CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

320 West 4th Street, Suite 200, Los Angeles, CA 90013
(213)576-6600 • Fax (213)576-6660
http://www.waterboards.ca.gov/losangeles/

REVISED TENTATIVE

ORDER NO. R4-2011-XXX
NPDES NO. CA0053597

WASTE DISCHARGE REQUIREMENTS FOR THE CAMARILLO SANITARY DISTRICT, CAMARILLO WATER RECLAMATION PLANT DISCHARGE TO CONEJO CREEK

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

Table 1. Discharger Information

Discharger	Camarillo Sanitary District
Name of Facility	Camarillo Water Reclamation Plant
Facility Address	150 Howard Road
	Camarillo, CA 93012
	Ventura County
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 Camarillo Sanitary District from the discharge points 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
001A	tertiary treated effluent	34 º, 11', 40" N	119º, 00',00" W	Conejo Creek
001B	tertiary treated effluent	34 º, 11', 40" N	119º, 00',00" W	Conejo Creek
002	tertiary treated effluent	34 º, 09', 30" N	119º, 03',30" W	Calleguas Creek

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	April 14, 2011
This Order shall become effective on:	June 3, 2011
This Order shall expire on:	March 10, 2016
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date (Title 40, Code of Federal Regulations, part 122.21(d))

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 14, 2011.

_____

Samuel Unger, Executive Officer

REVISED

TENTATIVE

Table of Contents

I. Facility Information 6
II. Findings 7
III. Discharge Prohibitions 16
IV. Effluent Limitations and Discharge Specifications 16
A. Effluent Limitations – Discharge Point 001A, 001B and 002 16
B. Land Discharge Specifications 23
C. Reclamation Specifications 23
V. Receiving Water Limitations 24
A. Surface Water Limitation 24
B. Groundwater Limitations 27
VI. Provisions 28
A. Standard Provisions 28
B. Monitoring and Reporting Program (MRP) Requirements 31
C. Special Provisions 31
1. Reopener Provisions 31
2. Special Studies, Technical Reports and Additional Monitoring Requirements 33
3. Best Management Practices and Pollution Prevention 35
4. Construction, Operation and Maintenance Specifications 37
5. Special Provisions for Municipal Facilities (POTWs Only) 37
6. Spill Reporting Requirements 39
7. Compliance Schedules ..... 43~~42~~
8. TMDL- related Tasks 43
VII. Compliance Determination 43
A. General. 43
B. Multiple Sample Data 43
C. Average Monthly Effluent Limitation (AMEL) ..... 44~~44~~
D. Average Weekly Effluent Limitation (AWEL) 44
E. Maximum Daily Effluent Limitation (MDEL) 45
F. Instantaneous Minimum Effluent Limitation. 45
G. Instantaneous Maximum Effluent Limitation. 45
H. Six-month Median Effluent Limitation 45
I. Percent Removal ..... 46~~46~~
J. Mass and Concentration Limitations 46
K. Compliance with single constituent effluent limitations 46
L. Compliance with effluent limitations expresses as sum of several constituents 46
M. Mass Emission Rate 46
N. Bacterial Standards and Analysis 47
O. Single Operational Upset ..... 48~~47~~

List of Tables

Table 1. Discharger Information 1
Table 2. Discharge Location 1
Table 3. Administrative Information 1
Table 4. Facility Information 6

REVISED TENTATIVE

Table 5a. Basin Plan Beneficial Uses – Surface Waters 10
Table 5b. Basin Plan Beneficial Uses – Ground Waters..... 11
Table 6a. Effluent Limitations 17
Table 7. Interim Effluent Limitations 22
Table 8. Land Discharge Specifications 23
Table 9. Reclamation Discharge Specifications ..... 24~~23~~

REVISED

TENTATIVE

List of Attachments

Attachment A – Definitions A-1
Attachment B – Map B-1
Attachment C – Flow Schematic..... C-1
Attachment D – Standard Provisions D-1
Attachment E – Monitoring and Reporting Program E-1
Attachment F – Fact Sheet F-1
Attachment G- Generic Toxicity Reduction Evaluation (TRE) Workplan..... G-1
Attachment H – SWPPP Requirements (Not Applicable)..... ..... H-1
Attachment I - Biosolids/sludge Use and Disposal Requirements..... I-1
Attachment J – Pretreatment Requirements..... J-1
Attachment K – TMDL Tasks..... K-1

REVISED

TENTATIVE

I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	**Camarillo Sanitary District**
Name of Facility	**Camarillo Water Reclamation Plant**
Facility Address	**150 Howard Road**
	Camarillo, CA 93012
	Ventura County
Facility Contact, Title, and Phone	**Mark Richardson, Sanitary Superintendent, (805) 383-5665**
Mailing Address	**P.O. Box 248 Camarillo, CA 93012**
Type of Facility	**Publicly Owned Treatment Works**
Facility Design Flow	**7.25 million gallons per day (MGD)**

REVISED

TENTATIVE

II. FINDINGS

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

A. Background. Camarillo Sanitary District (hereinafter Camarillo SD or Discharger) is currently discharging pursuant to Order No. R4-2003-0079 (as Revised by Order No. R4-2004-0121) and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0053597, which was adopted June 5, 2003 and expired on May 10, 2008. The Discharger submitted a Report of Waste Discharge, dated September 17, 2007, and applied for a NPDES permit renewal to discharge up to 7.25 MGD of tertiary-treated wastewater from the Camarillo Water Reclamation Plant (hereinafter Facility). The application was deemed complete on November 8, 2007, so the NPDES permit was administratively extended. On April 3, 2008, a tentative NPDES permit was mailed out to interested parties. Subsequent revised tentatives were mailed on May 6, May 20, July 8, and August 12, 2008, incorporating comments received. However, the NPDES permit renewal was postponed awaiting the development of a state-wide policy for toxicity. Although the state-wide policy for toxicity has not been finalized, the permit renewal process must proceed because the Discharger is in need of the interim limits afforded to them in several Total Maximum Daily Loads (TMDLs) for the Calleguas Creek Watershed. Following the adoption of a state-wide policy for toxicity, and its subsequent approval by the Office of Administrative Law (OAL) and the United States Environmental Protection Agency (USEPA), the NPDES permit may be reopened to make any necessary changes to the NPDES permit so that it conforms to the new policy.

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

B. Facility Description. The Discharger owns and operates the Camarillo Water Reclamation Plant, a publicly owned treatment works (POTW). The treatment system consists of comminution, primary sedimentation, activated sludge treatment, secondary clarification, filtration, chlorination and dechlorination. Primary sludge is anaerobically digested and waste activated sludge is thickened and aerobically digested. Sewage solids separated from the wastewater are dried in sludge drying beds and transported off-site. The majority of the sludge is hauled to a compost facility in Kern County, California. A small fraction is disposed of at a landfill. Under normal conditions, treated wastewater is discharged by gravity flow from Discharge Point 001A (see table on cover page) to Conejo Creek, a water of the United States, and tributary to Calleguas Creek within Calleguas Creek Watershed. However, when the water level rises in the stream to the extent that discharge point 001A is partially or completely submerged (i.e., during heavy storm events), the final effluent is pumped to Conejo Creek, through Discharge Serial No. 001-B, located approximately 40 feet away from the Discharge Serial No. 001-A. Discharge Serial Points 001-A and 001-B have the same approximate coordinates: Latitude 34º 11' 40" North, Longitude 119º 00' 00" West. In the last permit

REVISED TENTATIVE

cycle, Camarillo SD had requested the addition of another discharge point (Discharge Serial Point No. 002, approximate location: latitude 34°09'30" North, longitude 119°03'30"West), which would discharge treated effluent to Calleguas Creek, at a point below its intersection with Potrero Road. Construction of the new Discharge Point is pending environmental review. However, it is possible that Discharge Point 002 may be constructed and used within the lifetime of this NPDES Order. Attachment B provides a map of the area around the facility. Attachment C provides a flow schematic of the facility.

C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (CWC) (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the ~~California Water Code~~ CWC (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.

On November 9, 1990, CSD submitted the following report *Conejo and Calleguas Creeks Water Contact Recreation Study*, prepared in October 1990 by Black & Veatch. This study was conducted in response to NPDES finding 8, in Order 90-057, adopted by the Regional Board on May 21, 1990, which reads, "There is limited public contact in the downstream areas, and the quality of wastewater discharged to Conejo Creek must be such that no public health hazard is created. The discharger will monitor and evaluate the extent of body-contact use of the receiving waters downstream of the discharge outfall." As such, the purpose of the study was to determine the existence and extent of any water contact recreation occurring in the receiving waters downstream of the Camarillo WRP's discharge point. The report presented the results of an initial survey, landowner questionnaires, observations of water contact activity, interviews of agencies, review of available water quality information, and conclusions."

- Evidence of activity was observed at four locations along Conejo Creek and Calleguas Creek from the Camarillo WRP discharge point to the Pacific Coast Highway. Each of the four locations was visited a total of 27 times (3 times per day for 9 days) during a four-week period between August 18 and September 15, 1990.
- Water contact activity was observed on seven occasions. Three observations took place during Labor Day weekend. Observed activities included boys walking barefoot in the creek, dogs playing in the creek bed, a woman and two children wading in the creek looking for crawdads, and five children and one woman swimming in the creek.

REVISED TENTATIVE

- One of the land owners answered the questionnaire that he had seen two to three people using the stream four times a year.
- Neither the transmittal letter nor the report state any conclusions or recommendations for further action.

The report by Black & Veatch clearly documented the fact that the water contact (REC-1) beneficial use, a fishable/swimmable use, does exist. Existing fishable/swimmable beneficial uses cannot be removed or de-designated if they have been attained in a waterbody on or after existing from November 28, 1975. Therefore, a Use Attainability Analysis (UAA) to remove the REC-1 beneficial use is not appropriate. Limits contained in this permit will need to be protective of the existing REC-1 beneficial use.

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 (TBELs). 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 TBELs development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations (WQBELs). 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 Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS), 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, 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).

REVISED TENTATIVE

H. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region for the Coastal Watersheds of Los Angeles and Ventura Counties (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 (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the receiving waters are as follows:

REVISED TENTATIVE

Table 5a. Basin Plan Beneficial Uses – Surface Waters

Discharge Point(s)	Receiving Water Name	Beneficial Use(s)
001A, 001B	Conejo Creek (Hydro Unit 403.12)	Existing: industrial service supply (IND); industrial process supply (PROC); agricultural supply (AGR); ground water recharge (GWR); contact (REC-1) and non-contact water recreation (REC-2); warm freshwater habitat (WARM); and wildlife habitat (WILD). Potential: Municipal and domestic water supply (p*MUN).
	Calleguas Creek (Hydro Unit 403.12)	Existing: IND; PROC; AGR; GWR; REC-1; REC-2; WARM; and WILD. Potential: p*MUN.
002	Calleguas Creek (Hydro Unit 403.11)	Existing: AG; GWR; freshwater replenishment (FRSH); REC-1; REC-2; WARM; cold freshwater habitat (COLD); WILD; rare, threatened, or endangered species (RARE); and wetland habitat (WET) . Potential: p*MUN.
	Calleguas Creek Estuary (Hydro Unit 403.11)	Existing: REC-2; commercial and sport fishing (COMM); estuarine habitat (EST); WILD; RARE; migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN); and WET. Potential: navigation (NAV) and REC-1.
	Mugu Lagoon (Hydro Unit 403.11)	Existing: NAV; REC-2; COMM; EST; marine habitat (MAR); WILD; preservation of biological habitats (BIOL); RARE; MIGR; shellfish harvesting (SHELL); and WET. Potential: REC-1.

* 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.

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

Table 5b. Basin Plan Beneficial Uses – Ground Waters

Discharge Point(s)	Receiving Water Name	Beneficial Use(s)
001A, 001B, 002	Pleasant Valley (Ventura Central Basin) (DWR Basin No. 4-6)	Confined Aquifer Existing Beneficial Uses: Municipal and domestic water supply (MUN); industrial service supply; industrial process supply; and agricultural supply. Unconfined Aquifer Existing Beneficial Uses: Industrial service supply; industrial process supply; and agricultural supply. Potential Beneficial Use: MUN.
001A, 001B, 002	Oxnard Plain (Ventura Central Basin) (DWR Basin No. 4-4)	Confined Aquifer Existing Beneficial Uses: MUN; industrial service supply; industrial process supply; and agricultural supply. Unconfined Aquifer Existing Beneficial Uses: MUN and agricultural supply; Potential Beneficial Use: Industrial service supply
001A, 001B, 002	Oxnard Forebay	Existing Beneficial Uses: MUN; industrial service supply; industrial process supply; and agricultural supply.

Requirements of this Order implement the Basin Plan.

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, OAL, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. On December 1, 2005, Resolution No. 2005-014, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life,* was adopted by the Regional Water Board. Resolution No. 2005-014 was approved by the State Water Board, OAL, and USEPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively. Although the revised ammonia water quality objectives may be less

REVISED TENTATIVE

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 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 added 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 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 TBELs on point sources.

Conejo Creek, Calleguas Creek, 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. Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303(d) List) – chem A (tissue), chloride, endosulfan (tissue), fecal coliform, sulfates, and total dissolved solids;

2. Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303(d) List) – chem A (tissue), endosulfan (tissue), fecal coliform, lindane/ hexachlorocyclohexane/ HCH (tissue), sulfates, and total dissolved solids;

3. Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on 1998 303(d) List) – chloride, sedimentation/siltation, and total dissolved solids;

4. Calleguas Creek Reach 2 (estuary to Potrero Road – was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list) – chem A (tissue), endosulfan (tissue), fecal coliform, and sedimentation/siltation;

5. Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) List) – endosulfan (tissue).

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

REVISED TENTATIVE

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. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does include TMDL-based compliance schedules and interim effluent limitations. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) is included in the Fact Sheet (**Attachment F**).

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 Code of Federal Regulations (C.F.R.) § 131.21; 65 Federal Register 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 TBELs consist of restrictions on BOD, TSS, pH, and percent removal of BOD and TSS. Restrictions on BOD, TSS and power of hydrogen (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.

WQBELs 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

REVISED TENTATIVE

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). Collectively, 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, CFR, part 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Some effluent limitations in this Order are less stringent 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~~ CWC sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes

REVISED TENTATIVE

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.

REVISED

TENTATIVE

THEREFORE, IT IS HEREBY ORDERED, that Order Nos. R4-2003-0079 and R4-2004-0121 are rescinded 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.

REVISED TENTATIVE

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 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 (l) 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. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001A, 001B and 002

1. Final Effluent Limitations – Discharge Point 001A, 001B and 002

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Points 001A, 001B into Conejo Creek and Discharge Point 002 into Calleguas Creek, with compliance measured at Monitoring Location EFF001 and EFF002 as described in the attached Monitoring and Reporting Program (MRP):

Table 6a. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Ave. Weekly	Max. Daily	Instant-aneous Min.	Instant-aneous Max~~imum~~
Biochemical Oxygen Demand (BOD) 5-day @ 20°C	mg/L	20	30	45	--	--
	lbs/day[1]	1210	1810	2720	--	--
Total Suspended Solids	mg/L	15	40	45	--	--
	lbs/day [1]	910	2420	2720	--	--
pH	standard units	--	--	--	6.5	8.5
Settleable Solids	ml/L	0.1	--	0.3	--	--
Oil and grease	mg/L	10	--	15	--	--
	lbs/day[1]	600		910	--	--
Total Residual Chlorine	mg/L	--	--	0.1	--	--
MBAS	mg/L	0.5	--	--	--	--
	lbs/day[1]	30	--	--	--	--
Boron	mg/L	1.0	--	--	--	--
	lbs/day[1]	60	--	--	--	--
TDS	lbs/day	850xQ - AF[2,3]	--	--	--	--
Sulfate	lbs/day	250xQ - AF[2,3]	--	--	--	--
Chloride	lbs/day	150xQ - AF[2,3]	--	--	--	--

[1] The mass emission rates are based on the plant design flow rate of 7.25 MGD, and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

[2] This limitation shall become operative on December 2, 2023, fifteen years after the effective date of the *Calleguas Creek Watershed Salts Total Maximum Daily Load (Salts TMDL)*, established by the Regional Water Board on October 4, 2007. The TMDL ~~will become~~ became effective on December 2, 2008, following USEPA's approval of said TMDL. Consistent with the TMDL, this limitation is derived from the final Waste Load Allocations (WLAs) in the *Salts TMDL* and will supersede any previous applicable effluent limitations. Prior to the operative date of the final WLA-based limits, the TMDL specifies an interim WLA for chloride, which may be re-evaluated three, seven, and ten years after the TMDL effective date. Interim limits for TDS, sulfate, and chloride, consistent with those interim WLAs have been incorporated into this NPDES Order and will apply on the effective date of the *Salts TMDL* (See section IV.A.2 below).

Consistent with the *Salts TMDL*, these limits apply only during dry weather (as defined in the *Salts TMDL*).

AF represents the adjustment factor, which equals the difference between the minimum salts export requirement and the actual salts export.

Q represents the POTW flow at the time the water quality measurement is collected and a conversion factor to lbs/day based on the units of measure for the flow.

[3] These limitations do not apply to Discharge Point 002, because it is located below Potrero Road. The Basin Plan does not contain water quality objectives~~WQOs~~ for these pollutants in Calleguas Creek below Potrero Road.

REVISED TENTATIVE

Parameter	Units	Effluent Limitations				
		Average Monthly	Ave. Weekly	Max. Daily	Instant-aneous Min.	Instant-aneous Max~~imum~~
Ammonia Nitrogen (NH_3-N)	mg/L	3.5[4]	--	7.8 [~~3~~4]	--	--
	lbs/day	--	--	7.0 x Q[5]	--	--
Nitrate + Nitrite as Nitrogen (NO_3-N + NO_2-N)	mg/L	9[6]	--	--	--	--
Nitrite as Nitrogen(NO_2-N)	mg/L	0.9[~~5~~6]	--	--	--	--
Nitrate as N (NO_3-N)	mg/L	9[~~5~~6]	--	--	--	--
Antimony	µg/L	6	--	--	--	--
	lbs/day[1]	0.36	--	--	--	--
Arsenic	µg/L	10	--	--	--	--
	lbs/day[1]	0.6	--	--	--	--
Cadmium	µg/L	5	--	--	--	--
	lbs/day[1]	0.3	--	--	--	--
Copper	µg/L	~~6~~ 14 22[7]	--	~~9~~ 44 48[~~6~~7]	--	--
	lbs/day	--	--	0.12*WER-0.04[8]	--	--

[4] This limitation is derived from the final WLA for ammonia nitrogen, as set forth in the *Nitrogen Compounds and Related Effects TMDL,* established by the Regional Water Board on October 24, 2002. Final WLAs became operative on October 24, 2004, because the implementation provisions of the *Nitrogen Compounds and Related Effects TMDL* allowed interim limits for ammonia nitrogen for a duration of no more than two years starting from October 24, 2002.

