutants of concern.
- B. The Malibu Creek Watershed Advisory Council (Council) became part of the Santa Monica Bay Restoration Project as a BRP implementing committee. As part of overall watershed management, the Council has identified the reduction of freshwater flows to the Lagoon, reduction of nutrients to the Creek and Lagoon, protection of human health in the Creek, Lagoon, and surfzone, and restoration of a fully functioning Lagoon, as high priorities. Previous investigations conducted for the SMBRP showed pathogens were detected in summer runoff at four storm drain or channel locations. Possible sources of pathogen contamination include pet and livestock feces, illicit sewer connections to the storm drains, leaking sewer lines, malfunctioning septic systems, and improper waste disposal by recreational vehicles, campers or transients. Additional potential sources of human pathogens in nearshore waters include sewage overflows into storm drains, small boat waste discharges, and bathers.
- C. The Malibu Creek Watershed Natural Resources Plan completed in July 1995 by the Natural Resources Conservation Service (NRCS) demonstrated significant increases in flow in Malibu Creek from urban runoff. The U.S. Fish and Wildlife Service listed the Tidewater Goby (Eucyclogobius newberry) as an endangered species in February 1994. On August 18, 1997, the National Marine Fisheries Service listed the Southern California Steelhead Trout (Oncorhynchus mykiss) as an endangered species. The tidewater goby historically existed in Malibu Lagoon but died out in the 1950's. A tidewater goby population was successfully reintroduced to the Lagoon on April 5, in 1991. Population surveys conducted by the Resource Conservation District of the Santa Monica Mountains and UCLA show that the Goby population has remained stable since their reintroduction. Malibu Creek has the southernmost known sustained run of steelhead trout in North America.
- D. Los Angeles County Lifeguards favor reduced flow to the Lagoon, and thus, less time with an open sandbar during the dry season, because of a standing riptide current that developed around the mouth of the creek opening and because they can not drive

emergency vehicles across the Creek mouth area to provide emergency service to the west side of Surfrider Beach.

E. To minimize the contribution of Tapia's discharge to the excess freshwater flow into Malibu Lagoon (which leads to elevated lagoon level and frequent breaching of the sandbar once or if the sandbar has formed), thus impacting both wildlife and human health beneficial uses, this Order continues to enforce the existing discharge prohibition from April 15 to November 15 of each calendar year, the time period of heaviest recreational use and historically-lowest freshwater flows in the watershed.

### V. DISCHARGE PROHIBITION EXEMPTION FOR MALIBU CREEK

Malibu Creek: The Discharger shall not discharge as otherwise permitted by these requirements to Malibu Creek at any of its discharge points from April 15 to November 15 of each calendar year. This prohibition will not be in effect during any of the following events specified below. However, the exceptions specified below only apply to an exception of allowing a discharge during the prohibition period. They do not provide an exception for meeting the limitations contained in this Order:

- A. Treatment plant upset or operational emergencies These consist of exceptional incidents that result in unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Discharger [40 CFR 122.41(n). These factors exclude raw sewage spills, sludge spills, operational errors, improperly designed or inadequate treatment facilities, lack of preventive maintenance, careless or improper operation of the treatment plant and lack of reasonable engineering judgment to prevent noncompliance. The Discharger must demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that: a) an upset or operational emergency occurred and the Discharger can identify the cause(s) of the upset or operational emergency; b) the facility was properly operated and maintained; c) the Discharger has notified the Regional Board of the incident within 24-hours; and, d) the Discharger implemented immediate remedial measures to minimize the noncompliance and/or implemented corrective measures to prevent the noncompliance, or recurrence of the incident.
- B. Qualifying storm events as determined by the Executive Officer –

The Discharger may discharge to Malibu Creek during the prohibition period during storm events without prior approval of the Executive Officer provided that *all* of the following conditions have been met:

- 1. The rainfall event produces 0.4 inches or greater of precipitation in 24 hours at the Facility Rain Gauge; and
- 2. The Malibu Lagoon Sand Bar is open; and
- 3. The spray fields at Rancho Las Virgenes Farm are saturated; and
- 4. There is no demand for recycled water; and

- The capacity to send wastewater to the Los Angeles River has been exhausted;
- 6. All other disposal options are exhausted.

For a rainfall event of less than 0.4 inches in 24 hours at the Facility Rain Guage, the Discharger may discharge to Malibu Creek during the prohibition period during storm events with prior approval of the Executive Officer provided that *all* of the following conditions have been met:

- 1. The Malibu Lagoon Sand Bar is open; and
- 2. The spray fields at Rancho Las Virgenes Farm are saturated; and
- 3. There is no demand for recycled water; and
- 4. The capacity to send wastewater to the Los Angeles River has been exhausted; and
- 5. All other disposal options are exhausted.

The Discharger shall maintain a log of the discharge. Other factors that will be considered before approval to discharge has been granted are listed on Attachment SW-1, which is hereby incorporated and made part of this Order. The log shall include, but not be limited to, the date and time of discharge, the amount of discharge, weather conditions, the discharge outfalls, and the condition of the Malibu Lagoon sand bar.

C. The existence of minimal streamflow conditions that require flow augmentation in Malibu Creek to sustain endangered species as determined by the Executive Officer—The Discharger shall augment flow in the Malibu Creek, such that 2.5 cfs of maximum total flow is measured at the Los Angeles County gauging station F-130-R to sustain the steelhead trout habitat. The discharge shall not cause a breach of the Malibu Lagoon. During the prohibition period, the Discharger must obtain written permission from the Executive Officer to discharge into Malibu Creek for the purpose of this provision.

### VI. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

- A. Effluent Limitations Discharge Points 001, 002, 003, and 005
  - 1. Effluent Limitations Applicable to Discharge Points 001, 002, 003, and 005
    - a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Points 001, 002, and 003 into Malibu Creek, with compliance measured at Monitoring Location EFF001, and Discharge Point 005 into Los Angeles River with compliance measured at Monitoring Location EFF005, as described in the attached Monitoring and Reporting Program (MRP):

Table 6a. Effluent Limitations Applicable to Discharge Points 001, 002, 003, and 005 (For footnotes, refer to pages 25 and 26)

Effluent Limitations						
Parameter	Units	Average Monthly	Average Weekly	Max. Daily	Instanta- neous Minimum	Instanta- neous Maximum
Biochemical Oxygen Demand	mg/L	10		20		
5-day @ 20 ℃	lbs/day <sup>[1]</sup>	1.3xE3		2.7xE3		
T. 10	mg/L	5.0		10		
Total Suspended Solids	lbs/day [1]	6.7xE2		1.3xE3		
рН	standard units				6.5	8.5
Settleable Solids	ml/L	0.1		0.2		
Oil and aware	mg/L	5		10		
Oil and grease	lbs/day <sup>[1]</sup>	6.7xE2		1.3xE3		
Total Residual Chlorine <sup>[2]</sup>	mg/L			0.1		
MBAS	mg/L	0.5				
	lbs/day <sup>[1]</sup>	67				
Mercury	μg/L	0.051		0.10		
	lbs/day <sup>[1]</sup>	0.0068		0.013		
Aldrin	μg/L	0.00014		0.00030		
	lbs/day <sup>[1]</sup>	1.9xE-5		4.0xE-5		
Alpha-BHC	μg/L	0.013		0.026		
	lbs/day <sup>[1]</sup>	0.0017		0.0035		
Dichlorobromomethane	μg/L	46		85		
	lbs/day <sup>[1]</sup>	6.2		11		

# 2. Effluent Limitations Applicable to Discharge Point 001, 002, and 003 – Malibu Creek

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Points 001, 002, and 003 into Malibu Creek with compliance measured at Monitoring Location EFF001, as described in the attached MRP:
- b. The ammonia nitrogen effluent limitation is the translated effluent limitation based on the water quality objective for ammonia in the current Basin Plan, Table 3-1 and Table 3-2, which resulted from Resolution No. 2002-011, and 2005-014 adopted by the Regional Water Board on April 25, 2002, and December 1, 2005, respectively. This effluent limitation is derived according to the Implementation Section of Resolution No. 2002-011.

Table 6b. Effluent Limitations Applicable to Discharge Points 001, 002, and 003 (For footnotes, refer to pages 25 and 26)

		Effluent Limitations					
Parameter	Units	Average Monthly	Average Weekly	Max. Daily	Instanta-neous Minimum	Instanta- neous Maximum	
Total dissalved calida	mg/L	2000					
Total dissolved solids	lbs/day <sup>[1]</sup>	2.7xE5					
Olds dds	mg/L	500					
Chloride	lbs/day <sup>[1]</sup>	6.7xE4					
Colfete	mg/L	300					
Sulfate	lbs/day <sup>[1]</sup>	16260					
Boron	mg/L	2					
DOIOII	lbs/day <sup>[1]</sup>	2.7xE2					
Total Ammonia as	mg/L	3.1		9.2			
Nitrogen	lbs/day <sup>[1]</sup>	4.2xE2		1.2xE3			
Nitrate + Nitrite as Nitrogen	mg/L	8 <sup>[3]</sup>					
	lbs/day <sup>[1]</sup>	1.1xE3					
Total Phosphorus <sup>[6]</sup>	mg/L	3					
	lbs/day <sup>[1]</sup>	4.0xE2	_				
Bis(2- Ethylhexyl)Phthalate	μg/L	5.9		15			
Lurymexyi/Fillialale	lbs/day <sup>[1]</sup>	0.79		2.0			

### 3. Effluent Limitations Applicable to Discharge Point 005 – Los Angeles River

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 005 into the Los Angeles River with compliance measured at Monitoring Location EFF005, as described in the attached MRP:

Table 6c. Effluent Limitations Applicable to Discharge Point 005

(For footnotes, refer to pages 25 and 26)

		Effluent Limitations					
Parameter	Units	Average Monthly	Average Weekly	Max. Daily	Instanta-neous Minimum	Instanta- neous Maximum	
Total dissolved solids	mg/L	950					
	lbs/day <sup>[1]</sup>	1.3xE5					
Chloride	mg/L	190 [4]					
	lbs/day <sup>[1]</sup>	2.6xE4					
Sulfate	mg/L	300					
	lbs/day <sup>[1]</sup>	4.0xE4					
Davis	mg/L	1.5					
Boron	lbs/day <sup>[1]</sup>	2.0xE2					
Fluoride	mg/L	1.6					
	lbs/day <sup>[1]</sup>	2.2xE2					
Total Ammonia as N	mg/L	2.3 <sup>[5]</sup>		10.1			
	lbs/day <sup>[1]</sup>	0.31		1.36			
Nitrate + Nitrite as Nitrogen	mg/L	8 <sup>[5]</sup>					
	lbs/day <sup>[1]</sup>	1.1 xE3					
Nitrite as Nitrogen	mg/L	1 [5]					
	lbs/day <sup>[1]</sup>	1.3 xE2					
Nitrate as Nitrogen	mg/L	8 <sup>[5]</sup>					
	lbs/day <sup>[1]</sup>	1.1 xE3					
Total Phosphorus <sup>[6]</sup>	mg/L	3		4			
	lbs/day <sup>[1]</sup>	4.0 xE2		8.0 xE2			
Arsenic Perchlorate  Total Trihalomethanes	μg/L	10					
	lbs/day[1]	1.3					
	μg/L	6					
	lbs/day[1]	0.81					
	μg/L	80					
Arsenic	lbs/day[1]	11					
	μg/L lbs/day <sup>[1]</sup>	10 0.42					
Cadmium	μg/L	5.0		7.9			
(wet weather) [7]	lbs/day <sup>[1]</sup>	0.67		0.1			
Copper (wet weather)	μg/L	21		32			
[7]	lbs/day <sup>[1]</sup>	2.9		4.3			