[5] This limitation is derived from the final WLA for ammonia nitrogen, as set forth in Resolution No. R4-2008-009, Amendment to the Water Quality Control Plan for the Los Angeles Region through revision of the Waste Load Allocations for the Calleguas Creek Watershed Nitrogen Compounds and Related Effects Total Maximum Daily Load, adopted by the Regional Water Board on September 11, 2008.

[6] This limitation is derived from the final WLA for nitrate nitrogen, nitrite nitrogen, and nitrate plus nitrite nitrogen, as set forth in the *Nitrogen Compounds and Related Effects TMDL,* established by the Regional Water Board on October 24, 2002. Final WLAs became operative on July 16, 2007, because the implementation provisions of the *Nitrogen Compounds and Related Effects TMDL* allowed interim limits for nitrite nitrogen, nitrite nitrogen, and nitrate plus nitrite nitrogen, for a duration of four years starting from the effective date of the TMDL.

[7] This limitation is derived from the final WLA, as set forth in the *Calleguas Creek Watershed Metals TMDL*, established by the Regional Water Board on June 8, 2006. The TMDL became effective on March 26, 2007. This final effluent limitation will apply on March 26, 2017 (10 years after the effective date of the amendment) ~~when~~after the interim limits, consistent with the interim WLAs, expire (See section IV.A.2 below).

[8] This final mass-based limitation shall not become operative until March ~~25~~26, 2017, in accordance with the *Calleguas Creek Watershed Metals TMDL*, established by the Regional Water Board on June 8, 2006. This limitation is derived from the WLA for copper as set forth in said TMDL. The TMDL became effective on March 26, 2007. Consistent with the *Calleguas Creek Watershed Metals TMDL*, the ten-year compliance schedule is based on the estimated time-frame for completing the relevant implementation actions delineated in the TMDL as shown in Table 7-19.2 of Attachment A to Resolution No. R4-2006-012. If the Water Effect Ratio (WER) is set equal to the default value of 1, then the copper final mass-based WLA applicable to Discharge Points 001A and 001B is equal to 0.08 lbs/day. For Discharge Point 002, located below Potrero Road, when the 3.69 WER is applied, the applicable copper final mass-based WLA would be 0.40 lbs/day.

REVISED TENTATIVE

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Mercury	lbs/month	0.015 [9]	--	--	--	--
Nickel	µg/L	114[6]	--	287 [6]	--	--
	lbs/day	--	--	0.2 [~~7~~8]		
Selenium	µg/L	4	--	9	--	--
	lbs/day[1]	0.24	--	0.54	--	--
Cyanide	µg/L	4.2	--	8.5	--	--
	lbs/day[1]	0.25	--	0.51	--	--
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--
	lbs/day[1]	0.24	--	--	--	--
Aldrin	µg/L	0.00014	--	0.000281	--	--
	lbs/day[1]	0.000008	--	0.000017	--	--
Alpha-BHC	µg/L	0.013	--	0.026	--	--
	lbs/day[1]	0.00079	--	0.0016	--	--
Chlordane	µg/L	0.00059[10]	--	0.0012 [10~~9~~]	--	--
4,4-DDD	µg/L	0.00084 [~~9~~10]	--	0.0017 [10~~9~~]	--	--
4,4-DDE	µg/L	0.00059 [~~9~~10]	--	0.0012 [10~~9~~]	--	--
4,4-DDT	µg/L	0.00059 [~~9~~10]	--	0.0012 [10~~9~~]	--	--
Dieldrin	µg/L	0.00014 [~~9~~10]	--	0.00028 [10~~9~~]	--	--
Heptachlor epoxide	µg/L	0.00011	--	0.00022	--	--
	lbs/day[1]	0.000007	--	0.000013	--	--
PCBs	µg/L	0.00017 [~~9~~10]	--	0.00034 [~~9~~10]	--	--
Toxaphene	µg/L	0.00016 [~~9~~10]	--	0.00033 [~~9~~10]	--	--
Chlorpyrifos	µg/L	0.0133 [11]	--	--	--	--

REVISED TENTATIVE

[9] This limitation does not become operative until March ~~25~~26, 2017 in accordance with the *Calleguas Creek Watershed Metals TMDL,* established by the Regional Water Board on June 8, 2006. This limitation is derived from the WLA for mercury, specified in pounds per month, as set forth in said TMDL. The TMDL became effective on March ~~27~~26, 2007. Consistent with the TMDL, the ten-year compliance schedule is based on the estimated time-frame for completing the relevant implementation actions delineated in the TMDL and shown in Table 7-19.2 of Attachment A to Resolution No. R4-2006-012.The TMDL assigns interim WLA, and allows a ten-year compliance schedule with re-evaluation of the interim WLA by March 25, 2012. Interim limits based on those interim WLAs have been incorporated into this NPDES Order and will apply on the effective date of this NPDES Order (See section IV.A.2 below).

[10] This limitation shall not become operative until March 24, 20~~17~~26 in accordance with the *Calleguas Creek Watershed Organochlorine Pesticide, Polychlorinated Biphenyls (PCB), and Siltation TMDL,* established by the Regional Water Board on July 7, 2005. The limitation is derived from the final WLA as set forth in said TMDL. The TMDL became effective on March 24, 2006. Prior to the effective date of the final WLA-based limits, the TMDL specifies interim WLAs, which may be re-evaluated five, ten, and fifteen years after the TMDL effective date based on State Implementation Policy procedures. Interim limits consistent with the interim WLAs have been incorporated into this NPDES Order and will apply on the effective date of this NPDES Order (See section IV.A.2 below).

[11] This limitation is derived from the final WLA as set forth in the *Calleguas Creek Watershed Toxicity TMDL,* established by the Regional Water Board on July 7, 2005. The TMDL became effective on March 24, 2006. Consistent with the TMDL, the final WLA-based limit became operative on March 23, 2008. The interim limits

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Diazinon	µg/L	0.1 [~~10~~11]	--	0.1 [~~10~~11]	--	--
Toxicity	TUc	1.0 [12]	--	1.6	--	--

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

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

d. 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.

e. 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 coliform organisms at some point in the treatment process does not exceed a most probable number (MPN) or colony forming units (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 coliform organisms does not exceed an MPN or CFU of 23 per 100 milliliters in more than one sample within 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.

f. 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

REVISED TENTATIVE

specified in this TMDL lapsed prior to the date this permit was renewed. Therefore, only final WLA-based limits are incorporated into this permit.

[12] The *Calleguas Creek Watershed Toxicity TMDL* includes a WLA of 1.0 TUc for toxicity, which is required to be implemented in accordance with USEPA, State Water Board, and Regional Water Board resolutions, guidance and policy at the time of permit issuance or renewal. Consistent with the TMDL Implementation Plan, the staff report, and ~~a~~ USEPA letters dated August 25, 2008, and March 17, 2011, this toxicity WLA ~~"limit"~~ will be implemented as a 1.6 TUc Daily Maximum Water Quality Based Effluent Limitation (WQBEL) and a 1.0 TUc M~~m~~onthly M~~m~~edian WQBEL. Exceedance of the 1.0 TUc WQBEL also triggers ~~for~~ initiation of the toxicity identification evaluation (TIE)/toxicity reduction evaluation (TRE) process. Within 48 hours of knowledge of an exceedance of the 1.0 TUc monthly median WQBEL, the Discharger shall conduct six accelerated tests within a 12-week period. If three of the six accelerated tests exceed 1.0 TUc, then the Discharger shall initiate the TIE/TRE process, per protocols outlined in USEPA's *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program* (2000) and any provision of this Order. Failure to complete the accelerated monitoring and/or failure to initiate the TIE/TRE process is enforceable by the Regional Water Board.

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.

g. 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.

h. Acute Toxicity Final Effluent 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 (h)(i)(a) or (h)(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 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 TRE Workplan described later in this section.

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

i. Chronic Toxicity ~~Trigger~~Final Effluent Limitation 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.

REVISED TENTATIVE

ii. The~~re shall be no chronic toxicity in the~~ effluent discharge shall not exceed a Maximum Daily Effluent limitation of 1.6 TUc or a Monthly Median limitation of 1.0 TUc.

iii. If the chronic toxicity of the effluent exceeds the 1.0 TUc monthly median ~~trigger~~final effluent limitation, then 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.

2. Interim Effluent Limitations

a. Consistent with the Calleguas Creek Watershed TMDLs, during the period beginning June 3, 2011 (permit effective date) and ending on March 10, 2016 (permit expiration date), the Discharger shall maintain compliance with the following interim effluent limitations in Table 7 of this NPDES Order, at Discharge Points 001A~~,~~ and 001B, ~~and 002~~, with compliance measured at Monitoring Locations EFF-001A~~,~~ and EFF-001B~~, and EFF-002~~ as described in the attached MRP. These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations, until the final effluent limitations become operative as delineated in footnotes 2, ~~6,~~ 7, 8, 9, 10, and 11 of Table 6a, for the same parameters during the time period indicated in this provision.

Table 7. Interim Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total Dissolved Solids	mg/L	1012[13]~~[12]~~	--	--	--
Sulfate	mg/L	283 ~~[12]~~[13]	--	--	--
Chloride	mg/L	216 ~~[12]~~[13]	--	--	--

[13] This interim effluent limitation is derived from the interim WLA as set forth in the *Calleguas Creek Watershed Salts TMDL*, established by the Regional Water Board on October 4, 2007,~~.~~ and approved by ~~Following~~ USEPA ~~approval of the TMDL~~on December 2, 2008.~~,~~ ~~t~~This interim effluent limitation shall apply in lieu of the corresponding final effluent limitations specified for the same parameter, in Table 6a of section A.1. of this Order, beginning on June 3, 2011 and ending on December 1, 2023 (one day prior to 15 years after the effective date of the TMDL). ~~during the time period indicated in this provision~~. ~~At the time this permit was adopted, the TMDL was not yet effective. Therefore, this limit shall not be operative unless and until the TMDL has been approved, and is effective. The limit shall become operative at that time.~~ These interim effluent limitations do not apply to Discharge Point 002 because it is located below Potrero Road.

REVISED TENTATIVE

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Mercury	lb/month	0.03[14]	--	--	--
~~Copper~~	~~µg/L~~	~~20~~ [13]	~~57~~ [13]	--	--
~~Nickel~~	~~µg/L~~4	~~6.2~~ [13]	~~16~~ [13]	--	--
Chlordane	µg/L	--	0.100[15]	--	--
4,4-DDD	µg/L	--	0.006 [14]	--	--
4,4-DDE	µg/L	--	0.188 [14]	--	--
4,4-DDT	µg/L	--	0.010 [14]	--	--
Dieldrin	µg/L	--	0.010 [14]	--	--
PCBs	µg/L	--	0.031 [14]	--	--
Toxaphene	µg/L	--	0.500 [14]	--	--

B. Land Discharge Specifications

[Not Applicable.]

Table 8. Land Discharge Specifications

Parameter	Units	Discharge Specifications		
		Average Monthly	Maximum Daily	Average Annual

C. Reclamation Specifications

1. The discharger currently recycles treated effluent and plans on increasing the amount of water it recycles. The production, distribution, and reuse of recycled water for direct, non-potable applications are presently regulated under Water Reclamation Requirements (WRR) Order No. 87-132, adopted by this Regional Board on September 28, 1987, and will continue being regulated under a separate Order.

   The amount of treated effluent that is recycled varies between 3.5% to 40%, from month to month. The monthly average for the year is 20%. The remainder of the treated effluent is discharged to Conejo Creek under this NPDES permit.

[14] This interim effluent limitation is derived from the interim WLA as set forth in the *Calleguas Creek Watershed Metals TMDL,* established by the Regional Water Board on June 8, 2006. The TMDL became effective on March 26~~7~~, 2007. This interim effluent limitation shall apply in lieu of the corresponding final effluent limitations specified for the same parameter, in Table 6a of section A.1. of this Order, beginning on June 3, 2011 and ending on March 25, 2017~~during the time period indicated in this provision~~.

[15] This limitation is derived from the interim WLA as set forth in the *Calleguas Creek Watershed Organochlorine Pesticide, PCB, and Siltation TMDL,* established by the Regional Water Board on July 7, 2005. The TMDL became effective on March 24, 2006. This interim effluent limitation shall apply in lieu of the corresponding final effluent limitations specified for the same parameter, in Table 6a of section A.1. of this Order, beginning on June 3, 2011 and ending on March 23, 2026~~during the time period indicated in this provision~~. The TMDL specifies that these interim limits, may be re-evaluated five, ten, and fifteen years after the TMDL effective date.

REVISED TENTATIVE

Table 9. Reclamation Discharge Specifications

Parameter	Units	Discharge Specifications		
		Average Monthly	Maximum Daily	Average Annual
N/A – See Order No. 87-132				

V. RECEIVING WATER LIMITATIONS

REVISED TENTATIVE

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 Conejo Creek, Calleguas Creek, or Mugu Lagoon:

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

4. The fecal coliform concentration in the receiving water shall not exceed the following, as a result of wastes discharged:

a. Geometric Mean Limits

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

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

b. Single Sample Limits

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

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

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

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

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

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

7. The wastes discharged shall not cause concentrations of contaminants to occur at levels that are harmful to human health in waters which are existing or potential sources of drinking water.

8. The concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses as a result of the wastes discharged.

9. The wastes discharged shall not contain substances that result in increases in BOD, 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.

REVISED

TENTATIVE

17. 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 and RSW-004D 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 but the effluent acute toxicity is in compliance, acute toxicity accelerated monitoring in the receiving water according to Attachment E - MRP section V.A.2.d does not apply.

18. 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 effluent limitation of 1 TUc ~~trigger~~, then accelerated monitoring need not be implemented.

REVISED

TENTATIVE

B. Groundwater Limitations

1. In groundwaters used for domestic or municipal supply the concentration of coliform organisms over any seven day period shall be less than 1.1/ 100 ml.

2. Groundwaters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents and radionuclides in excess of the limits specified in the provisions of Title 22 of the CCRs, which are incorporated by reference into the Basin Plan.

3. Groundwaters shall not exceed 10 mg/L nitrogen as nitrate nitrogen plus nitrite nitrogen (NO_3-N + NO_2-N), 45 mg/L as nitrate (NO_3), 10 mg/L as nitrate nitrogen (NO_3-N), or 1 mg/L as nitrite nitrogen (NO_2-N).

4. Groundwaters shall not contain taste or odor producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

REVISED

TENTATIVE

VI. PROVISIONS

A. Standard Provisions

1. 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:

   a. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by section 13050 of the California Water Code.

   b. Odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system due to improper operation of facilities, as determined by the Regional Water Board, are prohibited.

   c. All facilities used for collection, transport, treatment, or disposal of "wastes" shall be adequately protected against damage resulting from overflow, washout, or inundation from a storm or flood having a recurrence interval of once in 100 years.

   d. Collection, treatment, and disposal systems shall be operated in a manner that precludes public contact with wastewater.

   e. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer of the Regional Water Board.

   f. The provisions of this order are severable. If any provision of this order is found invalid, the remainder of this Order shall not be affected.

   g. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation under authority preserved by section 510 of the CWA.

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

   i. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water

REVISED TENTATIVE

management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

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

k. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the Federal CWA and amendments thereto.

l. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

m. Oil or oily material, chemicals, refuse, or other 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.

n. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.

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

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

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

r. 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

REVISED

TENTATIVE

of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

s. Pursuant to California Water Code 13387(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.

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

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

i. Name and general composition of the chemical,

ii. Frequency of use,

iii. Quantities to be used,

iv. Proposed discharge concentrations, and

v. USEPA registration number, if applicable.

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

w. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Watershed Regulatory Section Chief at the Regional Water Board by telephone at (213) 576-6616, or electronically at dhung@waterboards.ca.gov, within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing to the Regional Board within five days, unless the Regional Water Board waives confirmation. The

REVISED

TENTATIVE

written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance, and the measures to prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

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

REVISED

TENTATIVE

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 noncompliance 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, the adoption of a Water Effect Ratio (WER), or the adoption of a TMDL for the Calleguas Creek Watershed.

j. This Order may be reopened and modified to revise the acute toxicity effluent limitation, 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.

REVISED TENTATIVE

2. Special Studies, Technical Reports and Additional Monitoring Requirements

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

The paucity of information on the occurrence and possible effects of constituents of emerging concern (CECs) on ecosystems from treated municipal wastewater currently limits our ability to define and thus manage risks associated with CECs. Therefore, a need for a more holistic understanding of the effects of CECs on human health and aquatic life is being developed. The monitoring of CECs in POTW discharge is the first vital step in collecting information on the occurrence of the CECs in effluent. ~~The City~~ Camarillo SD shall submit a Work Plan within 6 months of the effective date of this Order, subject to the approval of the Executive Officer, to conduct a CEC Special Study. This Work Plan must address the following:

i. CECs to Monitor – ~~The City~~ Camarillo SD shall monitor the following chemicals specified in Table 8 at the EFF-001 containing tertiary-treated wastewater.

Table 8 – CECs in the Effluent

Parameter	Units	Sample Type	Minimum Sampling Frequency
17α-Ethinyl Estradiol	µg/L	24-hour composite	[16]
17β-Estradiol	µg/L	24-hour composite	~~17~~16
Estrone	µg/L	24-hour composite	~~17~~16
Endocrine disruptors[17]	µg/L	24-hour composite	~~17~~16
Pharmaceuticals[18]	µg/L	24-hour composite	~~17~~16
Personal Care Products[19]	µg/L	24-hour composite	~~17~~16
Other Chemicals[20]	µg/L	24-hour composite	~~17~~16
Emerging chemicals[21]	µg/L	Grab or 24-hour composite	~~17~~16

[16] These chemicals need to be monitored every other year starting in 2012. Monitoring shall occur in the first half of the calendar year so that the results can be presented in the first annual report.