		Effluent Limitations					
Parameter	Units	Average Monthly	Average Weekly	Max. Daily	Instanta-neous Minimum	Instanta- neous Maximum	
Lead (wet weather) [7]	μg/L	11		20			
	lbs/day <sup>[1]</sup>	1.5		2.7			
Zinc (wet weather) [7]	μg/L	2.3xE2		3.0xE2			
	lbs/day[1]	31		40			
Copper (dry weather)	μg/L	21		32			
	lbs/day[1]	2.9		4.3			
Lead (dry weather) [8]	μg/L	11		20			
	lbs/day[1]	1.5		2.7			
Selenium (dry weather) <sup>[8]</sup>	μg/L	4.5		9.0			
	lbs/day <sup>[1]</sup>	0.6		1.2			
Bis(2- Ethylhexyl)Phthalate	μg/L	4		15			
	lbs/day <sup>[1]</sup>	0.54		2.0			

### Footnotes:

- [1] The mass emission rates are based on the existing plant design flow rate of 16.1 mgd, and are calculated as follows: Flow(MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. However, if the design capacity is reduced to achieve NDN process, the mass-based effluent limitation will accordingly be modified upon certification and approval of de-rated treatment plant capacity. 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.
- [2] Total residual chlorine concentration excursions of up to 0.3 mg/L, at the point in treatment train immediately following dechlorination, shall not be considered violations of this requirement provided the total duration of such excursions do not exceed 15 minutes during any 24-hour period. Peaks in excess of 0.3 mg/L lasting less than one minute shall not be considered a violation of this requirement.
- [3] This is based on the waste load allocation (WLA) for nitrate plus nitrite as nitrogen in the Malibu Creek Watershed Nutrients TMDL developed by USEPA in 2003. This TMDL became effective on March 23, 2004. The WLA of 8 mg/L assigned to the Tapia WRF for nitrate plus nitrite as nitrogen was for the winter season (November 16 April 14). Since the Tapia WRF has a Malibu Creek discharge prohibition during the summer season (April 15 November 15), U.S. EPA deemed any potential summer discharge from the Tapia WRF negligible in its nutrient loading, and therefore, did not establish a wasteload allocation for Tapia WRF for the summer season. For consistency, the Order No. 2005-0074 assigned an effluent limitation of 8 mg/L for nitrate plus nitrite as nitrogen for the summer season. The limitations are carried over in this Permit.
- [4] In accordance with the Resolution 98-027, adopted by the Regional Water Board on April 13, 1998, the chloride limitation has been increased from 150 to 190 mg/L.
- [5] These are the waste load allocations (WLA) established for the Tapia WRF for ammonia, nitrate plus nitrite, nitrate, and nitrite in the Nutrient TMDL for the Los Angeles River, Resolution No. 2003-009, Amendment to the Water Quality Control Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds in the Los Angeles River (LA River Nitrogen Compounds TMDL).
- [6] A wasteload allocation for phosphorus was not established in the Malibu Creek nutrients TMDL or the Los Angeles River Nitrogen Compounds TMDL. Antidegradation policy dictates that the existing permit limitation be retained, which applies to both Malibu Creek and the Los Angeles River discharge. The effluent limitation is a carry-over limitation from the Order No. 2005-0074, and was based on statistical analysis on performance data from January 2000 through October 2004, using P-limit software or maximum detected effluent concentration. Because the limitation was based upon plant performance,

no additional treatment is needed in order to comply with this limitation.

- [7] This value was derived using a translation of the applicable wet weather wasteload allocation (WLA), contained in Resolution No. R2007-014, 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, adopted by the Regional Board on September 6, 2007. The translation used site-specific harness values and applied the effluent limitations procedures in Section 1.4 of the State Water Resources Control Board Policy for Implementation of Toxics Standards for Inland Surface Waters. Enclosed Bays. and Estuaries of California (2000). This is consistent with the implementation provision in the Attachment A to Resolution No. R2007-014. Resolution No. R2007-0014 supersedes 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), adopted by the Regional Board on June 2, 2005. The Metals TMDL was approved by the State Water Board, with the adoption of Resolution No. 2008-0046. On October 14, 2008 and October 29, 2008, respectively, OAL and USEPA approved the LA River Metals TMDL. It went into effect on October 29, 2008. According to the LA River Metals TMDL, wet weather is "when the maximum daily flow in the River is equal to or greater than 500 cfs at the LA River Wardlow gage station."
- This value was derived using a translation of the applicable dry weather wasteload allocation (WLA), [8] contained in Resolution No. R2007-014, 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, adopted by the Regional Board on September 6, 2007. The translation used site-specific harness values and applied the effluent limitations procedures in Section 1.4 of the State Water Resources Control Board Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2000). This is consistent with the implementation provision in the Attachment A to Resolution No. R2007-014. Resolution No. R2007-0014 supersedes 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), adopted by the Regional Board on June 2, 2005. The Metals TMDL was approved by the State Water Board, with the adoption of Resolution No. 2008-0045. On October 14, 2008 and October 29, 2008, respectively, OAL and USEPA approved the LA River Metals TMDL. It went into effect on October 29, 2008. According to the LA River Metals TMDL, dry weather is "when the maximum daily flow in the River is less than 500 cfs at the LA River Wardlow gage station."
- [9] Total trihalomethanes is the sum of concentrations of the trihalomethane compounds: bromodichloromethane, bromoform, chloroform, and dibromochloromethane. This limitation is based on the Basin Plan WQO incorporation of MCLs by reference.