[17] Endocrine disruptors include bisphenol A, nonylphenol and nonylphenol polyethoxylates, octylphenol, and polybrominated diphenyl ethers, or surrogates that could represent one or more endocrine disruptors.

[18] Pharmaceuticals include acetaminophen, amoxicillin, azithromycin, carbamazepine, ciprofloxacin, dilantin, gemfibrozil, ibuprofen, lipitor, sulfamethoxazole, trimethoprim, and salicylic acid, or surrogates that could represent one or more pharmaceuticals.

[19] Personal care products include triclosan and N,N-Diethyl-3-methylbenzamide (DEET), or surrogates that could represent one or more personal care products.

[20] Other chemicals include caffeine, iodinated contrast media (i.e. iopromide), fire retardants such as tris(2-chloroethyl)phosphate (TCEP), or surrogates that could represent one or more chemicals that suggest the presence of wastewater.

REVISED TENTATIVE

TENTATIVE

ii. ii. Analytical Methodology – ~~The City~~Camarillo SD shall use methodologies listed in USEPA Methods 1694 or 1698, methodologies approved by the California Department of Public Health, methodologies approved by the State Board, or methodologies approved by the Executive Officer.

iii. Reports – ~~The City~~Camarillo SD shall submit the progress annual reports to this Regional Board by December 31, 2012, 2013, 2014, 2015, and 2016 to this Regional Board.

REVISED TENTATIVE

b. Toxicity Reduction Requirements

The Discharger shall ~~prepare and submit a copy of the Discharger's~~ update its existing initial investigation TRE workplan and submit a copy of the revised initial investigation TRE workplan to the Executive Officer of the Regional Water Board for approval within 30 days of the date of adoption 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 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 effluent limitation~~trigger~~, then the Discharger shall immediately implement accelerated toxicity testing that consists of six additional tests, each test done 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.

[21] Given the evolving state of research, science, and policy in the area of CECs, the Executive Officer can add or remove emerging chemicals including CECs from the monitoring program.

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

If results of the implementation of the facility's initial investigation TRE workplan (as described above) indicate the need to continue the TIE/TRE, 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)

The Discharger will not be required to submit an updated SWPPP, because all storm water is captured and treated on-site and no stormwater is discharged or allowed to run off-site from the facility. Therefore, the typical *Storm Water Pollution Prevention Plan Requirements* (**Attachment H**) are not included in this Order.

REVISED TENTATIVE

b. Spill Clean-up Contingency Plan (SCP)

Within ninety days, 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 CWC section 13263.3(d), shall be considered to fulfill the PMP requirements.

REVISED TENTATIVE

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

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

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

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

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

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

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

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

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

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

4. Construction, Operation and Maintenance Specifications

a. Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to section 13625 et seq. 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

REVISED

TENTATIVE

(1) 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. The Discharger shall comply with the requirements of part 503, in general, and in particular the requirements in **Attachment I** of this Order, [Biosolids/sludge Management]. These requirements are enforceable by USEPA.

(2) The Discharger shall ensure compliance with the requirements in SWRCB 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 Quality Control 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.

(3) The Discharger shall comply, if applicable, with WDRs issued by other Regional Water Boards to which jurisdiction the biosolids are transported and applied.

(4) The Discharger shall furnish this Regional Water Board with a copy of any report submitted to USEPA, State 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 Board. Any change to the Program shall be reported to the Regional 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 Federal Regulations 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);

REVISED TENTATIVE

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 Board and USEPA Region 9, describing the Discharger's pretreatment activities over the period. The annual and semiannual reports shall contain, but not be limited to the information required in the attached Pretreatment Reporting Requirements (**Attachment 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 Board, USEPA, or other appropriate parties, as provided in the Federal Clean Water Act. The Regional 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

REVISED TENTATIVE

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:

a. For any discharges of sewage that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but no later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the Regional Water Quality Control Board.

b. As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the Regional Water Quality Control Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

B. Monitoring

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

a. 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 Health Services authorizes cessation of monitoring.

b. 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.

REVISED

TENTATIVE

C. Reporting

The Regional Water Board initial notification shall be followed by:

a. 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.

b. 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:

a. the date and time of each spill, overflow or bypass;
b. the location of each spill, overflow or bypass;
c. 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;
d. the cause of each spill, overflow or bypass;
e. 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;
f. mitigation measures implemented; and,

REVISED TENTATIVE

g. corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.

E. Activities Coordination

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

F. Consistency with 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 an NPDES permit. (title 33 of the United States Codes (U.S.C.) sections1311, 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. The Regional 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 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 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.

REVISED TENTATIVE

7. Compliance Schedules

The compliance schedules and the interim limits in section IV.A.2.a of this Order are authorized under TMDLs (Basin Plan Amendments) which have been adopted by the Los Angeles Regional Board and approved by USEPA. ~~However~~In the past, interim limits and compliance schedules ~~may be~~had been provided in an administratively issued Time Schedule Order because~~if~~ the permit effective date precede~~s~~d the TMDL effective date. However, the Regional Water Board cannot extend the TSO, because the conditions under section 13385(j)(3)(C)(ii)(II) of the CWC did not apply to Camarillo SD's discharge. The stakeholders in the Calleguas Creek Watershed are embarking on a watershed-wide solution to salt management, which will include reverse osmosis treatment of potable water and construction of a brine line for brine disposal. The dischargers need time to complete the capital improvement projects. The *Calleguas Creek Watershed Salts TMDL* includes tasks and milestone dates for the various phases of the project.

8. TMDL- related Tasks

The Discharger shall comply with the applicable TMDL- related tasks, and future revisions thereto, in **Attachment K** of this Order.

VII. COMPLIANCE DETERMINATION

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

A. General.

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

B. Multiple Sample Data

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

REVISED

TENTATIVE

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

REVISED

TENTATIVE

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

REVISED TENTATIVE

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 (%) = $[1-(C_{Effluent}/ C_{Influent})] \times 100$ %
When preferred, the Discharger may substitute mass loadings and mass emissions for the concentrations.

J. Mass and Concentration Limitations

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

K. Compliance with single constituent effluent limitations

Dischargers 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:

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

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

REVISED

TENTATIVE

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

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

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

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

N. Bacterial Standards and Analysis

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

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

   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.

REVISED TENTATIVE

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).

REVISED TENTATIVE

ATTACHMENT A – DEFINITIONS

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

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

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

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

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

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.

REVISED TENTATIVE

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

REVISED

TENTATIVE

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.

REVISED TENTATIVE

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.

REVISED TENTATIVE

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.)

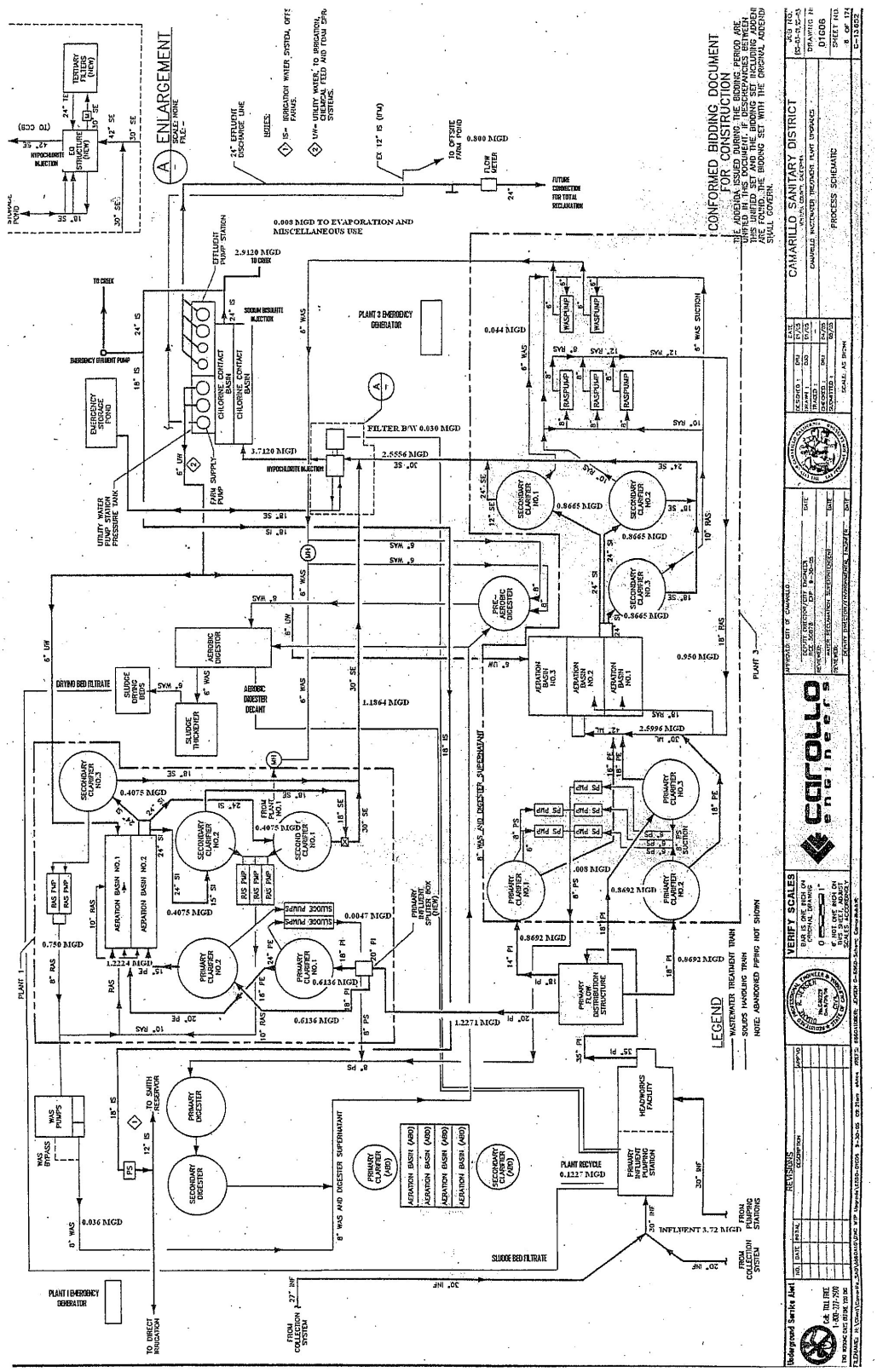
REVISED

TENTATIVE

ATTACHMENT B – MAP

Camarillo Water Reclamation Plant

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).)

REVISED TENTATIVE

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); Cal. Wat. Code § 13383):

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

REVISED TENTATIVE

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

REVISED TENTATIVE

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(l)(3), 122.61.)

REVISED TENTATIVE

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(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

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

B. Records of monitoring information shall include:

1. 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).)

REVISED TENTATIVE

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); Cal.Wat. Code § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 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).)

REVISED TENTATIVE

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

1. 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(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 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(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

REVISED

TENTATIVE

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(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report to the Regional 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(l)(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(l)(6)(ii)):

a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in part 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)

REVISED TENTATIVE

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(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

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

I. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the 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

REVISED

TENTATIVE

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).)

REVISED

TENTATIVE

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Table of Contents

I. General Monitoring Provisions E-2
II. Monitoring Locations E-6
III. Influent Monitoring Requirements E-6
  A. Monitoring Location INF-001 ..... E-6
IV. Effluent Monitoring Requirements E-7
  A. Monitoring Location EFF-001A, EFF-001B, and EFF-002 ..... E-7
V. Whole Effluent Toxicity Testing Requirements ..... E-11~~E-12~~
  A. Acute Toxicity ..... E-11~~E-12~~
VI. Land Discharge Monitoring Requirements E-19
VII. Reclamation Monitoring Requirements E-19
VIII. Receiving Water Monitoring Requirements – Surface Water ..... E-19~~E-20~~
  A. Monitoring Location RSW-001U and RSW-002D ..... E-19~~E-20~~
  B. Monitoring Location RSW-003U and RSW-004D ..... E-22~~E-23~~
IX. Other Monitoring Requirements E-25
X. Reporting Requirements E-27
  A. General Monitoring and Reporting Requirements E-27
  B. Self Monitoring Reports (SMRs) E-28
  C. Discharge Monitoring Reports (DMRs) E-31
  D. Other Reports E-31

List of Tables

Table E-1. Monitoring Station Locations E-6
Table E-2. Influent Monitoring E-7
Table E-3. Effluent Monitoring E-8
Table E-7a. Receiving Water Monitoring Requirements ..... E-20~~E-20~~
Table E-7b. Receiving Water Monitoring Requirements ..... E-22~~E-23~~
Table E-8. Monitoring Periods and Reporting Schedule E-28

REVISED TENTATIVE

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations, title 40, part 122.48 requires that all NPDES permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

REVISED TENTATIVE

I. GENERAL MONITORING PROVISIONS

A. All samples shall be representative of the waste discharge under conditions of peak load. Quarterly effluent analyses shall be performed during the months of February, May, August, and November. Semiannual analyses shall be performed during the months of February and August. Annual analyses shall be performed during the month of August (except for bioassessment monitoring, which will be conducted in the spring/summer). Biennial analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Water Board, state the reason why monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual, annual, and biennial analyses shall be reported in the second monthly monitoring report following the analysis.

B. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. parts 136.3, 136.4, and 136.5 (revised March 12, 2007); or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.

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

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

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

F. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Public Health (formerly known as the Department of Health Services) or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP."

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

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

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

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

a. When the pollutant under consideration is not included in Appendix 4, SIP;

b. When the discharger and the Regional Water Board agree to include in the permit a test method that is more sensitive than those specified in 40 C.F.R., part 136 (revised as of March 12, 2007);

REVISED TENTATIVE

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

d. When a discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 and proposes an appropriate ML for the matrix; or,

e. When the discharger uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are USEPA-approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the discharger, the Regional Water Board, and the State Water Resources Control Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

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

K. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with the limitations set forth in this Order.

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

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

a. 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 in advance by the United State Environmental Protection Agency (USEPA) pursuant to 40 C.F.R. part 136.

b. 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 Regional Water Board to be appropriate.

REVISED TENTATIVE

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

A watershed-wide Monitoring Program will be developed, within one year from the effective date of this Order and permit, for the Calleguas Creek Watershed, with the participation of the Regional Water Board and other stakeholders (which include the POTWs in Calleguas Creek watershed). The watershed-wide Monitoring Program should be consistent with TMDL-related monitoring efforts in the Calleguas Creek Watershed. The goals of the watershed-wide monitoring program will include evaluating or assessing: compliance with receiving water objectives, trends in surface water quality, impacts to beneficial uses, the health of the biological community, data needs for modeling contaminants of concern, and attaining the goals of the TMDLs under implementation in the Calleguas Creek Watershed. The Discharger shall participate in the development and implementation of the watershed-wide monitoring program, and submit a copy of the proposed program to the Regional Water Board.

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

Until such time when a watershed-wide monitoring program is developed, Camarillo Sanitary District shall implement the monitoring program in the following sections.

REVISED TENTATIVE

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
--	INF-001	Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained.
001A	EFF-001A	The effluent sampling station shall be located downstream of any inplant return flows and after the final disinfection process, where representative samples of the effluent can be obtained. Under normal conditions, treated effluent is discharged through Discharge Point 001A by gravity flow. Latitude 34°11' 40" and Longitude 119°00'00"
001B	EFF-001B	The effluent sampling station shall be located downstream of any inplant return flows and after the final disinfection process, where representative samples of the effluent can be obtained. Treated effluent is pumped and discharged through Discharge Point 001B when it is not possible to discharge through 001A, due to high water levels in the stream. Latitude 34°11' 40" and Longitude 119°00'00"
002	EFF-002	This future sampling station would be located below Potrero Road and would eventually replace Discharge Serial Nos. 001A and 001B. Approximate Latitude 34°09'30" and Longitude 119°03'30"
--	RSW-001U	Conejo Creek, 50 feet upstream of Discharge Serial No. 001
--	RSW-002D	Conejo Creek, downstream of Discharge Serial No. 001, at Howard Road crossing
--	RSW-003U	Calleguas Creek, 100 feet upstream of Discharge Serial No. 002
--	RSW-004D	Calleguas Creek, 100 feet downstream of Discharge Serial No. 002

III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to:

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

A. Monitoring Location INF-001

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

REVISED TENTATIVE

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	recorder	continuous[1]	[2]
pH	pH units	grab	weekly	[2]
Total suspended solids (TSS)	mg/L	24-hour composite	weekly	[2]
Biochemical oxygen demand $(BOD)_5$ 20°C	mg/L	24-hour composite	weekly	[2]
Chloride	mg/L	24-hour composite	monthly	[2]
Sulfate	mg/L	24-hour composite	monthly	[2]
Total dissolved solids (TDS)	mg/L	24-hour composite	monthly	[2]
Remaining USEPA Priority Pollutants[3] (excluding asbestos)	µg/L	24-hour composite/grab for VOCs, Cyanide, and Chromium VI	semiannually	[2]

REVISED

TENTATIVE

IV. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

- Determine compliance with NPDES permit conditions and water quality standards.
- Assess plant performance, identify operational problems and improve plant performance.
- Provide information

A. Monitoring Location EFF-001A, EFF-001B, and EFF-002

1. The Discharger shall monitor EFF-001A, EFF-001B, and EFF-002 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

---

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

[2] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the *Policy for Implementation of Toxics Standards for Inland Waters, Enclosed bays, and Estuaries of California* (State Implementation Policy or SIP), the analytical method with the lowest ML must be selected.

[3] Priority pollutants are those constituents referred to in 40 C.F.R. 401.15; a list of these pollutants is provided as Appendix A to 40 C.F.R. 423.