# 4. Other Effluent Limitations Applicable to Discharge Points 001, 002, 003, and 005

- a. **Percent Removal:** The average monthly percent removal of BOD 5-day 20 ℃ and total suspended solids shall not be less than 85 percent.
- b. The temperature of wastes discharged shall not exceed 86°F except as a result of external ambient temperature.
- c. The radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the California Code of Regulations (CCR), or subsequent revisions.
- d. The wastes discharged to water courses shall at all times be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if: 1) the median number of total coliform bacteria measured in the disinfected effluent does not exceed an MPN or CFU of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which

analyses have been completed; 2) the number of total coliform bacteria does not exceed an MPN or CFU of 23 per 100 milliliters in more than one sample in any 30-day period; and 3) no sample exceeds 240 MPN or CFU of total coliform bacteria per 100 milliliters. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and the disinfection processes.

- e. For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the treated wastewater does not exceed: (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) during any 24 hour period; and (c) 10 NTUs at any time.
- f. To protect underlying ground water basins, pollutants shall not be present in the wastes discharged at concentrations that pose a threat to ground water quality.
- g. Acute Toxicity Limitation and Effluent Requirements:
  - i. The acute toxicity of the effluent shall be such that:
    - (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 produces less than 70% survival.
  - ii. If either of the above requirements VI.A.4.g.i.(a) or VI.A.4.g.i.(b) is not met, the Discharger shall conduct six additional tests over a twelve-week period. The Discharger shall ensure that they receive results of a failing acute 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. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume testing at the regular frequency as specified in the monitoring and reporting program. 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 limits.
  - iii. If the initial test and any of the additional six acute toxicity bioassay tests result in less than 70 % survival, the Discharger shall immediately implement the Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan described later in this section.
  - iv. The Discharger shall conduct acute toxicity monitoring as specified in Attachment E Monitoring and Reporting Program (MRP).

### h. 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 1.0 TUc monthly median trigger, the Discharger shall immediately implement accelerated chronic toxicity testing according to Attachment E –MRP, Section V.B.3. If any three out of the initial test and the six accelerated test results exceed 1.0 TUc, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in Attachment E MRP, Sections V.D and V.E.
- iv. The Discharger shall conduct chronic toxicity monitoring as specified in Attachment E MRP.

### 5. Interim Effluent Limitations

a. The Discharger shall comply immediately with the following interim effluent limitation for the Discharge Point 005 until May 10, 2015. Thereafter, the Discharger shall comply with the final limitations specified in Section VI.A.3 of this Order:

Table 7. Interim Effluent Limitation for Discharge Point 005

		Effluent Limitations					
Parameter	Units	Average Monthly	Instantaneous Maximum				
Total Trihalomethanes [1]	μg/L	2.9xE2					

Footnote:

Total trihalomethanes is the sum of concentrations of the trihalomethane compounds: bromodichloromethane, bromoform, chloroform, and dibromochloromethane. This limitation is based on the Basin Plan WQO incorporation of MCLs by reference.

Interim limits prescribed as maximum detected effluent concentration or based on P-limit calculations. P-limit monthly average interim effluent limitation was derived statistically as the 99% confidence level of the 95th percentile, using the P-limit software and effluent performance data from November 2005 through January 2010. This program incorporates the procedure in Appendix E of the Technical Support Document (TSD) For Water Quality-based Toxics Control

[EPA/505/2-90-001] for the limitation calculation. Effluent values (x<sub>i</sub>) are assumed to be lognormally distributed for data sets containing all detects, and delta lognormally distributed for data sets containing detects and non-detects.

This interim limitation is applicable to the Discharge Point 005 only.

b. The Discharger shall submit quarterly progress reports (January 15, April 15, July 15 and October 15) to describe the progress of studies and/or actions undertaken to reduce total trihalomethanes in the effluent, and to achieve compliance with the limits in this Order by the above-mentioned deadline. The first progress report shall be received at the Regional Board by October 15, 2010.

### **B. Land Discharge Specifications**

[Not Applicable.]

Table 8. Land Discharge Specifications

		Discharge Specifications		
Parameter	Units	Units Average Monthly	Maximum Daily	Average Annual
N/A	-			

### C. Reclamation Specifications

1. Approximately 40 percent of the treated wastewater is recycled and used on an annual basis for landscaping irrigation. Recycled water is also used at Tapia WRF, Pepperdine University, Rancho Las Virgenes Composting Facility and Rancho Las Virgenes Farm. The use of reclaimed water is regulated under Water Reclamation Requirements contained in Order No. 87-086. Order No. 87-086 was readopted on May 12, 1997, through General blanket Order No. 97-072.

**Table 9. Reclamation Discharge Specifications** 

		Discharge Specifications		
Parameter	Units Average Monthly	Average Monthly	Maximum Daily	Average Annual
N/A				

### VII. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitation

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Malibu Creek or the 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 °F above the natural temperature 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.
- 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. For waters designated with a WARM beneficial use, the dissolved oxygen in the receiving water shall not be depressed below 5 mg/L as a result of the wastes discharged. For waters designated with a COLD beneficial use, the dissolved oxygen in the receiving water shall not be depressed below 6 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, 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. The wastes discharged shall not contain radionuclides in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in accumulation of radionuclides in the food web to an extent that present a hazard to human, plant, animal, or aquatic life.
- 18. Acute Toxicity Receiving Water Quality Objective
  - 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 monitoring location RSW-002D located immediately downstream of the discharge(s), including mixing zone 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 produces 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, and the effluent acute toxicity is in compliance, then the acute toxicity accelerated monitoring in the receiving water according to Attachment E -MRP Section V.A.2.d does not apply.
- 19. Chronic Toxicity Receiving Water Quality Objective
  - a. There shall be no chronic toxicity in ambient waters as a result of wastes discharged.
  - b. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.
  - c. If the chronic toxicity in the receiving water at the monitoring station immediately downstream of the discharge exceeds the monthly median of 1.0 TUc 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 Attachment E MRP Section V.B.3. If two of the six tests exceed a 1.0 TUc 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 monthly median of 1 TUc trigger, then accelerated monitoring need not be implemented.