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Total waste flow	MGD	recorder	continuous[4]	[5]
Turbidity[6]	NTU	recorder	continuous[4]	[5]
Total residual chlorine	mg/L	recorder	continuous[7]	
Total residual chlorine	mg/L	grab	daily[8]	[5]
Total coliform[6]	CFU or MPN/100 mL	grab	weekly	[5]
Fecal coliform[6]	CFU or MPN/100 mL	grab	weekly	[5]
E.coli[9, 6]	CFU or MPN/100 mL	grab	weekly	[5]
Temperature	°F	grab	weekly	[5]
pH	pH units	grab	weekly	[5]
Settleable solids	mL/L	grab	weekly	[5]
Suspended solids	mg/L	24-hour composite	weekly	[5]
BOD_5 20°C	mg/L	24-hour composite	weekly[10]	[5]
Oil and Grease	mg/L	grab	quarterly	[5]

REVISED

TENTATIVE

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

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

[6] Coliform and turbidity samples shall be obtained at some point in the treatment process at a time when wastewater flow and characteristics are most demanding on the treatment facilities, filtration, and disinfection procedures. Fecal coliform testing shall be conducted only if total coliform test result is positive.

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

[8] Daily grab samples shall be collected at monitoring location EFF-001A, EFF-001B, and EFF-002 Monday through Friday only, except for holidays. Analytical results of daily grab samples will be used to determine compliance with total residual chlorine effluent limitation. Furthermore, additional monitoring requirements specified in section IV.A.2. shall be followed.

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

[10] If the result of the weekly BOD analysis yields a value greater than the 30-day average limit, the frequency of analysis shall be increased to daily within one week of knowledge of the test result for at least 30 days and until compliance with the 7-day and 30-day average BOD limits is demonstrated; after which the frequency shall revert to weekly.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Dissolved oxygen	mg/L	grab	quarterly	[5]
Total dissolved solids	mg/L	24-hour composite	monthly	[5]
Chloride	mg/L	24-hour composite	monthly	[5]
Sulfate	mg/L	24-hour composite	monthly	[5]
Boron	mg/L	24-hour composite	monthly	[5]
Fluoride	mg/L	24-hour composite	quarterly	[5]
Ammonia nitrogen[11]	mg/L	24-hour composite	monthly	[5]
Nitrate nitrogen	mg/L	24-hour composite	monthly	[5]
Nitrite nitrogen	mg/L	24-hour composite	monthly	[5]
Organic nitrogen	mg/L	24-hour composite	monthly	[5]
Total kjeldahl nitrogen (TKN)	mg/L	24-hour composite	monthly	[5]
Total nitrogen	mg/L	24-hour composite	monthly	[5]
Total phosphorus	mg/L	24-hour composite	monthly	[5]
Orthophosphate-P	mg/L	24-hour composite	quarterly	[5]
Surfactants (MBAS)[12]	mg/L	24-hour composite	monthly	[5]
Surfactants (CTAS)	mg/L	24-hour composite	quarterly	[5]
Total hardness ($CaCO_3$)	mg/L	24-hour composite	monthly	[5]
Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium)	PCi/L	24-hour composite	semiannually	[13]
Chronic toxicity	TUc	24-hour composite	monthly	[5]
Acute toxicity	% Survival	24-hour composite	quarterly	[5]
Antimony	µg/L	24-hour composite	monthly	[5]
Arsenic	µg/L	24-hour composite	monthly	[5]

REVISED

TENTATIVE

[11] Nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, organic nitrogen, pH, and temperature sampling shall be conducted concurrently.

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

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Beryllium	µg/L	24-hour composite	semiannually	[5]
Cadmium	µg/L	24-hour composite	monthly	[5]
Chromium III	µg/L	grab	semiannually	[5]
Chromium VI	µg/L	grab	semiannually	[5]
Copper	µg/L	24-hour composite	monthly	[5]
Iron	µg/L	24-hour composite	quarterly	[5]
Lead	µg/L	24-hour composite	semiannually	[5]
Mercury	µg/L	24-hour composite	monthly	[5]
Nickel	µg/L	24-hour composite	monthly	[5]
Selenium	µg/L	24-hour composite	monthly	[5]
Silver	µg/L	24-hour composite	semiannually	[5]
Thallium	µg/L	24-hour composite	semiannually	[5]
Zinc	µg/L	24-hour composite	semiannually	[5]
Cyanide	µg/L	grab	monthly	[5]
2,3,7,8-TCDD[14]	µg/L	24-hour composite	semiannually	[5]
Bromoform	µg/L	grab	semiannually	[5]
Dibromochloromethane	µg/L	grab	semiannually	[5]
Chloroform	µg/L	grab	semiannually	[5]
Bromodichloromethane	µg/L	grab	semiannually	[5]
Bis(2-ethylhexyl) phthalate	µg/L	24-hour composite	monthly	[5]
Aldrin	µg/L	24-hour composite	quarterly	[5]
Alpha-BHC	µg/L	24-hour composite	quarterly	[5]
Chlordane	µg/L	24-hour composite	quarterly	[5]
4-4'-DDT	µg/L	24-hour composite	quarterly	[5]
4,4'-DDE	µg/L	24-hour composite	quarterly	[5]
4,4'-DDD	µg/L	24-hour composite	quarterly	[5]
Dieldrin	µg/L	24-hour composite	quarterly	[5]
Alpha-Endosulfan	µg/L	24-hour composite	semiannually	[5]
Heptachlor epoxide	µg/L	24-hour composite	quarterly	[5]
Polychlorinated	µg/L	24-hour composite	quarterly	[5]

REVISED TENTATIVE

[14] In accordance with the SIP, the Discharger shall conduct effluent monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in the receiving water stations RSW-002D and RSW-004D, located downstream of the discharge point. The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i)., (i.e., $TEQ_i = C_i \times TEF_i$). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
biphenyls (PCBs)[15]				
Remaining USEPA Priority Pollutants[16] (excluding asbestos)	µg/L	24-hour composite/ grab for VOCs and Chromium VI	semiannually	[5]
Chlorpyrifos	µg/L	24-hour composite	quarterly	[5]
Diazinon	µg/L	24-hour composite	quarterly	[5]
Toxaphene	µg/L	24-hour composite	quarterly	[5]

2. Total Residual Chlorine Additional Monitoring

Continuous monitoring of total residual chlorine at EFF-001 shall serve as an internal trigger for the increased grab sampling at EFF-001 or EFF-002 if either of the following occurs, except as noted in item c:

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

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

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

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

1. Definition of Acute Toxicity

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

REVISED TENTATIVE

[15] Polychlorinated Biphenyls (PCBs) is the sum of aroclor 1016, aroclor 1221, aroclor 1232, aroclor 1242, aroclor 1248, aroclor 1254, and aroclor 1260.

[16] Priority pollutants are those constituents referred to in 40 C.F.R. 401.15; a list of these pollutants is provided as Appendix A to 40 C.F.R. 423.

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

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

2. Acute Toxicity Effluent Monitoring Program

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

b. **Test Species.** The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish discharges. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Discharger may have the option of using the inland silverslide, *Menidia beryllina*, instead of the topsmelt. The method for topsmelt is found in USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October, 2002 (EPA-821-R-02-012).

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

d. **Acute Toxicity Accelerated Monitoring.** If either of the effluent or receiving water toxicity requirements in section IV.A.1. h(i) and (ii), and section V.A.17.c., respectively, of this Order is not met, the Discharger shall conduct six additional tests approximately every two weeks, over a twelve-week period. The Discharger shall ensure that results of a failing acute toxicity test are received by the Discharger within 24 hours of completion of the test and the additional tests shall begin within 5 business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing.

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

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

REVISED TENTATIVE

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

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

REVISED

TENTATIVE

B. Chronic Toxicity Testing

1. Definition of Chronic Toxicity

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

2. Chronic Toxicity Effluent Monitoring Program

   a. **Test Methods**. The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100 % effluent samples or receiving water samples in accordance with USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, October 2002 (EPA-821-R-02-013) or USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, October 2002 (EPA-821-R-02-014), or current version.

   b. **Frequency**

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

      2. **Re-screening** Re-screening is required every 24 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests

demonstrates that the same species is the most sensitive then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is uncertainty as to whether the same species is still the most sensitive based on the test results, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five, suites.

3. Regular toxicity tests - After the screening period, monitoring shall be conducted monthly using the most sensitive species.

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

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

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

3. Accelerated Monitoring

If the chronic toxicity of the effluent or the receiving water downstream the discharge exceeds the monthly median effluent limitation~~trigger~~ of 1.0 TU_c, the Discharger shall conduct six additional tests of the water source that exceeded ~~the~~ 1.0 TUc ~~trigger~~ (effluent or downstream receiving water), approximately every two weeks, over a 12-week period. The Discharger shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 48-hours of the receipt of the result. However, if the chronic toxicity of the receiving water upstream of the discharge is greater than the downstream and the TUc of the effluent chronic toxicity test is less than or equal to a monthly median effluent limitation of 1 TU_c ~~trigger~~, then accelerated monitoring need not be implemented for the receiving water.

a. If any three out of the initial test and the six additional tests results exceed 1.0 TU_c the Discharger shall immediately implement the Initial Investigation TRE workplan. Otherwise, the Discharger may return to normal sampling.

b. If implementation of the initial investigation TRE workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the normal sampling frequency required in Table 3 and Table 4 of this MRP.

c. If all of the six additional tests required above do not exceed 1 TUc, then the Discharger may return to the normal sampling frequency.

REVISED TENTATIVE

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

C. Quality Assurance

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

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

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

D. Preparation of an Initial Investigation TRE Workplan

The Discharger shall ~~prepare and submit a copy of the Discharger's~~ update its existing initial investigation TRE workplan and submit a copy of the revised initial investigation TRE workplan to the Executive Officer of the Regional Water Board for approval within 30 days of the date of adoption of this permit. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the TRE Workplan must contain the provisions in Attachment G. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

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

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

3. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP section V.E.3. for guidance manuals.

E. Steps in Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)

REVISED

TENTATIVE

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

   a. Future actions to investigate and identify the cause of toxicity;

   b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and,

   c. A schedule for these actions.

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

   a. Step 1 includes basic data collection.

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

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

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

   e. Step 5 evaluates in-plant treatment options.

   f. Step 6 consists of confirmation once a toxicity control method has been implemented. Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity violations.

3. The Discharger shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/R-96-054 (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.

REVISED

TENTATIVE

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

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

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

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

   b. If the results of any of the six accelerated tests exceed the acute toxicity limitation, or the chronic toxicity effluent limitation~~trigger~~, then the Discharger shall continue to monitor weekly until six consecutive weekly tests are in compliance. At that time, the Discharger may resume regular monthly testing.

   c. If the results of three of the six tests exceed the 1 TUc effluent limitation ~~trigger~~, the Discharger shall initiate a TRE.

   d. If implementation of the initial investigation TRE workplan (see item B.3.b above) indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the regular testing frequency.

F. Ammonia Removal

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

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

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

REVISED TENTATIVE

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

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

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

G. Reporting

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

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

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

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

   a. sample date(s)

   b. test initiation date

   c. test species

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

REVISED TENTATIVE

e. NOEC values in percent effluent

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

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

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

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

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

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

VI. LAND DISCHARGE MONITORING REQUIREMENTS

Not Applicable.

VII. RECLAMATION MONITORING REQUIREMENTS

The production, distribution, and reuse of recycled water are presently regulated under a separate Order (Water Reclamation Requirements [WRRs] Order No. 87-132), adopted by this Board on September 28, 1987. The Monitoring and Reporting Program, CI No. 6178, for the WRR was modified by the Executive Officer on January 6, 1999. All other WRR requirements and provisions remain unchanged.

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Monitoring Location RSW-001U and RSW-002D

1. The Discharger shall monitor Conejo Creek at RSW-001U (50 feet upstream of Discharge Serial 001) and RSW-002D (downstream of Discharge Serial 001 at Howard Road crossing) as follows (only if there is a discharge from Discharge Serial No. 001):

REVISED TENTATIVE

Table E-7a. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	grab	weekly	[17]
pH [18]	pH units	grab	weekly	[17]
Temperature[18]	°F	grab	weekly	[17]
Dissolved Oxygen	mg/L	grab	weekly	[17]
Total residual chlorine	mg/L	grab	weekly	[17]
Total coliform	CFU or MPN/100 mL	grab	weekly	[17]
Fecal coliform[19]	CFU or MPN/100 mL	grab	weekly	[17]
E coli[20]	CFU or MPN/100 mL	grab	weekly	[17]
Turbidity	NTU	grab	monthly	[17]
BOD_5 20°C	mg/L	grab	monthly	[17]
Total dissolved solids	mg/L	grab	monthly	[17]
Conductivity	µmho/cm	grab	monthly	[17]
Chloride	mg/L	grab	monthly	[17]
Sulfates	mg/L	grab	monthly	[17]
Boron	mg/L	grab	monthly	[17]
Fluoride	mg/L	grab	quarterly	[17]
Ammonia nitrogen [18]	mg/L	grab	monthly	[17]
Nitrate nitrogen [18]	mg/L	grab	monthly	[17]
Nitrite nitrogen [18]	mg/L	grab	monthly	[17]
Organic nitrogen [18]	mg/L	grab	monthly	[17]
Total kjeldahl nitrogen (TKN) [18]	mg/L	grab	monthly	[17]
Total nitrogen	mg/L	grab	monthly	[17]
Total phosphorus	mg/L	grab	monthly	[17]
Orthophosphate-P	mg/L	grab	quarterly	[17]
Algal biomass[21]	mg/cm^2	grab	annually	[17]
Surfactants (MBAS)[22]	mg/L	grab	monthly	[17]

REVISED

TENTATIVE

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

[18] Nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, organic nitrogen, pH, and temperature sampling shall be conducted concurrently.

[19] Fecal coliform testing shall be conducted only if total coliform test result is positive.

[20] E. coli testing shall be conducted only if fecal coliform testing is positive. If the fecal coliform analysis results in no detection, a result of less than (<) the reporting limit for fecal coliform will be reported for E. coli.

[21] Algal biomass or chlorophyll a samples shall be collected by obtaining scrapings from the substrate. This will be a measure of benthic algae, rather than algae in the water column. Percent cover shall also be reported. Algal biomass monitoring shall be conducted concurrently with bioassessment monitoring.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Surfactants (CTAS)	mg/L	grab	quarterly	[17]
Chemical oxygen demand (COD)	mg/L	grab	monthly	[17]
Oil and grease	mg/L	grab	quarterly	[17]
Settleable solids	ml/L	grab	monthly	[17]
Suspended solids	mg/L	grab	monthly	[17]
Total hardness ($CaCO_3$)	mg/L	grab	monthly	[17]
Chronic toxicity	TUc	grab	quarterly	[17]
Acute toxicity	% Survival	grab	semiannually	[17]
MTBE	µg/L	grab	annually	[17]
Antimony	µg/L	grab	monthly	[17]
Arsenic	µg/L	grab	semiannually	[17]
Beryllium	µg/L	grab	semiannually	[17]
Cadmium	µg/L	grab	monthly	[17]
Chromium III	µg/L	grab	semiannually	[17]
Chromium VI	µg/L	grab	semiannually	[17]
Copper	µg/L	grab	monthly	[17]
Iron	µg/L	grab	quarterly	[17]
Lead	µg/L	grab	semiannually	[17]
Mercury	µg/L	grab	monthly	[17]
Nickel	µg/L	grab	monthly	[17]
Selenium	µg/L	grab	monthly	[17]
Silver	µg/L	grab	semiannually	[17]
Thallium	µg/L	grab	semiannually	[17]
Zinc	µg/L	grab	semiannually	[17]
Cyanide	µg/L	grab	semiannually	[17]
2,3,7,8-TCDD (Dioxin)[23]	µg/L	grab	semiannually	[17]
Bromoform	µg/L	grab	semiannually	[17]

REVISED TENTATIVE

[22] MBAS is methylene blue active substances and CTAS is cobalt thiocyanate active substances. Reaches of the Calleguas Creek Watershed are unlined in several reaches downstream of the points of wastewater discharge and are designated with the GWR beneficial use in the Basin Plan. Monitoring is required to assess compliance with the Title 22-based limit prescribed to protect underlying groundwater quality with the MUN beneficial use.

[23] In accordance with the SIP, the Discharger shall conduct effluent monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in the receiving water Station RSW-002D, located downstream of the discharge point. The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i)., (i.e., $TEQ_i = C_i \times TEF_i$). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dibromochloromethane	µg/L	grab	semiannually	[17]
Chloroform	µg/L	grab	semiannually	[17]
Bromodichloromethane	µg/L	grab	semiannually	[17]
Aldrin	µg/L	grab	quarterly	[17]
Alpha-BHC	µg/L	grab	quarterly	[17]
Chlordane	µg/L	grab	quarterly	[17]
4,4'-DDT	µg/L	grab	quarterly	[17]
4,4'-DDE	µg/L	grab	quarterly	[17]
4,4'-DDD	µg/L	grab	quarterly	[17]
Dieldrin	µg/L	grab	quarterly	[17]
Alpha-Endosulfan	µg/L	grab	quarterly	[17]
Heptachlor Epoxide	µg/L	grab	quarterly	[17]
Polychlorinated biphenyls (PCBs)[24]	µg/L	grab	quarterly	[17]
Toxaphene	µg/L	grab	quarterly	[17]
Chlorpyrifos[25]	µg/L	grab	quarterly	[17]
Diazinon	µg/L	grab	quarterly	[17]
Perchlorate	µg/L	grab	annually	[17]
1,4-Dioxane	µg/L	grab	annually	[17]
1,2,3-Trichloropropane	µg/L	grab	annually	[17]
Remaining USEPA Priority Pollutants (excluding asbestos)	µg/L	24-hour composite/ grab for VOCs & Chromium VI	semiannually	[17]

REVISED

TENTATIVE

B. Monitoring Location RSW-003U and RSW-004D

1. The Discharger shall monitor Calleguas Creek at RSW-003U (100 feet upstream of Discharge Serial 002) and RSW-004D (100 feet downstream of Discharge Serial 002) as follows (only if there is a discharge from Discharge Serial No. 002):

Table E-7b. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	grab	weekly	[26]

[24] PCBs is the sum of aroclor 1016, aroclor 1221, aroclor 1232, aroclor 1242, aroclor 1248, aroclor 1254, and aroclor 1260.

[25] Chlorpyrifos and diazinon sampling shall be conducted concurrently with the receiving water chronic toxicity sampling.

[26] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Board. For

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH [27]	pH units	grab	weekly	[26]
Temperature[27]	°F	grab	weekly	[26]
Dissolved Oxygen	mg/L	grab	weekly	[26]
Total residual chlorine	mg/L	grab	weekly	[26]
Total coliform	CFU or MPN/100 mL	grab	weekly	[26]
Fecal coliform[28]	CFU or MPN/100 mL	grab	weekly	[26]
E coli[29]	CFU or MPN/100 mL	grab	weekly	[26]
Turbidity	NTU	grab	monthly	[26]
BOD_5 20°C	mg/L	grab	monthly	[26]
Total dissolved solids	mg/L	grab	monthly	[26]
Conductivity	µmho/cm	grab	monthly	[26]
Chloride	mg/L	grab	monthly	[26]
Sulfates	mg/L	grab	monthly	[26]
Boron	mg/L	grab	monthly	[26]
Fluoride	mg/L	grab	quarterly	[26]
Ammonia nitrogen [27]	mg/L	grab	monthly	[26]
Nitrate nitrogen [27]	mg/L	grab	monthly	[26]
Nitrite nitrogen [27]	mg/L	grab	monthly	[26]
Organic nitrogen [27]	mg/L	grab	monthly	[26]
Total kjeldahl nitrogen (TKN) [27]	mg/L	grab	monthly	[26]
Total nitrogen[27]	mg/L	grab	monthly	[26]
Total phosphorus	mg/L	grab	monthly	[26]
Orthophosphate-P	mg/L	grab	quarterly	[26]
Algal biomass[30]	mg/L	grab	annually	[26]
Surfactants (MBAS)[31]	mg/L	grab	monthly	[26]

REVISED

TENTATIVE

any pollutant whose effluent limitation is lower than all the MLs specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

[27] Nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, organic nitrogen, pH, and temperature sampling shall be conducted concurrently.

[28] Fecal coliform testing shall be conducted only if total coliform test result is positive.

[29] E. coli testing shall be conducted only if fecal coliform testing is positive. If the fecal coliform analysis results in no detection, a result of less than (<) the reporting limit for fecal coliform will be reported for E. coli.

[30] Algal biomass or chlorophyll a samples shall be collected by obtaining scrapings from the substrate. This will be a measure of benthic algae, rather than algae in the water column. Percent cover shall also be reported. Algal biomass monitoring shall be conducted concurrently with bioassessment monitoring.

[31] MBAS is methylene blue active substances and CTAS is cobalt thiocyanate active substances. Reaches of the Calleguas Creek Watershed are unlined in several reaches downstream of the points of wastewater discharge and are designated with the GWR beneficial use in the Basin Plan. Monitoring is required to assess compliance with the Title 22-based limit prescribed to protect underlying groundwater quality with the MUN beneficial use.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Surfactants (CTAS)	mg/L	grab	quarterly	[26]
Chemical oxygen demand (COD)	mg/L	grab	monthly	[26]
Oil and grease	mg/L	grab	quarterly	[26]
Settleable solids	ml/L	grab	monthly	[26]
Suspended solids	mg/L	grab	monthly	[26]
Total hardness ($CaCO_3$)	mg/L	grab	monthly	[26]
Chronic toxicity	TUc	grab	quarterly	[26]
Acute toxicity	% Survival	grab	semiannually	[26]
MTBE	µg/L	grab	annually	[26]
Antimony	µg/L	grab	monthly	[26]
Arsenic	µg/L	grab	semiannually	[26]
Beryllium	µg/L	grab	semiannually	[26]
Cadmium	µg/L	grab	monthly	[26]
Chromium III	µg/L	grab	semiannually	[26]
Chromium VI	µg/L	grab	semiannually	[26]
Copper	µg/L	grab	monthly	[26]
Iron	µg/L	grab	quarterly	[26]
Lead	µg/L	grab	semiannually	[26]
Mercury	µg/L	grab	monthly	[26]
Nickel	µg/L	grab	monthly	[26]
Selenium	µg/L	grab	monthly	[26]
Silver	µg/L	grab	semiannually	[26]
Thallium	µg/L	grab	semiannually	[26]
Zinc	µg/L	grab	semiannually	[26]
Cyanide	µg/L	grab	semiannually	[26]
2,3,7,8-TCDD (Dioxin)[32]	µg/L	grab	semiannually	[26]
Bromoform	µg/L	grab	semiannually	[26]
Dibromochloromethane	µg/L	grab	semiannually	[26]
Chloroform	µg/L	grab	semiannually	[26]
Bromodichloromethane	µg/L	grab	semiannually	[26]
Aldrin	µg/L	grab	quarterly	[26]
Alpha-BHC	µg/L	grab	quarterly	[26]

REVISED

TENTATIVE

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

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chlordane	µg/L	grab	quarterly	[26]
4,4'-DDT	µg/L	grab	quarterly	[26]
4,4'-DDE	µg/L	grab	quarterly	[26]
4,4'-DDD	µg/L	grab	quarterly	[26]
Dieldrin	µg/L	grab	quarterly	[26]
Alpha-Endosulfan	µg/L	grab	quarterly	[26]
Heptachlor Epoxide	µg/L	grab	quarterly	[26]
Polychlorinated biphenyls (PCBs)[33]	µg/L	grab	quarterly	[26]
Toxaphene	µg/L	grab	quarterly	[26]
Chlorpyrifos[34]	µg/L	grab	quarterly	[26]
Diazinon	µg/L	grab	quarterly	[26]
Perchlorate	µg/L	grab	annually	[26]
1,4-Dioxane	µg/L	grab	annually	[26]
1,2,3-Trichloropropane	µg/L	grab	annually	[26]
Remaining USEPA Priority Pollutants (excluding asbestos)	µg/L	24-hour composite/ grab for VOCs and Chromium VI	semiannually	[26]

REVISED

TENTATIVE

IX. OTHER MONITORING REQUIREMENTS

A. Watershed Monitoring

The goals of the Watershed-wide Monitoring Program for the Calleguas Creek Watershed are to:

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

[33] PCBs is the sum of aroclor 1016, aroclor 1221, aroclor 1232, aroclor 1242, aroclor 1248, aroclor 1254, and aroclor 1260.

[34] Chlorpyrifos and diazinon sampling shall be conducted concurrently with the receiving water chronic toxicity sampling.

1. The Discharger shall participate in the implementation of the Watershed-wide Monitoring Program. The Discharger's responsibilities under the Watershed-wide Monitoring Program are described in the Receiving Water Monitoring Requirements section. To achieve the goals of the Watershed-wide Monitoring Program, revisions to the Receiving Water Monitoring Requirements will be made under the direction of USEPA and the Regional Water Board. The District has participated with stakeholders in the Calleguas Creek Watershed, to develop a watershed-wide monitoring program. The Discharger shall implement the watershed-wide monitoring program and shall submit quarterly progress reports detailing ongoing efforts towards the implementation of the Watershed-wide Monitoring Program. The first report should be received in the Regional Board office by January 15, 2009.

2. In coordination with interested stakeholders in the Calleguas Creek Watershed, the Discharger shall conduct instream bioassessment monitoring once a year, during the spring/summer period (unless an alternate sampling period is approved by the Executive Officer). Over time, bioassessment monitoring will provide a measure of the physical condition of the waterbody and the integrity of its biological communities.

   A. The bioassessment program shall include an analysis of the community structure of the instream macroinvertebrate assemblages and physical habitat assessment at the monitoring stations RSW-001U, RSW-002D, RSW-003U, and RSW-004D.

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

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

REVISED

TENTATIVE

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

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

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

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (**Attachment D**) related to monitoring, reporting, and recordkeeping.

2. If there is no discharge during any reporting period, the report shall so state.

3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.

4. The Discharger shall inform the Regional Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

REVISED TENTATIVE

B. Self Monitoring Reports (SMRs)

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

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order (other than for process/operational control, start up, research, or equipment testing), the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-8. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	**Permit effective date**	**All**	**Submit with monthly SMR**
Daily	**Permit effective date**	**(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.**	**Submit with monthly SMR**
Weekly	**Sunday following permit effective date or on permit effective date if on a Sunday**	**Sunday through Saturday**	**Submit with monthly SMR**
Monthly	**First day of calendar month following permit effective date or on permit effective date if that date is first day of the month>**	**1st day of calendar month through last day of calendar month**	**By the 15th day of the second month after the month of sampling**
Quarterly	**Closest of February1, May 1, August 1, or November 1 following permit effective date.**	**January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31**	**May 15 August 15 November 15 February 15**
Semiannually	**Closest of February 1 or August 1 following permit effective date.**	**January 1 through June 30 July 1 through December 31**	**May 15 November 15**

REVISED

TENTATIVE

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Annually	**January 1 following permit effective date**	**January 1 through December 31**	**April 15**
Biennially (CECs)	**January 1, 2012**	**1st half of calendar year**	**December 31**

REVISED TENTATIVE

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in part 136.

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

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

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

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

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

d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State 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).

6. Multiple Sample Data. When determining compliance with an AMEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute median in place of the arithmetic mean in accordance with the following procedure:

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

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

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

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

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

   c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below: (Reference the reports to Compliance File No. 1278 to facilitate routing to the appropriate staff and file.)

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

REVISED TENTATIVE

REVISED TENTATIVE

C. Discharge Monitoring Reports (DMRs)

1. As described in section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

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

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

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

D. Other Reports

1. Annual Summary Report

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

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

a. A list of the pollutant(s) that triggered reasonable potential;
b. The Basin Plan or CTR criteria that was exceeded for each given pollutant;
c. The concentration of the pollutant(s);
d. The test method used to analyze the sample; and,
e. The date and time of sample collection.

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

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

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

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

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

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

REVISED TENTATIVE

ATTACHMENT F – FACT SHEET

Table of Contents

I. Permit Information F-3
II. Facility Description F-4
A. Description of Wastewater and Biosolids Treatment or Controls F-4
B. Discharge Points and Receiving Waters F-5
C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data F-5
D. Compliance Summary F-7
E. Planned Changes F-8
III. Applicable Plans, Policies, and Regulations F-8
A. Legal Authorities ..... F-9~~F-8~~
B. California Environmental Quality Act (CEQA) F-9
C. State and Federal Regulations, Policies, and Plans F-9
D. Impaired Water Bodies on CWA 303(d) List F-12
E. Other Plans, Polices and Regulations ..... F-13~~F-12~~
IV. Rationale For Effluent Limitations and Discharge Specifications F-16
A. Discharge Prohibitions ..... F-17~~F-16~~
B. Technology-Based Effluent Limitations (TBELs) ..... F-17~~F-16~~
1. Scope and Authority ..... F-17~~F-16~~
2. Applicable TBELS F-18
C. Water Quality-Based Effluent Limitations (WQBELs) F-19
1. Scope and Authority F-19
2. Applicable Beneficial Uses and Water Quality Criteria and Objectives F-19
3. Determining the Need for WQBELs F-29
4. WQBEL Calculations F-30
5. Whole Effluent Toxicity (WET) F-37
D. Final Effluent Limitations F-38
1. Satisfaction of Anti-Backsliding Requirements F-38
2. Satisfaction of Antidegradation Policy F-38
3. Stringency of Requirements for Individual Pollutants F-39
E. Interim Effluent Limitations F-44
F. Land Discharge Specifications F-44
G. Reclamation Specifications F-44
V. Rationale for Receiving Water Limitations F-44
A. Surface Water F-44
B. Groundwater F-44
VI. Rationale for Monitoring and Reporting Requirements F-44
A. Influent Monitoring F-45
B. Effluent Monitoring F-45
C. WET Testing Requirements F-48
D. Receiving Water Monitoring F-48
1. Surface Water F-48
2. Groundwater F-48

REVISED TENTATIVE

E. Other Monitoring Requirements F-48
VII. Rationale for Provisions ..... F-50~~F-49~~
A. Standard Provisions ..... F-50~~F-49~~
B. Special Provisions ..... F-50~~F-49~~
1. Reopener Provisions ..... F-50~~F-49~~
2. Special Studies and Additional Monitoring Requirements ..... F-50~~F-49~~
3. Best Management Practices and Pollution Prevention ..... F-51~~F-50~~
4. Construction, Operation, and Maintenance Specifications ..... F-52~~F-51~~
5. Special Provisions for Municipal Facilities (POTWs Only) ..... F-52~~F-51~~
6. Other Special Provisions ..... F-53~~F-52~~
7. Compliance Schedules ..... F-53~~F-52~~
VIII. Public Participation ..... F-53~~F-52~~
A. Notification of Interested Parties ..... F-53~~F-52~~
B. Written Comments ..... F-53~~F-52~~
C. Public Hearing ..... F-54~~F-53~~
D. Nature of Hearing ..... F-54~~F-53~~
E. Parties to the Hearing ..... F-54~~F-53~~
F. Public Comments and Submittal of Evidence ..... F-54~~F-53~~
G. Hearing Procedure ..... F-55~~F-54~~
H. Waste Discharge Requirements Petitions ..... F-56~~F-55~~
I. Information and Copying ..... F-56~~F-55~~
J. Register of Interested Persons ..... F-56~~F-55~~
K. Additional Information ..... F-56~~F-55~~

List of Tables

Table F-1. Facility Information F-3
Table F-2a. Historic Effluent Limitations and Monitoring Data F-5
Table F-2b. Discharger Proposed Actions and Timeline F-8
Table F-3a. Basin Plan Beneficial Uses ..... F-10~~F-9~~
Table F-3b. Basin Plan Beneficial Uses F-10
Table F-4. Summary of Technology-based Effluent Limitations F-18
Table F-5. Summary of Water Quality-based Effluent Limitations ..... F-36~~F-35~~
Table F-6. Summary of Final Effluent Limitations F-40

REVISED TENTATIVE

ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

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

REVISED TENTATIVE

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	**4A560100001**
Discharger	**Camarillo Sanitary District**
Name of Facility	**Camarillo Water Reclamation Plant**
Facility Address	**150 Howard Road**
	Camarillo, CA 93012
	Ventura County
Facility Contact, Title and Phone	**Mark Richardson, Sanitary Superintendent, (805) 383-5665**
Authorized Person to Sign and Submit Reports	**Tom Fox, Assistant District Manager, (805) 388-5355**
Mailing Address	**P.O. Box 248, Camarillo, CA 93011**
Billing Address	**Same as above**
Type of Facility	**Publicly Owned Treatment Works**
Major or Minor Facility	**Major**
Threat to Water Quality	**1**
Complexity	**A**
Pretreatment Program	**Y**
Reclamation Requirements	**Producer/User**
Facility Permitted Flow	**7.25 Million Gallons per Day (MGD)**
Facility Design Flow	**7.25 MGD**
Watershed	**Calleguas Creek**
Receiving Water	**Conejo Creek**
Receiving Water Type	**Inland surface water**

A. Camarillo Sanitary District (hereinafter Discharger) is the owner and operator of the Camarillo Water Reclamation Plant (hereinafter Facility), a Publicly Owned Treatment Works (POTW).

For the purposes of this Order, references to the "discharger" or "permittee" in

applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. The Facility discharges wastewater to Conejo Creek, a water of the United States, and is currently regulated by Order No. R4-2003-0079 (as revised by Order No. R4-2004-0121) and National Pollutant Elimination System (NPDES) permit No. CA0053597, which was adopted on June 5, 2003 and expires on May 10, 2008.

C. The Discharger filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on September 17, 2007. Supplemental information was requested on October 22, 2007, and received on November 8, 2007. A site visit was conducted on March 18, 2008, to observe operations and collect additional data to develop permit limitations and conditions. The application was deemed complete on November 8, 2007, so the NPDES permit was administratively extended. A follow-up inspection was conducted on January 20, 2011.

D. On April 3, 2008, a tentative NPDES permit was mailed out to interested parties. Subsequent revised tentatives were mailed on May 6, May 20, July 8, and August 12, 2008, incorporating comments received. However, the NPDES permit renewal was postponed awaiting the development of a state-wide policy for toxicity. Although the state-wide policy for toxicity has not been finalized, the permit renewal process must proceed, because the Discharger is in need of the interim limits afforded to them in several Total Maximum Daily Loads (TMDLs) for the Calleguas Creek Watershed. Following the adoption of a state-wide policy for toxicity, and its subsequent approval by the Office of Administrative Law (OAL) and the United States Environmental Protection Agency (USEPA), the NPDES permit may be reopened to make any necessary changes to the NPDES permit, so that it conforms to the new policy.

II. FACILITY DESCRIPTION

The Discharger owns and operates the Camarillo Water Reclamation Plant (Camarillo WRP), a tertiary wastewater treatment plant located at 150 Howard Road, Camarillo, California. Attachment B shows the location of the plant. The Camarillo WRP currently receives wastewater from the City of Camarillo and the County of Ventura. The wastewater is a mixture of domestic and industrial wastewater that is pre-treated pursuant to 40 C.F.R. part 403. The Camarillo WRP has a design capacity of 7.25 Million Gallons per Day (MGD) and serves an estimated population of 42,150.

A. Description of Wastewater and Biosolids Treatment or Controls

1. The Camarillo WRP was formerly an advanced secondary treatment plant. However, it was recently upgraded and is now a tertiary treatment plant. Treatment consists of comminution, primary sedimentation, activated sludge treatment, secondary clarification, filtration, chlorination and dechlorination.

REVISED TENTATIVE

2. Primary sludge is anaerobically digested and waste activated sludge is thickened and aerobically digested. Sewage solids separated from the wastewater are dried in sludge drying beds and transported off site. The majority of the sludge is hauled to a compost facility in Kern County, California. A small fraction is disposed of at a landfill.