- e. The Discharger shall conduct chronic toxicity monitoring as specified in MRP No. 4760.
- 20. These wastes discharged shall not cause the ammonia water quality objective in the Basin Plan to be exceeded in the receiving waters. Compliance with the ammonia water quality objectives shall be determined by comparing the receiving water ammonia concentration to the ammonia water quality objective in the Basin Plan. The ammonia water quality objective can also be calculated using the pH and temperature of the receiving water at the time of collection of the ammonia sample.

### **B.** Groundwater Limitations

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

### VIII. PROVISIONS

### A. Standard Provisions

- The Discharger shall comply with all Standard Provisions included in Attachment D
  of this Order.
- 2. Regional Water Board-specific Standard Provisions. The Discharger shall comply with the following Regional Water Board-specific provisions:
  - Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by Section 13050 of the California Water Code.
    - 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.
    - ii. 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.
    - iii. Collection, treatment, and disposal systems shall be operated in a manner that precludes public contact with wastewater.
    - iv. 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.
    - v. 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.
    - vi. 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.
    - vii. 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.

- viii. 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.
- ix. Discharge to wastes to any point other than specifically described in this Order is prohibited, and constitutes a violation thereof.
- x. 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 Federal CWA and amendments thereto.
- xi. 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.
- xii. Oil or oily material, chemicals, refuse, or other polluting 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.
- xiii. 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.
- xiv. 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.
- xv. The Discharger shall file with the Regional Water Board a report of waste discharge at least 120 days before making any proposed change in the character, location or volume of the discharge.
- xvi. 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, a copy of which shall be forwarded to the Regional Water Board.
- xvii. California Water Code section 13385 provides that any person who violates a waste discharge requirement or a provision of the California Water Code 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.
- xviii. Pursuant to California Water Code13387(e), 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, imprisonment for not more than two years, or both. For a subsequent conviction, such a person shall be punished by a fine of not more than \$25,000 per day of violation, by imprisonment of not more than four years, or by both.
- xix. 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.
- xx. 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:
  - 1. Name and general composition of the chemical,
  - 2. Frequency of use,
  - 3. Quantities to be used,
  - 4. Proposed discharge concentrations, and

#### 5. USEPA registration number, if applicable.

- xxi. 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.
- xxii. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Watershed Regulatory Section Chief at the Regional Water Board by telephone 576-6616. electronically (213)or 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. applicable, a schedule of implementation. noncompliance requires written notification as above at the time of the normal monitoring report.
- xxiii. 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 § 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:
  - (1) Violation of any term or condition contained in this Order;

- (2) Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts;
- (3) 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 and modified, in accordance with SIP section 2.2.2.A to incorporate the results of revised reasonable potential analyses to be conducted upon receipt of additional data.
- **c.** This Order may be modified, in accordance with the provisions set forth in 40 C.F.R., Parts 122 and 124 to include requirements for the implementation of the watershed protection management approach.
- **d.** The Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order 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 C.F.R., 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 C.F.R., parts 122 to 124, to include new MLs.
- g. If an applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Water Board may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.
- **h.** The waste discharged shall not cause a violation of any applicable water quality standard for receiving waters. If more stringent applicable water quality standards

are promulgated or approved pursuant to Section 303 of the CWA, or amendments, thereto, the Regional Water Board will revise and modify this Order in accordance with such standards.

- i. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of a water quality objective, the adoption of a site specific objective, or the adoption of a TMDL for the Malibu Creek and Los Angeles River Watersheds.
- j. This Order may be reopened and modified to revise the chronic toxicity effluent limitation or the residual chlorine effluent limitation, to the extent necessary, to be consistent with State Water Board precedential decisions, new policies, new laws, or new regulations.
- **k.** 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, or metal translators are warranted.

#### 2. Special Studies, Technical Reports and Additional Monitoring Requirements

#### a. Special Study - Constituents of Emerging Concern in Effluent

#### 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 or state notification levels 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 2009, 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.

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

#### CEC Special Study Requirements

1. The Discharger shall initiate an investigation of CECs 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, and sampling methodology.
 Table 18 identifies the minimum parameters to be monitored.

Table 18 – Effluent Monitoring of CECs

Parameter	Units	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 and nonylphenol polyethoxylates	ng/L	To be proposed	Annually	To be proposed
Octylphenol and 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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Analytical Test Method and (Minimum Level, units)
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	ng/L	To be proposed	Annually	To be proposed
Primidone	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

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.

<u>Sample Method</u> – The Discharger shall propose in the Work Plan the appropriate sample method for each type of constituent.

<u>Sampling Period</u> – 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.

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 sensitive analytical methodology available.

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 2000present, annually);
- analytical methodologies employed;
- RL, MLs and MDLs achieved for each methodology used; and
- Temporal and seasonal trend analyses (using both statistical and graphical demonstration) of CECs, over time and by season.
- iii. <u>Evaluation of CEC data collected as part of this Special Study</u>. 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
  - temporal/seasonal trend analyses (using both statistical and graphical demonstration) of cumulative CEC data collected as part of this special study.
- 2. Reporting By April 15<sup>th</sup> of each year (starting April 15, 2012), 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, 2012 shall include CEC monitoring data from January to December 2011. 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, 2012 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. 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) as guidance, or most current version. 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:

- (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 toxicity identification evaluation (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 1.0 TUc monthly median toxicity trigger, 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 business days of receipt of the test results exceeding the toxicity trigger.