B. Discharge Points and Receiving Waters

Under normal conditions, treated wastewater is discharged by gravity flow from Discharge Point 001A (see table on cover page) to Conejo Creek, a water of the United States and tributary to Calleguas Creek within Calleguas Creek Watershed. However, when the water level rises in the stream to the extent that discharge point 001A is partially or completely submerged (i.e., during heavy storm events), the final effluent is pumped to Conejo Creek, through Discharge Serial No. 001 B, located approximately 40 feet away from the Discharge Serial No. 001 A. Discharge Serial Points 001 A and 001 B have the same approximate coordinates: Latitude 34º 11' 40" North, Longitude 119º 00' 00" West. In the last permit cycle, Camarillo SD had requested the addition of another discharge point (Discharge Serial Point No. 002, approximate location: latitude 34°09'30" North, longitude 119°03'30"West), which would discharge treated effluent to Calleguas Creek, at a point below its intersection with Potrero Road. Construction of the new Discharge Point is pending environmental review. However, it is possible that Discharge Point 002 may be constructed and used within the lifetime of this NPDES Order.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point 001A (Monitoring Location EFF-001) and representative monitoring data from the term of the previous Order are as follows:

Table F-2a. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From 2003 – To December 2010)		
		Average Monthly	Ave. Weekly	Max. Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Biochemical Oxygen Demand $(BOD)_5$ 20°C	mg/L	20	30	45	3.5	--	7.1
Total Suspended Solids (TSS)	mg/L	15	40	45	6.0	--	9.2
Oil and grease	mg/L	10	--	15	ND	--	ND
Residual chlorine	mg/L	--	--	0.1	ND	--	ND
Total Dissolved Solids (TDS)	mg/L	850	--	--	1013	--	1330
Chloride	mg/L	--	--	190	188	--	200

REVISED TENTATIVE

Parameter	Units	Effluent Limitation			Monitoring Data (From 2003 – To December 2010)		
		Average Monthly	Ave. Weekly	Max. Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Sulfate	mg/L	250	--	--	255	--	307
Boron	mg/L	1	--	--	0.65	--	0.73
Fluoride	mg/L	1.4	--	--	0.38	--	0.42
Nitrate + Nitrite as N	mg/L	9	--	--	7.18	--	10.34
Ammonia as N	mg/L	3.5	--	--	2.23	--	7.8
Total Kjeldahl Nitrogen (TKN)	mg/L	--	--	--	2.83	--	3.7
Phosphorus (total P)	mg/L	--	--	--	2.0	--	3.97
MBAS	mg/L	0.5	--	--	0.03	--	0.08
CTAS	mg/L	--	--	--	<2	--	<2
Antimony	µg/L	6	--	--	90	--	<1
Arsenic	µg/L	50	--	--	13.1	--	13.1
Cadmium	µg/L	5	--	--	3	--	3
Chromium	µg/L	50	--	--	5	--	5
Copper	µg/L	1000	--	--	166	--	166
Lead	µg/L	50	--	--	0.15	--	0.15
Mercury	µg/L	2	--	--	<0.02	--	<0.02
Nickel	µg/L	100	--	--	6	--	6
Selenium	µg/L	50	--	--	3.3	--	3.3
Silver	µg/L	50	--	--	5.4	--	5.4
Thallium	µg/L	--	--	--	3.9	--	3.9
Zinc	µg/L	5000	--	--	51	--	51
Cyanide	µg/L	3.9	--	9.4	20	--	20
Barium	µg/L	1000	--	--	30	--	30
Iron	µg/L	300	--	--	182	--	182
Chlorodibromomethane	µg/L	--	--	--	3.8	--	3.8
Chloroform	µg/L	--	--	--	15	--	15
Dichlorobromomethane	µg/L	--	--	--	7.6	--	7.6
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	86	--	86
1,4-Dichlorobenzene	µg/L	5	--	--	<1	--	<5
Lindane (Gamma-BHC)	µg/L	0.2	--	--	0.0081	--	0.0081
Chlordane	µg/L	0.1	--	--	<0.059	--	<0.059
4,4-DDE	µg/L	0.00059	--	0.0012	0.0359	--	0.0359
4,4-DDD	µg/L	0.00084	--	0.0017	0.0075	--	0.0075
Endrin	µg/L	2	--	--	<0.0095	--	<0.0095
Aroclor 1254	µg/L	0.00017	--	0.00034	<0.1	--	<0.1
Toxaphene	µg/L	3	--	--	<0.3	--	<0.3
Methoxychlor	µg/L	40	--	--	<0.05	--	<0.005
Di-n-butyl phthalate	µg/L	--	--	--	0.28	--	1.1

REVISED TENTATIVE

Parameter	Units	Effluent Limitation			Monitoring Data (From 2003 – To December 2010)		
		Average Monthly	Ave. Weekly	Max. Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Diethyl phthalate	µg/L	--	--	--	0.78	--	0.42

All other priority pollutants were not detected in the effluent.

D. Compliance Summary

Monitoring data from 2003 to 2007, indicate that the Discharger has consistently complied with the final effluent limitations and interim effluent limitations of Order No. R4-2003-0079, and with the interim effluent limitations in its Time Schedule Orders (TSOs), except for exceedances of: chloride, sulfate, TDS, turbidity, cyanide, total coliform, ammonia nitrogen, and residual chlorine.

TSO No. R4-2003-0080 was adopted concurrently with the NPDES permit, Order No. R4-2003-0079. This TSO required the Discharger to:

1. Achieve compliance with the nitrate plus nitrite as nitrogen and nitrite nitrogen limitations within four years of the effective date of the TMDL;

2. Achieve compliance with the ammonia nitrogen limitation by October 24, 2004; and,

3. Develop a workplan which identified implementation tasks that would lead to attainment of the chloride and other salt water quality objective in the Calleguas Creek Watershed.

The Discharger complied with the nitrate plus nitrite nitrogen interim effluent limitations specified in TSO No. R4-2003-0080.

TSO No. R4-2007-0010 was administratively issued to the Discharger on April 2, 2007 and expired on January 31, 2011. This TSO prescribed performance-based interim limits for TDS and sulfate, and requires the Discharger to achieve compliance with the TDS and sulfate final effluent limitations.

The Discharger, in conjunction with other stakeholders, is implementing actions to achieve a watershed salt balance as required by the *Calleguas Creek Salts Total Maximum Daily Load (Salts TMDL)*. The Discharger is taking actions consistent with the first phase of the *Salts TMDL* Implementation plan and will begin implementing phase 2 during this permit term. Actions that are being implemented by the discharger and other stakeholders in phase 1 include:

1. Water conservation

REVISED

TENTATIVE

2. Expansion of water recycling distribution systems and connection to the Camrosa Water District recycling system.

3. Evaluation, planning and design of a regional desalter in the Camarillo area.

The Discharger is making progress towards achieving compliance with the final effluent limitations for TDS, chloride, and sulfate, based on the ~~Calleguas Creek Salts Total Maximum Daily Load (~~*Salts TMDL*~~)~~ Waste Load Allocations (WLAs) included in the accompanying Order. The following is a list of more specific actions taken by the Discharger and other stakeholders, as well as proposed actions in the near future:

Table F-2b. Discharger Proposed Actions and Timeline

Action	Date
Conduct a Pilot Project for de-salting Groundwater (GW)-Camarillo	2007
Submit application requesting permission to increase GW pumping – Fox Canyon Groundwater Management Agency (GMA)	January 2008
Conduct a Study to Seek Location for Desalter – Calleguas Municipal Water District (MWD)	March 2008 - October 2010
Initial partnership between stakeholders to share cost of CEQA documentation and GW study	March 2011
Begin Design and Property Acquisition	March 2012
Begin Construction of Desalter	March 2013
Begin Operating Desalter	December 2014

E. Planned Changes

The Camarillo WRP's treatment system has recently been upgraded to include filtration as a new process. As such the facility is now considered a tertiary POTW. The facility has also undergone changes with respect to nitrogen removal, in order to comply with the Nutrient TMDL for Calleguas Creek Watershed. In the future, the facility plans on eliminating its surface water discharge from Discharge Points 001 A & 001 B. Treated effluent would be recycled or discharged through the new Discharge Point 002. Design of the new discharge point has been completed. However, at this point in time the new discharge point has not been constructed.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

REVISED TENTATIVE

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (CWC) (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

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

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Quality Control Board (Regional Water Board) adopted a Water Quality Control Plan for the Los Angeles Region (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 (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to Conejo Creek and Calleguas Creek tributaries are as follows:

REVISED TENTATIVE

Table F-3a. Basin Plan Beneficial Uses

Discharge Point(s)	Receiving Water Name	Beneficial Use(s)
001A, 001B	Conejo Creek (Hydro Unit 403.12)	Existing: industrial service supply (IND); industrial process supply (PROC); agricultural supply (AGR); ground water recharge (GWR); contact (REC-1) and non-contact water recreation (REC-2); warm freshwater habitat (WARM); and wildlife habitat (WILD). Potential: Municipal and domestic water supply (p*MUN).
	Calleguas Creek (Hydro Unit 403.12)	Existing: IND; PROC; AGR; GWR; REC-1; REC-2; WARM; and WILD. Potential: p*MUN.
002	Calleguas Creek (Hydro Unit 403.11)	Existing: AG; GWR; freshwater replenishment (FRSH); REC-1; REC-2; WARM; cold freshwater habitat (COLD); WILD; rare, threatened, or endangered species (RARE); and wetland habitat (WET). Potential: p*MUN.
	Calleguas Creek Estuary (Hydro Unit 403.11)	Existing: REC-2; commercial and sport fishing (COMM); estuarine habitat (EST); WILD; RARE; migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN); and WET. Potential: navigation (NAV) and REC-1.
	Mugu Lagoon (Hydro Unit 403.11)	Existing: NAV; REC-2; COMM; EST; marine habitat (MAR); WILD; preservation of biological habitats (BIOL); RARE; MIGR; shellfish harvesting (SHELL); and WET. Potential: REC-1.

* 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.

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

Table F-3b. Basin Plan Beneficial Uses

Discharge Point(s)	Receiving Water Name	Beneficial Use(s)
001A, 001B, 002	Pleasant Valley (Ventura Central Basin) (DWR Basin No. 4-6)	Confined Aquifer Existing Beneficial Uses: Municipal and domestic water supply (MUN); industrial service supply; industrial process suppl;, and agricultural supply. Unconfined Aquifer Existing Beneficial Uses: Industrial service supply; industrial process supply; and agricultural supply. Potential Beneficial Use: MUN
001A, 001B, 002	Oxnard Plain	Confined Aquifer

REVISED TENTATIVE

	(Ventura Central Basin) (DWR Basin No. 4-4)	Existing Beneficial Uses: MUN; industrial service supply; industrial process supply; and agricultural supply. <u>Unconfined Aquifer</u> Existing Beneficial Uses: MUN and agricultural supply. Potential Beneficial Use: Industrial service supply.
001A, 001B, 002	Oxnard Forebay	Existing Beneficial Uses: MUN; industrial service supply; industrial process supply; and agricultural supply.

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

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, OAL, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. On December 1, 2005, Resolution No. 2005-014, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life,* was adopted by the Regional Water Board. Resolution No. 2005-014 was approved by the State Water Board, OAL, and USEPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively. 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.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. 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.

3. **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

REVISED TENTATIVE

pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

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

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

6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, CFR[1] part 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

D. Impaired Water Bodies on CWA 303(d) List

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 added 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 was prepared in accordance with section 303(d) of the Federal Clean Water Act to identify

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

REVISED TENTATIVE

specific impaired waterbodies where water quality standards are not expected to be met after implementation of TBELs on point sources.

Conejo Creek, Calleguas Creek, 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. Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2 on 1998 303(d) list) – chem a (tissue), chloride, endosulfan (tissue), fecal coliform, sulfates, and total dissolved solids;

2. Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on 1998 303(d) list) – chem a (tissue), endosulfan (tissue), fecal coliform, lindane/ hexachlorocyclohexane/HCH (tissue), sulfates, and total dissolved solids;

3. Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on 1998 303(d) list) – chloride, sedimentation/siltation, and total dissolved solids;

4. Calleguas Creek Reach 2 (estuary to Potrero Road – was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list) – chem a (tissue), endosulfan (tissue), fecal coliform, and sedimentation/siltation;

5. Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list) – endosulfan (tissue).

E. Other Plans, Polices and Regulations

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

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

REVISED TENTATIVE

arising from SODW policy and the Regional Water Board's enabling resolution]." On February 15, 2002, the USEPA clarified its partial approval (May 26, 2000) of the 1994 Basin Plan amendments and acknowledged that the conditional designations do not currently have a legal effect, do not reflect new water quality standards subject to USEPA review, and do not support new effluent limitations based on the conditional designations stemming from the SODW Policy until a subsequent review by the Regional Water Board finalizes the designations for these waters. This permit is designed to be consistent with the existing Basin Plan.

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

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

   General NPDES permit No. CAS000001 is not applicable to storm water discharges from the Camarillo WRP because they capture and treat all stormwater runoff on their site.

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

   The requirements contained in this Order in sections VI.C.3.b, VI.C.4, and VI.C.5.c.6. are intended to be consistent with the requirements in the SSO WDR. The Regional Water Board recognizes that there are areas of overlapping interest between the NPDES permit conditions and the SSO WDR requirements. The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of Water Quality (WQ) Order No. 2006-0003). The Regional Water Board will accept the documentation prepared by the Permittee under the SSO WDR for

REVISED TENTATIVE

compliance purposes, as satisfying the requirements in sections VI.C.3.b, VI.C.4, and VI.C.5.c.6, provided for any more specific or stringent provisions enumerated in this Order, have also been addressed.

5. **Watershed Management.** This Regional Water Board has been implementing a Watershed Management Approach (WMA), to address water quality protection in the Los Angeles Region, as detailed in the Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science. Information about the Calleguas Creek Watershed and other watersheds in the region can be obtained from the Regional Water Board's web site at http://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/index.shtml#Watershed.

6. **Relevant Total Maximum Daily Loads**. A Total Maximum Daily Load (TMDL) is a determination of the amount of a pollutant, from point, non-point, and natural background sources, including a margin of safety that may be discharged to a water quality-limited water body. Section 303(d) of the CWA established the TMDL process. The statutory requirements are codified at 40 C.F.R. part 130.7. TMDLs must be developed for the pollutants of concern, which impact the water quality of water bodies on the 303(d) List.

   a. **Calleguas Creek Watershed Nitrogen Compounds and Related Effects TMDL** – On October 24, 2002, the Regional Board adopted Resolution No. 02-017, *Amendment to the Water Quality Control Plan for the Los Angeles Region to include a TMDL for Nitrogen Compounds and Related Effects in Calleguas Creek* (*Calleguas Creek Watershed Nitrogen Compound TMDL*). The *Calleguas Creek Nitrogen Compound TMDL* was approved by the State Board, OAL, and USEPA on March 19, 2003, June 5, 2003, and June 20, 2003, respectively. The *Calleguas Creek Nitrogen Compound TMDL* became effective on July 16, 2003.

   b. **Calleguas Creek Watershed OC Pesticides & PCBs TMDL** - On July 7, 2005, the Regional Board adopted Resolution No. R4-2005-010, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a TMDL for Organochlorine (OC) Pesticides, Polychlorinated biphenyls (PCBs), and Siltation in Calleguas Creek, its Tributaries, and Mugu Lagoon* (*Calleguas Creek Watershed OC Pesticides, PCBs, and Siltation TMDL*). The *Calleguas Creek Watershed OC Pesticides, PCBs, and Siltation TMDL* was approved by the State Board, OAL, and USEPA on September 22, 2005, January 20, 2006, and March 14, 2006, respectively. The *Calleguas Creek Watershed OC Pesticide, PCBs, and SIltation TMDL* became effective on March 24, 2006.

   c. **Calleguas Creek Watershed Toxicity TMDL** - On July 7, 2005, the Regional Board adopted Resolution No. R4-2005-009, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate the TMDL for Toxicity,*

REVISED TENTATIVE

Chlorpyrifos, and Diazinon in the Calleguas Creek, its Tributaries, and Mugu Lagoon (*Calleguas Creek Watershed Toxicity TMDL*). The *Calleguas Creek Watershed Toxicity TMDL* was approved by the State Board, OAL, and USEPA on September 22, 2005, December 22, 2005, and March 14, 2006, respectively. The *Calleguas Creek Watershed Toxicity TMDL* became effective on March 24, 2006.

d. **Calleguas Creek Watershed Metals TMDL** – On June 8, 2006, the Regional Board adopted Resolution No. 2006-012, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate the TMDL for Metals and Selenium in Calleguas Creek, its Tributaries, and Mugu Lagoon* (*Calleguas Creek Watershed Metals TMDL*). The *Calleguas Creek Watershed Metals TMDL* was approved by the State Board, OAL, and USEPA on October 25, 2006, February 6, 2007, and March 26, 2007, respectively. The *Calleguas Creek Watershed Metals TMDL* became effective on March 27, 2007.

e. **Calleguas Creek Watershed Salts TMDL** – On October 4, 2007, the Regional Board adopted Resolution No. 2007-016, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate the TMDL for Boron, Chloride, Sulfate, and TDS (Salts) in the Calleguas Creek Watershed (Calleguas Creek Salts TMDL*). The *Calleguas Creek Watershed Salts TMDL* was approved by the State Board, OAL, and USEPA on May 20, 2008, November 6, 2008, and December 2, 2008, respectively. The *Calleguas Creek Watershed Salts TMDL* became effective on December 2, 2008.

f. **Calleguas Creek Watershed Chloride TMDL**. On March 22, 2002, USEPA Region 9 established the Calleguas Creek Total Maximum Daily Load for chloride (*USEPA Chloride TMDL*) in accordance with CWA section 303(d), because the State of California was not going to be able to complete adoption of the Calleguas Creek Chloride TMDL by the March 22, 2002, consent decree deadline. USEPA used the 150 milligram per liter (mg/L) objective in the Basin Plan and lower in stream targets to establish mass-based WLAs and load allocations (LAs) for all identified sources of chloride in the watershed. The *USEPA Chloride TMDL* established a WLA of 2,300 pounds per day (lbs/day) for the Camarillo WRP during normal conditions, and a WLA of 2,200 lbs/day during drought conditions. Once the Regional Board-adopted *Calleguas Creek Watershed Salts TMDL* has gone through the full approval process, the chloride WLA contained in the *Calleguas Creek Watershed Salts TMDL* will supersede the chloride WLA specified in USEPA's Chloride TMDL.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in

REVISED TENTATIVE

the Code of Federal Regulations: part 122.44(a) requires that permits include applicable technology-based limitations and standards; and part 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

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

B. Technology-Based Effluent Limitations (TBELs)

1. Scope and Authority

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

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.

REVISED TENTATIVE

2. Applicable TBELS

This facility is subject to the technology-based regulations for the minimum level of effluent quality attainable by secondary treatment in terms of $BOD_5 20^oC$, TSS, and pH.

The following Table summarizes the TBELs applicable to the Facility:

Summary of Technology-based Effluent Limitations
Discharge Points 001A, 001B, and 002

Table F-4. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
$BOD_5 20°C$	mg/L	20	30	45	--	--
	lbs/day *	1210	1810	2720	--	--
Total Suspended solids (TSS)	mg/L	15	40	45	--	--
	lbs/day *	910	2420	2720	--	--
pH	standard units	--	--	--	6.5	8.5
Removal Efficiency for BOD and TSS	%	85	--	--	--	--

* The mass emission rates are based on the plant design flow rate of 7.25 MGD, and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

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

REVISED TENTATIVE

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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, expressed as a technology equivalence requirement, more stringent than secondary treatment requirements that are necessary to meet applicable water quality standards. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements or other provisions, is discussed starting from section IV.C.2.b.

Part 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in part 122.44(d)(1)(vi).

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

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

a. The Basin Plan establishes the beneficial uses for surface water bodies in the Los Angeles region. The beneficial uses of Conejo Creek and Calleguas Creek, within the Calleguas Creek Watershed, affected by the discharge have been described previously in this Fact Sheet and in the WDR findings.

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

   i. Table R1 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the Reasonable Potential Analysis for this Order.

REVISED TENTATIVE

ii. Biochemical Oxygen Demand (BOD) and Suspended solids

Biochemical oxygen demand (BOD) is a measure of the quantity of the organic matter in the water and, therefore, the water's potential for becoming depleted in dissolved oxygen. As organic degradation takes place, bacteria and other decomposers use the oxygen in the water for respiration.

Unless there is a steady resupply of oxygen to the system, the water will quickly become depleted of oxygen. Adequate dissolved oxygen levels are required to support aquatic life. Depressions of dissolved oxygen can lead to anaerobic conditions resulting in odors or, in extreme cases, in fish kills.

40 C.F.R. part 133 describes the minimum level of effluent quality attainable by secondary treatment for BOD and suspended solids, as:

a. the monthly average shall not exceed 30 mg/L; and,
b. the 7-day average shall not exceed 45 mg/L.

The upgraded Camarillo WRP will provide tertiary treatment. As such, the limits in the permit are more stringent than secondary treatment requirements. The Plant will achieve solids removal rates that are better than secondary-treated wastewater by adding a polymer/coagulant to enhance the precipitation of solids and by filtering the effluent.

In addition to having mass-based and concentration-based effluent limitations for BOD and suspended solids, the Camarillo WRP also has a percent removal requirement for these two constituents. In accordance with 40 C.F.R. parts 133.102(a)(3) and 133.102(b)(3), the 30-day average percent removal shall not be less than 85 percent. Percent removal is defined as a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

iii. pH

The hydrogen ion activity of water (pH) is measured on a logarithmic scale, ranging from 0 to 14. While the pH of "pure" water at 25°C is 7.0, the pH of natural waters is usually slightly basic due to the solubility of carbon dioxide from the atmosphere. Minor changes from natural conditions can harm aquatic life. The effluent limitation for pH which reads, "the wastes discharged shall at all times be within the range of 6.5 to 8.5," is taken from the Basin Plan (page 3-15) which reads "the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge."

REVISED TENTATIVE

iv. Settleable solids

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

It is impracticable to use a 7-day average limitation, because short-term spikes of settleable solid levels that would be permissible under a 7-day average scheme would not be adequately protective of all beneficial uses.

v. Oil and Grease

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

The numeric limits are empirically based on concentrations at which an oily sheen becomes visible in water. It is impracticable to use a 7-day average limitation because spikes that occur under a 7-day average scheme could cause visible oil sheen. A 7-day average scheme would not be sufficiently protective of beneficial uses.

vi. Residual chlorine

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

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

REVISED TENTATIVE

vii. Total Dissolved Solids (TDS), Sulfate, and Boron

The limit for boron is based on Basin Plan Table 3-8 (page 3-12), for the Calleguas Creek watershed (above Potrero Road). Boron = 1.0 mg/L. It is practicable to express this limit as a monthly average, since it is not expected to cause acute effects on beneficial uses. This limit will protect waters of the US and prevent degradation.

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

Since the *Calleguas Creek Watershed Salts TMDL* became effective on December 2, 2008, the TMDL interim WLAs will replace the TDS and Sulfate limits which had been based upon the Basin Plan Water Quality Objective ~~(WQO)~~ Table 3-8. Once the TMDL compliance schedule expires, the interim effluent limits for TDS and Sulfate will be replaced by the final WLA-based effluent limitations for TDS and Sulfate.

Note that the limits for TDS, boron, and sulfate only apply to Discharge Points 001A and 001B and not to Discharge Point 002, because there are no Basin Plan ~~WQOs~~ water quality objectives for Calleguas Creek below Potrero Road.

viii. Chloride

The water quality objective for chloride in the Basin Plan Table 3-8 (page 3-12), for Calleguas Creek Watershed (above Potrero Road) is 150 mg/L. However, the 150 mg/L effluent limit for chloride changed to 190 mg/L resulting from several resolutions.

On January 27, 1997, the Regional Board adopted Resolution No. 97-02, *Amendment to the Water Quality Control Plan to incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters*. It was approved by the State Board (SWRCB Resolution 97-94); approved by the Office of Administrative Law (OAL) on January 8, 1998; and served to revise the chloride water quality objective in Calleguas Creek and other surface waters.

On April 13, 1998, the Regional Board adopted Order No. 98-027, which temporarily amended Camarillo WRP's chloride daily maximum effluent limit to 190 mg/L. This interim limit expired on January 9, 2001.

REVISED TENTATIVE

On December 7, 2000, the Regional Board adopted Resolution No. 2000-22 to extend the Interim Chloride Limits for POTW Dischargers within Calleguas Creek Watershed until March 31, 2001.

On March 22, 2002, USEPA Region 9 established the Calleguas Creek TMDL for chloride which used the 150 mg/L objective in the Basin Plan to establish a WLA of 2,300 lbs/day for the Camarillo WRP during normal conditions, and a WLA of 2,200 lbs/day for the Camarillo WRP during drought conditions.

On August 14, 2002 the City of Simi Valley (Simi Valley Water Quality Control Plant), Thousand Oaks (Hill Canyon Wastewater Treatment Plant), Camarillo Sanitary District (Camarillo WRP), Camrosa San. District (Camrosa WRP), Ventura County Water Works District No. 1 (Moorpark Facility) and the Los Angeles Regional Water Board entered into a "Stipulation for Order Issuing Stay, with Conditions," which stayed the chloride final effluent limitation in NPDES Order No. 96-042. The State Board adopted Water Quality Order (WQO) 2002-0017, which approved the August 14, 2002 stipulation.

On June 5, 2003, the NPDES permits for the City of Simi Valley (Simi Valley WQCP), Thousand Oaks (Hill Canyon WWTP), Camarillo Sanitary District (Camarillo WRP) were renewed, thereby rescinding the 1996 NPDES Orders, except for enforcement purposes. The Dischargers petitioned the revised NPDES Orders to the State Water Board, requested an extension of the chloride stay, and asked that the petitions be held in abeyance.

On October 10, 2003 the City of Simi Valley (Simi Valley WQCP), Thousand Oaks (Hill Canyon WWTP), Camarillo Sanitary District (Camarillo WRP), and the Los Angeles Regional Board entered into a "Stipulation for Further Order Issuing Stay, with Conditions," which stayed the chloride final effluent limitation in NPDES Order No. R4-2003-0079. The State Board adopted WQO 2003-0019, which approved the October 10, 2003 stipulation and held the petitions in abeyance for three years (until November 19, 2006).

On September 28, 2006, the State Water Board granted an extension of the abeyance until July 15, 2008, when the petition will be dismissed without prejudice. The State Water Board granted additional extensions in response to requests by the Discharger, continued to hold the petition in abeyance, continued the stay of the final effluent chloride limitations, and, continued to maintain the 190 mg/L interim effluent limit for chloride.

The chloride effluent limitations contained in the accompanying Order are consistent with the interim WLAs and final WLAs specified for the Camarillo WRP in the *Calleguas Creek Salts TMDL*, which became effective on December 2, 2008.

REVISED TENTATIVE

Note that the limit for chloride only apply to Discharge Points 001A and 001B and not to Discharge Point 002, because there are no Basin Plan ~~WQO~~water quality objectives for Calleguas Creek below Potrero Road.

ix. Methylene Blue Activated Substances (MBAS)

The MBAS procedure tests for the presence of anionic surfactants (detergents) in surface and ground waters. Surfactants disturb the water surface tension, which affects insects and can affect gills in aquatic life. The MBAS can also impart an unpleasant soapy taste to water, as well as cause scum and foaming in waters, which impact the aesthetic quality of both surface and ground waters.

Given the nature of the facility (a POTW) which accepts domestic washwater into the sewer system and treatment plant, and the characteristics of the wastes discharged, the discharge has reasonable potential to exceed both the numeric MBAS water quality objective and the narrative water quality objective for prohibition of floating material such as foams and scums. Therefore, an effluent limitation is required.

The discharge from the Camarillo WRP may have reasonable potential to contribute to an exceedance of the 0.5 mg/L. The 0.5 mg/L concentration (which has been determined to be protective of beneficial uses and the aesthetic quality of waters) is based on the California Department of Public Health's (formerly known as the Department of Health Services) secondary drinking water standard, and on the Basin Plan water quality objectives~~WQO~~ (p.3-11) which reads, "Waters shall not have MBAS concentrations greater than 0.5 mg/L in waters designated MUN." While the wastewater from this POTW is not directly discharged into a MUN designated surface water body, it will percolate into unlined reaches of Conejo Creek and Calleguas Creek [via ground water recharge designated beneficial use (GWR)] to ground water designated for MUN beneficial use. In addition, the Basin Plan states that "Ground water shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Therefore, the secondary MCL should be the MBAS limit for this discharge to protect ground water recharge and the MUN use of the underlying ground water, while also protecting surface waters from exhibiting scum or foaming.

Since the Basin Plan objective is based on a secondary drinking water standard, it is practicable to have a monthly average limitation in the permit, rather than a daily maximum.

x. Total Inorganic Nitrogen

Total inorganic nitrogen is the sum of nitrate-nitrogen and nitrite-nitrogen. High nitrate levels in drinking water can cause health problems in humans.

REVISED TENTATIVE

Infants are particularly sensitive and can develop methemoglobinemia (blue-baby syndrome). Nitrogen is also considered a nutrient. Excessive amounts of nutrients can lead to other water quality impairments, ex. algae.

(1) **Concentration-based Limit -** The effluent limit for total inorganic nitrogen (nitrate nitrogen plus nitrite nitrogen) of 9 mg/L is based on the Calleguas Creek Watershed Nutrient TMDL WLA which was assigned to the Camarillo WRP.

(2) **Mass-based Limit –** Since the TMDL does not specify any mass-based WLA for nitrate plus nitrite as nitrogen, mass bases limits are not included for nitrate nitrogen plus nitrite nitrogen.

xi. Nitrite as Nitrogen and Nitrate as Nitrogen

The effluent limits for nitrite as nitrogen (NO_2-N) of 0.9 mg/L and for nitrate as nitrogen (NO_3-N) of 9 mg/L are based on the *Calleguas Creek Watershed Nutrient TMDL* WLAs assigned to the Camarillo WRP. Since the TMDL does not specify any mass-based WLAs for nitrate as nitrogen or nitrite as nitrogen, mass based~~s~~ limits are not included for either of the two constituents.

xii. Ammonia Nitrogen

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

The monthly average effluent limit of 3.5 mg/L and the daily maximum effluent limit of 7.8 mg/L for ammonia as nitrogen (NH_3-N) are based on the *Calleguas Creek Watershed Nutrient TMDL* WLAs which were assigned to the Camarillo WRP.

xiii. Coliform Bacteria

REVISED TENTATIVE

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

i. Effluent Limitations:

- The 7-day median number of coliform organisms at some point in the treatment process must not exceed a Most Probable Number (MPN) or Colony Forming Unit (CFU) of 2.2 per 100 milliliters, and

- The number of coliform organisms must not exceed an MPN or CFU of 23 per 100 milliliters in more than one sample within any 30-day period.

These disinfection-based effluent limitations for coliform are for human health protection and are consistent with requirements established by the California Department of Public Health (formerly known as the Department of Health Services). These limits for coliform must be met at the point of the treatment train immediately following disinfection, as a measure of the effectiveness of the disinfection process.

ii. Receiving Water Limitation

- Geometric Mean Limits
  - E.coli density shall not exceed 126/100 mL.
  - Fecal coliform density shall not exceed 200/100 mL.

- Single Sample Limits
  - E.coli density shall not exceed 235/100 mL.
  - Fecal coliform density shall not exceed 400/100 mL.

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

xiv. Temperature

REVISED TENTATIVE

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

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

- Temperature also affects the self-purification phenomenon in water bodies and therefore the aesthetic and sanitary qualities that exist. Increased temperatures accelerate the biodegradation of organic material both in the overlying water and in bottom deposits which makes increased demands on the dissolved oxygen resources of a given system. The typical situation is exacerbated by the fact that oxygen becomes less soluble as water temperature increases. Thus, greater demands are exerted on an increasingly scarce resource which may lead to total oxygen depletion and obnoxious septic conditions. Increased temperature may increase the odor of water because of the increased volatility of odor-causing compounds. Odor problems associated with plankton may also be aggravated.

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

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

REVISED TENTATIVE

maximum limitation is. A daily maximum limit is necessary to protect aquatic life and is consistent with the fishable/swimmable goals of the CWA.

xv. Turbidity

Turbidity is an expression of the optical property that causes light to be scattered in water due to particulate matter such as clay, silt, organic matter, and microscopic organisms. Turbidity can result in a variety of water quality impairments. The effluent limitation for turbidity which reads, "For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the wastewater does not exceed: (a) a daily average of 5 Nephelometric turbidity units (NTUs) more than 5 percent of the time (72 minutes) during any 24 hour period; (b) a monthly average of 2 NTUs (from the effective date of the NPDES Order until the expiration date of such Order [i.e., until March 10, 2016]); and, (c) 10 NTUs at any time," is based on the Basin Plan's incorporation by reference of Title 22 and the definition of filtered wastewater. In comparison to other POTWs in this region, the turbidity limit for the Camarillo WRP is consistent with those of POTWs which have filtration as part of their treatment process. The limitation, therefore reflects what the technology (of choice by the Discharger) is designed to achieve.

xvi. Radioactivity

Radioactive substances are generally present in natural waters in extremely low concentrations. Mining or industrial activities increase the amount of radioactive substances in waters to levels that are harmful to aquatic life, wildlife, or humans. Section 301(f) of the CWA contains the following statement with respect to effluent limitations for radioactive substances: "Notwithstanding any other provisions of this Act it shall be unlawful to discharge any radiological, chemical, or biological warfare agent, any high-level radioactive waste, or any medical waste, into the navigable waters." chapter 5.5 of the CWC contains a similar prohibition under section 13375, which reads as follows: "The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is hereby prohibited." However, rather than give a hard and fast absolute prohibition on radioactive substances, Regional Water Board staff have set the following effluent limit for radioactivity: "Radioactivity of the wastes discharged shall not exceed the limits specified in title 22, chapter 15, article 5, section 64443, of the California Code of Regulations, or subsequent revisions." The limit is based on the Basin Plan incorporation of title 22, *Drinking Water Standards,* by reference, to protect beneficial uses. Therefore, the accompanying Order will retain the limit for radioactivity.

xvii. Iron

REVISED TENTATIVE

The previous Order had an effluent limitation of 300 mg/l for iron, which was based on the USEPA document, *Quality Criteria for Water 1986* [EPA 440/5-86-001, May 1, 1986], also referred to as the *Gold Book*, for the protection of GWR beneficial use. 300 µg/L was also the secondary MCL for iron. However, the limit was removed because there was no reasonable potential for the discharge to cause or contribute to an exceedance.

The California Toxic Rule (CTR) and State Implementation Policy (SIP) specify numeric objectives for toxic substances and the procedures whereby these objectives are to be implemented. The procedures include those used to conduct reasonable potential analysis to determine the need for effluent limitations for priority pollutants. The Technical Support Document (TSD) specifies the procedures to conduct reasonable potential analyses for non-priority pollutants.

3. Determining the Need for WQBELs

The Regional Water Board developed WQBELs for ammonia nitrogen, nitrite nitrogen, nitrate nitrogen, nitrite plus nitrite as nitrogen, chloride, TDS, sulfate, copper, nickel, mercury, chlordane, dichlorodiphenyldichloroethane (4,4-DDD), 1,1-Dichloro-2,2-bis(p-chlorophenyl) ethylene (4,4-DDE), toxaphene, dieldrin, PCBs **d**ichloro**d**iphenyl**t**richloroethane (4,4-DDT), chlorpyrifos, diazinon, and toxicity based upon TMDLs. The effluent limitations for these pollutants were established regardless of whether or not there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. The Regional Water Board developed WQBELs for these pollutants pursuant to part 122.44(d)(1)(vii), which does not require or contemplate a reasonable potential analysis (RPA). The Regional Water Board has determined that the WQBEL is consistent with the assumptions of the TMDL. Similarly, compliance with the effluent limitation will satisfy the requirements of the TMDL. Similarly, the SIP at section 1.3 recognizes that RPA is not appropriate if a TMDL has been developed.

In accordance with section 1.3 of the SIP, the Regional Water Board conducted a RPA for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Water Board analyzed effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. Regional Water Board staff mainly focused on the effluent data set generated since the last plant upgrade (from February 2007 to December 2010), and on the receiving water data from February 2003 to December 2010 (because the upstream receiving water data is independent of the plant upgrade). An average receiving water harness value of 36~~2~~7 mg/L was used to calculate the CTR criteria for hardness-dependent metals. However, individual hardness receiving water data points were capped at 400 mg/L prior to averaging, consistent with the CTR preamble. For all parameters that demonstrate reasonable potential, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water

REVISED TENTATIVE

quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board staff would normally identified the maximum effluent concentration (MEC) and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

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

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

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

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

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

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. Based on the SIP RPA, there was reasonable potential for the Discharge to contribute to an exceedance of the following pollutants: cyanide, selenium, aldrin, alpha-BHC, and heptachlor epoxide. Irrespective of whether the SIP or the ~~Based on the~~ TSD RPA is used, there is~~was~~ reasonable potential for the Discharge to cause or contribute to an exceedance of the following pollutants: antimony, arsenic, bis(2-ethylhexyl)phthalate, and cadmium.

4. WQBEL Calculations

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

- Use WLA from applicable TMDL
- Use a steady-state model to derive Maximum Daily Effluent Limits (MDELs) and Average Monthly Effluent Limits (AMELs).
- Where sufficient data exist, use a dynamic model which has been approved by the State Water Board.