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 Toxicity Reduction Evaluation (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 Plant 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:

- (1) 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;
- (2) The best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the facilities; and
- (3) 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 (SCP)

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 cleanup 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 (PMP)

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

The Discharger shall be required to develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of

whole effluent toxicity, health advisories for fish consumption, 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 California Water Code 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:

- 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:
  - (a) All PMP monitoring results for the previous year;
    - a. A list of potential sources of the reportable pollutant(s);
    - A summary of all actions undertaken pursuant to the control strategy;
       and

c. 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 section 13625 of the California Water Code.
- 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.

## 5. Special Provisions for Municipal Facilities (POTWs Only)

## a. Sludge Disposal Requirements

- i. All sludge generated at the wastewater treatment plant will be disposed of, treated, or applied to land in accordance with federal regulations contained in 40 C.F.R. part 503., in general and in particular with the requirements in Attachment I of this Order, "Biosolids Use and Disposal Requirements". These requirements are enforceable by USEPA.
- ii. The Discharger shall ensure compliance with the requirements in STATE WATER BOARD Order No. 2004-10-DWQ, "General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities" for those sites receiving the Discharger's biosolids which a Regional Water Board has placed under this general order, and with the requirements in individual Waste Discharge Requirements (WDRs) issued by a Regional Water Board for sites receiving the Discharger's biosolids.
- iii. The Discharger shall comply, if applicable, with WDRs issued by other Regional Water Boards to which jurisdiction the biosolids are transported and applied.
- iv. The Discharger shall furnish this Regional Water Board with a copy of any report submitted to USEPA, State Water Board or other Regional Water Board, with respect to municipal sludge or biosolids.

#### b. Pretreatment Requirements

- (1) 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 C.F.R. part 403.18.
- (2) The Discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the Federal Clean Water Act 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.
- (3) The Discharger shall perform the pretreatment functions as required in 40 C.F.R. part 403 including, but not limited to:
  - A. Implement the necessary legal authorities as provided in 40 C.F.R. part 403.8(f)(1);
  - B. Enforce the pretreatment requirements under 40 C.F.R. parts 403.5 and 403.6;
  - C. Implement the programmatic functions as provided in 40 C.F.R. part 403.8(f)(2); and,
  - D. Provide the requisite funding of personnel to implement the Pretreatment Program as provided in 40 C.F.R. part 403.8(f)(3).
- (4) The Discharger shall submit semiannual and annual reports to the Regional Water Board, with copies to the State Water Board and USEPA Region IX, 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 J), 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.
- (5) The Discharger shall be responsible and liable for the performance of all control authority pretreatment requirements contained in 40 C.F.R. part 403, including subsequent regulatory revisions thereof. Where part 403 or subsequent revisions 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 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 Federal Clean Water Act. The Regional Water Board or USEPA may initiate enforcement action against an industrial user for noncompliance with acceptable standards and requirements as provided in the Federal Clean Water Act and/or the California Water Code.

c. 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 C.F.R. § 122.41(e)). The Discharger must report any non-compliance (40 C.F.R. § 122.41(l), subsections (6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 C.F.R. § 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.

# 6. Spill Reporting Requirements

#### A. Notification

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

- 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.
- 2. In accordance with the requirements of Water Code 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. 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 these releases to Cal EMA is (800) 852-7550.
- 3. The discharger shall notify the Regional Water Quality Control Board of any unauthorized release of sewage from its wastewater treatment plant that causes, or probably will cause a discharge to a water of the state as soon as possible, but not later than *two* (2) hours after becoming aware of the

release. This notification does not need to be made if the discharger has notified Cal EMA. The phone number for reporting these releases of sewage to the Regional Water Quality Control Board is (213) 576-6657. At a minimum the following information shall be provided:

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

#### B. Monitoring

For certain spills, overflows and bypasses, the Discharger shall monitor as required below:

- 1. 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.
- 2. 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.

## C. Reporting

The Regional Water Board initial notification shall be followed by:

- 1. 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 wastewater treatment plant to a water of the state, the discharger shall submit a statement to the Regional Water Quality Control Board by email at <u>aanijielo@waterboards.ca.gov</u>. If the discharge is 1,000 gallons or more, this statement shall certify that the Cal EMA has been notified of the discharge in accordance with Water Code section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:
  - (i) Agency, NPDES No., Order No., and MRP CI No., if applicable.
  - (ii) The location, date, and time of the discharge.
  - (iii) The water body that received the discharge.
  - (iv) A description of the level of treatment of the sewage or other waste discharged.
  - (v) An initial estimate of the amount of sewage or other waste released and the amount that reached a surface water.
  - (vi) The Cal EMA control number and the date and time that notification of the incident was provided to the Cal EMA.
  - (vii) The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).
- 2 A written preliminary report five working days after disclosure of the incident (submission to the Regional Water Board of the log number of the Sanitary Sewer Overflow database entry shall satisfy this requirement). Within 30 days after submitting the preliminary report, the Discharger shall submit the final written report to this Regional Water Board. (A copy of the final written report, for a given incident, already submitted pursuant to a Statewide General Waste Discharge Requirements for Wastewater Collection System Agencies, may be submitted to the Regional Water Board to satisfy this requirement.) The written report shall document the information required in paragraph D. below, monitoring results and any other information required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize

future occurrences. The Executive Officer for just cause can grant an extension for submittal of the final written report.

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

#### D. Records

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

- 1. the date and time of each spill, overflow or bypass;
- 2. the location of each spill, overflow or bypass;
- 3. the estimated volume of each spill, overflow or bypass including gross volume, amount recovered and amount not recovered, monitoring results as required by Section VI.C.6.B;
- 4. the cause of each spill, overflow or bypass;
- whether each spill, overflow or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances;
- 6. mitigation measures implemented; and,
- 7. corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.

#### E. Activities Coordination

In addition, Regional Water Board expects that the POTW's owners/operators will coordinate their compliance activities for consistency and efficiency with other entities that have responsibilities to implement: (i) this NPDES permit, including the Pretreatment Program, (ii) a MS4 NPDES permit that may contain spill prevention, sewer maintenance, and reporting requirements and (iii) the SSO WDR.

## F. Consistency with Sanitary Sewer Overflows WDRs

The Clean Water Act prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under a NPDES permit. (33 U.S.C. §§1311, 1342). The State Water Board adopted General Waste

Discharge Requirements (WDRs) for Sanitary Sewer Systems, (WQ Order No. 2006- 0003) on May 2, 2006, to provide a consistent, statewide regulatory approach to address Sanitary Sewer Overflows (SSOs). The SSOs 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 SSOs database.

The requirements contained in this Order in Sections VI.C.3.b. (Spill Contingency Plan Section), VI.C.4. (Construction, Operation and Maintenance Specifications Section), and VI.C.6. (Spill Reporting Requirements) are intended to be consistent with the requirements of the SSOs WDR and as outlined in the letter dated September 9, 2008 (Modification to Monitoring and Reporting Program). The Regional Water Board recognizes that there may be some overlap between the NPDES permit provisions and SSOs WDR requirements. The requirements of the SSOs WDR are considered the minimum thresholds (see Finding 11 of WQ Order No. 2006-0003). The Regional Water Board will accept the documentation prepared by the Permittees under the SSOs WDR for compliance purposes, as satisfying the requirements in Sections VI.C.3.b., VI.C.4., and VI.C.6. provided that any more specific or stringent provisions enumerated in this Order, have also been addressed.

#### G. Emergency Power Facilities

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.

## 7. Compliance Schedules

The compliance schedule and the interim limitation in Section VI.A.5 of this Order are consistent with the Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits (Compliance Schedule Policy), adopted by the State Water Resources Control Board (Resolution No. 2008-0025) and approved by USEPA. In this Order, a RPA was performed using the TSD approach for Title 22. MCL constituents for the Los Angeles River discharge, based on the fact that segments of the Los Angeles River downstream of the discharge is designated for groundwater recharge beneficial use and the underlying groundwater basins have an existing MUN beneficial use. This is a case in which a new interpretation of the existing water quality objectives has been applied to the discharge, and has resulted in effluent limitations (for arsenic, perchlorate, and total trihalomethanes) more stringent than in the previous permit. Based on the past monitoring data, the Discharger will experience difficulty in complying with the final effluent limitation for total trihalomethanes (TTHM). Therefore, consistent with the provisions of the Compliance Schedule Policy, this Order contains an interim limitation for TTHM and a compliance schedule for achieving the final effluent limitation.

#### IX. 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, if the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

 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 shall 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 weeks consisting of four or more days at the end of any month will include the remaining days of the week, which occur in the following month in order to calculate a consecutive seven-day average. This value will be reported as a weekly average or seven-day average on the SMR for the month containing the partial week of four or more days. Partial calendar weeks consisting of less than four days at the end of any month will be carried forward to the succeeding month and reported as a weekly average or a seven-day average for the calendar week that ends with the first Saturday of that month.

## 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 plant for a given pollutant parameter, as determined from the 30-day average values of pollutant concentrations (C in mg/L) of influent and effluent samples collected at about the same time using the following equation:

Percent Removal (%) = [1-(C<sub>Effluent</sub>/ C<sub>Influent</sub>)] x 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 are 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 RML.

# L. Compliance with effluent limitations expresses as sum of several constituents

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

#### M. Mass Emission Rate

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

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

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

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

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

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

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

## N. Bacterial Standards and Analysis

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

Geometric Mean = 
$$(C1 \times C2 \times ... \times Cn)^{1/n}$$

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 C.F.R. part 136 (revised March 12, 2007), unless alternate methods have been approved by USEPA pursuant to 40 C.F.R. 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 California Water Code section 13385, subsections (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 California Water Code section 13385, subsections (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 California Water Code 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:  $\Sigma x$  is the sum of the measured ambient water concentrations, and n is the number of samples.

# **Average Monthly Effluent Limitation (AMEL)**

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

## **Average Weekly Effluent Limitation (AWEL)**

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

#### **Bioaccumulative**

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

## Carcinogenic

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

# **Coefficient of Variation (CV)**

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

# **Daily Discharge**

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

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

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

## **Detected, but Not Quantified (DNQ)**

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

#### **Dilution Credit**

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

## **Effluent Concentration Allowance (ECA)**

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

## **Enclosed Bays**

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

#### **Estimated Chemical Concentration**

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

#### **Estuaries**

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

#### **Inland Surface Waters**

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

#### **Instantaneous Maximum Effluent Limitation**

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

#### **Instantaneous Minimum Effluent Limitation**

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

## **Maximum Daily Effluent Limitation (MDEL)**

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

#### Median

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

# **Method Detection Limit (MDL)**

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

# Minimum Level (ML)

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

## **Mixing Zone**

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

## Not Detected (ND)

Sample results which are less than the laboratory's MDL.

#### **Ocean Waters**

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 Board's California Ocean Plan.

#### **Persistent Pollutants**

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

## **Pollutant Minimization Program (PMP)**

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

#### **Pollution Prevention**

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in California Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

## Reporting Level (RL)

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**

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**

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

#### Standard Deviation (σ)

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

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

where:

x is the observed value:

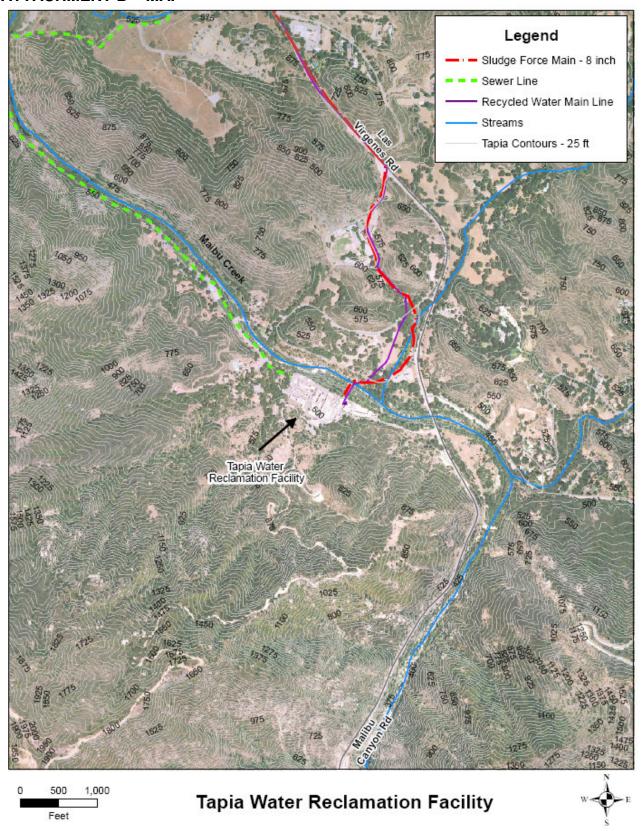
μ is the arithmetic mean of the observed values; and

n is the number of samples.

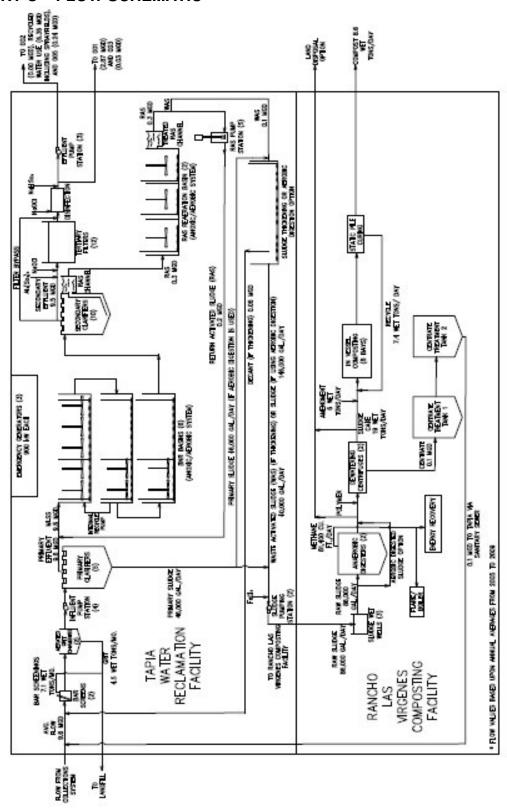
## **Toxicity Reduction Evaluation (TRE)**

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

# ATTACHMENT B - MAP



# ATTACHMENT C - FLOW SCHEMATIC



#### 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 and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.41(e).)

# **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 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 C.F.R. § 122.5(c).)

# F. Inspection and Entry

The Discharger shall allow the Regional Water 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 (40 C.F.R. § 122.41(i); CWC § 13383):

- 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 California Water Code, any substances or parameters at any location. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 (40 C.F.R. § 122.41(m)(4)(i)):
  - **a.** Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 that (40 C.F.R. § 122.41(n)(3)):
  - **a.** An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
  - **b.** The permitted facility was, at the time, being properly operated (40 C.F.R. § 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 C.F.R. § 122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 California Water Code. (40 C.F.R. §§ 122.41(I)(3), 122.61.)

#### III. STANDARD PROVISIONS - MONITORING

- **A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 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 C.F.R. §§ 122.41(j)(4), 122.44(j)(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 C.F.R. § 122.41(j)(2).)

## B. Records of monitoring information shall include:

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

# C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

- 1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
- 2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 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 C.F.R. § 122.41(h); CWC § 13267.)

## B. Signatory and Certification Requirements

- 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.22(b)(2)); and
  - **c.** The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 122.22(d).)

## C. Monitoring Reports

- Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(I)(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 C.F.R. § 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 C.F.R. § 122.41(I)(4)(ii).)
- 4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(I)(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 C.F.R. § 122.41(I)(5).)

#### E. Twenty-Four Hour Reporting

- 1. The Discharger shall report to the Regional Water Board 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 C.F.R. § 122.41(I)(6)(i).)
- 2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(I)(6)(ii)):
  - **a.** Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(I)(6)(ii)(A).)
  - **b.** Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(I)(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 C.F.R. § 122.41(I)(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. Notice is required under this provision only when (40 C.F.R. § 122.41(I)(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 part 122.29(b) (40 C.F.R. § 122.41(I)(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 C.F.R. § 122.41(I)(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 C.F.R.§ 122.41(I)(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 C.F.R. § 122.41(I)(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 C.F.R. § 122.41(I)(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 C.F.R. § 122.41(I)(8).)

#### **VI. STANDARD PROVISIONS - ENFORCEMENT**

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

#### VII. ADDITIONAL PROVISIONS - NOTIFICATION LEVELS

## A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 C.F.R. § 122.42(b)):

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