REVISED TENTATIVE

b. **Calleguas Creek Watershed Metals TMDL**. Concentration-based and mass-based WLAs are established for copper and nickel, in total recoverable forms, and are applied to POTWs during both wet and dry weather. Mass-based WLAs are developed for mercury for POTWs. In the TMDL, WLAs for selenium are not set for POTWs because POTWs do not discharge to reaches listed for selenium. However, for Camarillo WRP's case, selenium effluent limitations will be prescribed because it shows reasonable potential (Tier 2, B>C and was detected at the effluent).

c. **SIP Calculation Procedure**. Section 1.4 of the SIP requires the step-by-step procedure to "adjust" or convert CTR numeric criteria into AMELs and Maximum Daily Effluent Limitations MDELs, for toxics. A table providing the calculation for all applicable WQBELs for this Order is provided in Table R1 of this Order.

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

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

Sample calculation for alpha-BHC:

Step 1: Identify applicable water quality criteria.

From CTR, we can obtain the Criterion Maximum Concentration (CMC) and the Criterion Continuous Concentration (CCC).

Freshwater Aquatic Life Criteria:
CMC = NA µg/L (CTR page 31715, column B1) and
CCC = NA µg/L (CTR page 31715, column B1); and
Human Health Criteria for Organisms only = 0.013 µg/L (CTR page 31715, column D2).

Step 2: Calculate effluent concentration allowance (ECA)

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

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

i. Calculate CV:

CV = Standard Deviation/Mean
= 0.6 (By default because <10 data points)

REVISED TENTATIVE

ii. Find the ECA Multipliers from SIP Table 1 (page 7), or by calculating them using equations on SIP page 6. When CV = 0.6, then:

ECA Multiplier acute = 0.321 and
ECA Multiplier chronic = 0.527

iii. LTA acute = ECA acute x ECA Multiplier acute
= NA µg/L x 0.321 = NA µg/L

iv. LTA chronic = ECA chronic x ECA Multiplier chronic
= NA µg/L x 0.527 = NA µg/L

Step 4: Select the lowest LTA

In this case, the lowest LTA is not applicable.

Step 5: Calculate the AMEL & MDEL for AQUATIC LIFE

i. Find the multipliers. You need to know CV and n (frequency of sample collection per month). If effluent samples are collected 4 times a month or less, then n = 4. CV was determined to be 0.6 in a previous step.

AMEL Multiplier = 1.552
MDEL Multiplier = 3.114

ii. AMEL aquatic life = lowest LTA (from Step4) x AMEL Multiplier
= NA µg/L x 1.552 = NA µg/L

iii. MDEL aquatic life = lowest LTA (from Step4) x AMEL Multiplier
= NA µg/L x 3.114 = NA µg/L

Step 6: Find the AMEL & MDEL for HUMAN HEALTH

i. Find factors. Given CV = 0.6 and n = 4.

For AMEL human health limit, there is no factor.
The MDEL/AMEL human health factor = 2.006

ii. AMEL human health = ECA = 0.013 µg/L

iii. MDEL human health = ECA x MDEL/AMEL factor
= 0.013 µg/L x 2.006 = 0.026 µg/L

REVISED TENTATIVE

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

i. Lowest AMEL = 0.013 µg/L (Based on Human Health protection)

ii. Lowest MDEL = 0.026 µg/L (Based on Human Health protection)

d. Impracticability Analysis

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

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

For example, a POTW sampling for a toxicant to evaluate compliance with a 7-day average limitation could fully comply with this average limit but still be discharging toxic effluent on one, two, three, or up to four of these seven days and not be meeting 1-hour average acute criteria or 4-day average chronic criteria. For these reason, USEPA recommends daily maximum and 30-day average limits for regulating toxics in all NPDES discharges. For the purposes of protecting the acute effects of discharges containing toxicants (CTR human health for the ingestion of fish), daily maximum limitations have been established in this NPDES permit for selenium because it is bioaccumulative.

Although trace amounts of selenium are considered an essential dietary element for most organisms, at higher concentrations it can be more toxic than arsenic or mercury (Sorensen 1991). The chemical properties of selenium resemble sulfur, and uptake occurs readily in protein synthesis; if allowed to cycle within the food chain, selenium tends to bioaccumulate and can adversely affect higher order sensitive wildlife (Ohlendorf 2003, Martinez 1994, Rusk 1991, Sorensen 1991).

Studies in the upper Colorado River Basin have documented selenium-induced reproductive impairments in razorback sucker and bonytail (Hamilton 1994, Buhl and Hamilton 1995, Waddell and May 1995). Selenium is implicated with toxic effects to other aquatic organisms and biota (such as fish-eating birds) utilizing aquatic organisms as prey and has been linked to deformities, reproductive impairments, and mortality (Ohlendorf 2003). Studies in the lower Colorado River Basin have documented potentially toxic levels of selenium in fish-eating birds (Radtke et al. 1988; Rusk 1991; Martinez 1994; Andrews et al. 1997).

REVISED TENTATIVE

For these reasons, a 7-day average alone would not protect one, two, three, or fours days of discharging selenium in excess of the acute and chronic criteria. Fish exposed to selenium will pass the bioaccumulated constituent on to the human consumer.

In addition, daily maximum limitations have been established in the order for aldrin, alpha-BHC, alpha endosulfan, and heptachlor epoxide because they are not only bioaccumulative compounds (Wan, Kuo, and Pasternak 2005) but are also endocrine disruptors (Keith 1998).

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

- mimic or partly mimic the sex steroid hormones estrogens and androgens (the male sex hormone) by binding to hormone receptors or influencing cell signaling pathways.
- block, prevent and alter hormonal binding to hormone receptors or influencing cell signaling pathways.
- alter production and breakdown of natural hormones.
- modify the making and function of hormone receptors.

REFERENCES:

Sorensen, E.M.B. 1991. Metal Poisoning in Fish. CRC Press, Boca Raton, FL. 374 pp

Ohlendorf, H.M. 2003. Ecotoxicology of selenium. Pages 465-500 In Hoffman, D.J., Rattner, B.A., Burton, Jr., G.A., and Cairns, Jr., J. (eds.). Handbook of Ecotoxicology. Lewis Publishers, Boca Raton, Florida.

Martinez, C.T. 1994. Selenium Levels in Selected Species of Aquatic Birds on Imperial National Wildlife Refuge. M.S. Thesis. University of Arizona, Tucson. 74 pp.

McCaulou, T. 1993. Corbicula fluminea as a Bioindicator on the Lower Colorado River. M.S. Thesis. University of Arizona, Tucson. 69 pp.

Rusk, M.K. 1991. Selenium Risk to Yuma Clapper Rails and Other Marsh Birds of the Lower Colorado River. M.S. Thesis. University of Arizona, Tucson. 75 pp.

Hamilton, S.J. 1994. Hazard Assessment of Inorganics to Three Endangered Fish in the Green River, Utah. Ecotoxicology and Environmental Safety 30:134-142.

REVISED TENTATIVE

Buhl, K.J. and S.J. Hamilton. 1995. Irrigation Drainwater May be Harmful to Endangered Fish in the Green River of Utah. National Biological Service Research Informational Bulletin No. 8. 4 pp.

Waddell, B. and T. May. 1995. Selenium Concentrations in the Razorback Sucker (Xyrauchen texanus): Substitution of Non-lethal Muscle Plugs for Muscle Tissue in Contaminant Assessment. Archives of Environmental Contamination and Toxicology 28:321-326.

Radtke, D.B., W.G. Kepner, and R.J. Effertz. 1988. Reconnaissance investigation of Water Quality, Bottom Sediment, and Biota Associated with Irrigation Drainage in the Lower Colorado River Valley, Arizona, California, and Nevada. U.S. Geological Survey, Water-Resources Investigations Report 88-4002, Tucson, Arizona. 77 pp.

Andrews, B.J., K.A. King, and D.L. Baker. 1997. Environmental Contaminants in Fish and Wildlife of Havasu National Wildlife Refuge, Arizona. U.S. Fish and Wildlife Service, Arizona Ecological Services Field Office Report, Phoenix. 65 pp.

Wan, Michael T., Kuo, Jen-ni, and Pasternak, John. 2005. Residues of Endosulfan and other Selected Organochlorine Pesticides in Farm Areas of the Lower Fraser Valley, British Columbia, Canada. Journal of Environmental Quality 34:1186-1193.

Keith, Lawrence. 1998. Environmental Endocrine Disruptors. Pure & Applied Chemistry 12:2319-2326.

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

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

Summary of Water Quality-based Effluent Limitations

REVISED TENTATIVE

Discharge Point 001A, 001B, and 002

Table F-5. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Antimony	µg/L	6	--	--	--	--
	lbs/day[1]	0.36	--	--	--	--
Arsenic	µg/L	10	--	--	--	--
	lbs/day[1]	0.6	--	--	--	--
Cadmium	µg/L	5	--	--	--	--
	lbs/day[1]	0.3	--	--	--	--
Copper	µg/L	~~6~~ 22	--	~~9~~ 48	--	--
	lbs/day	--	--	0.12*WER-0.04	--	--
Mercury	lbs/month	0.015	--	--	--	--
Nickel	µg/L	114	--	287	--	--
	lbs/day		--	0.2	--	--
Cyanide	µg/L	4.2	--	8.5	--	--
	lbs/day[1]	0.25	--	0.51	--	--
Selenium	µg/L	4	--	9	--	--
	lbs/day[1]	0.24	--	0.54	--	--
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--
	lbs/day[1]	0.24	--	--	--	--
Aldrin	µg/L	0.00014	--	0.000281	--	--
	lbs/day[1]	0.000008	--	0.000017	--	--
Alpha-BHC	µg/L	0.013	--	0.026	--	--
	lbs/day[1]	0.00079	--	0.0016	--	--
Heptachlor epoxide	µg/L	0.00011	--	0.00022	--	--
	lbs/day[1]	0.000007	--	0.000013	--	--
Chlordane	µg/L	0.00059	--	0.0012	--	--
4,4-DDD	µg/L	0.00084	--	0.0017	--	--
4,4-DDE	µg/L	0.00059	--	0.0012	--	--
4,4-DDT	µg/L	0.00059	--	0.0012	--	--
Dieldrin	µg/L	0.00014	--	0.00028	--	--
PCBs	µg/L	0.00017	--	0.00034	--	--
Toxaphene	µg/L	0.00016	--	0.00033	--	--
Chlorpyrifos	µg/L	0.0133	--	--	--	--
Diazinon	µg/L	0.1	--	0.1	--	--
Toxicity	TUc	1.0	--	1.6	--	--

1 The mass emission rates are based on the plant design flow rate of 7.25 MGD, and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

REVISED TENTATIVE

5. Whole Effluent Toxicity (WET)

The permit contains effluent limitations for toxicity based upon the Calleguas Creek Watershed Toxicity TMDL.

In general, toxicity numeric effluent limitations can be based on:

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

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

c. Basin Plan objectives and implementation provisions for toxicity;

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

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

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

However, the circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential were under review by the State Water Board in Office of Chief Counsel (OCC) Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, at a public hearing, the State Water Board adopted Order No. 2003-0012 deferring the issue of numeric chronic toxicity effluent limitations until Phase II of the SIP is adopted. In the mean time the State Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1 TUc trigger in the Long Beach and Los Coyotes WRP NPDES permits.

a. Acute Toxicity Limitation:

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

REVISED TENTATIVE

b. Chronic Toxicity Limitation and Requirements:

The previous Order contained a narrative chronic toxicity effluent limitation with a trigger for accelerated monitoring. The accompanying Order will contain a 1.0 TUc numeric chronic toxicity limit, consistent with the WLA assigned to the Camarillo WRP in the *Calleguas Creek Watershed Toxicity TMDL* as well as a daily maximum effluent limitation of 1.6 TUc consistent with Appendix C of USEPA's Regions 8, 9, and 10 Toxicity Training Tool and as specified by USEPA in their correspondence. Chronic toxicity provisions in the accompanying Order require the Discharger to accelerate chronic toxicity monitoring and take further actions to identify the source of toxicity and to reduce chronic toxicity.

The chronic toxicity final effluent limitations may be modified at a later date, according to a permit reopener included in section VI.C.1.j of the accompanying Order, following the adoption of a state-wide policy for toxicity by the State Water Board, and following its approval by OAL and by USEPA.

D. Final Effluent Limitations

1. Satisfaction of Anti-Backsliding Requirements

The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for fluoride, arsenic, chromium VI, lead, silver, zinc, tetrachloroethylene, 1,4-Dichlorobenzene, lindane (gamma-BHC), barium, iron, methoxychlor, 2,4-Dichlorophenoxyacetic acid (2,4-D), 2,4,5-Trichlorophenoxyacetic acid (2,4,5-TP or Silvex), and halomethanes. The effluent limitations for these pollutants are deleted because they did not show reasonable potential to be in the effluent water. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

2. Satisfaction of Antidegradation Policy

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

REVISED

TENTATIVE

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The TBELs consist of restrictions on BOD, 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.

WQBELs 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 WQBELs 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). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

REVISED TENTATIVE

Summary of Final Effluent Limitations
Discharge Point 001A, 001B, and 002

Table F-6. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Minimum	Instant-aneous Max.	
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30	45	--	--	Existing
	lbs/day[2]	1210	1810	2720	--	--	calculated
Total Suspended Solids	mg/L	15	40	45	--	--	Existing
	lbs/day [2]	910	2420	2720	--	--	Calculated
pH	standard units	--	--	--	6.5	8.5	Existing
Settleable Solids	ml/L	0.1	--	0.3	--	--	Existing
Oil and grease	mg/L	10	--	15	--	--	Existing
	lbs/day[2]	600		910	--	--	Calculated
Total Residual Chlorine	mg/L	--	--	0.1	--	--	Existing
Total dissolved solids	lbs/day	850 x Q-AF[3], [4]	--	--	--	--	TMDL
Sulfate	lbs/day	250 x Q-AF[3], [4]	--	--	--	--	TMDL

REVISED TENTATIVE

[2] The mass emission rates are based on the plant design flow rate of 7.25 MGD, and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

[3] This limitation shall become operative on December 2, 2023, fifteen years after the effective date of the *Calleguas Creek Watershed Salts Total Maximum Daily Laod (Salts TMDL)*, established by the Regional Water Board on October 4, 2007. The TMDL ~~will become~~ became effective on December 2, 2008, following USEPA's approval of said TMDL. Consistent with the TMDL, this limitation is derived from the final WLAs in the *Salts TMDL* and will supersede any previous applicable effluent limitations. Prior to the operative date of the final WLA-based limits, the TMDL specifies interim WLAs for chloride, which may be re-evaluated three, seven, and ten years after the TMDL effective date. Interim limits for TDS, sulfate, and chloride, consistent with those interim WLAs have been incorporated into this NPDES Order and will apply on the effective date of the *Salts TMDL* (See section IV.A.2 of the accompanying Order).

Consistent with the *Salts TMDL*, these limits apply only during dry weather (as defined in the *Salts TMDL*).

AF represents the adjustment factor, which equals the difference between the minimum salts export requirement and the actual salts export.

Q represents the POTW flow at the time the water quality measurement is collected and a conversion factor to lbs/day based on the units of measure for the flow.

[4] These limitations do not apply to Discharge Point 002, because it is located below Potrero Road. The Basin Plan does not contain water quality objectives for these pollutants in Calleguas Creek below Potrero Road.

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Minimum	Instant-aneous Max.	
Chloride	lbs/day	150 x Q-AF [3 ,4, & 5]	--	--	--	--	TMDL
Boron	mg/L	1.0	--	--	--	--	Existing
	lbs/day[2]	60	--	--	--	--	Calculated
MBAS	mg/L	0.5	--	--	--	--	Existing
	lbs/day[2]	30	--	--	--	--	Calculated
Ammonia Nitrogen (NH_3-N)	mg/L	3.5[6]	--	7.8 [6 ~~5~~]	--	--	TMDL
	lbs/day	--	--	7.0 x Q[7]	--	--	TMDL
Nitrate + Nitrite as Nitrogen (NO_3-N + NO_2-N)	mg/L	9[8]	--	--	--	--	TMDL
Nitrite as Nitrogen (NO_2-N)	mg/L	0.9 [8 ~~7~~]	--	--	--	--	TMDL
Nitrate as N (NO_3-N)	mg/L	9 [8 ~~7~~]	--	--	--	--	TMDL
Antimony	µg/L	6	--	--	--	--	Existing
	lbs/day[2]	0.36	--	--	--	--	Calculated
Arsenic	µg/L	10	--	--	--	--	MCL
	lbs/day[2]	0.6	--	--	--	--	Calculated
Cadmium	µg/L	5	--	--	--	--	Existing
	lbs/day[2]	0.3	--	--	--	--	Calculated
Copper	µg/L	~~23~~ 22[9]	--	~~46~~ 48[9 ~~8~~]	--	--	TMDL

REVISED TENTATIVE

[5] This limitation is derived from the WLA for chloride under routine conditions, as set forth in the *Chloride TMDL*, established by USEPA on March 22, 2002. It will be superceded by the interim effluent limit for chloride shown in Table 7 of this NPDES Order, upon the effective date of the *Salts TMDL*.

[6] This limitation is derived from the final WLA for ammonia nitrogen, as set forth in the *Nitrogen Compounds and Related Effects TMDL,* established by the Regional Water Board on October 24, 2002. Final WLAs became operative on October 24, 2004, because the implementation provisions of the *Nitrogen Compounds and Related Effects TMDL* allowed interim limits for ammonia nitrogen for a duration of no more than two years starting from October 24, 2002.

[7] This limitation is derived from the final WLA for ammonia nitrogen, as set forth in Resolution No. R4-2008-009, Amendment to the Water Quality Control Plan for the Los Angeles Region through revision of the Waste Load Allocations for the Calleguas Creek Watershed Nitrogen Compounds and Related Effects Total Maximum Daily Load, adopted by the Regional Water Board on September 11, 2008.

[8] This limitation is derived from the final WLAs for nitrate nitrogen, nitrite nitrogen, and nitrate plus nitrite nitrogen, as set forth in the *Nitrogen Compounds and Related Effects TMDL,* established by the Regional Water Board on October 24, 2002. Final WLAs became operative on July 16, 2007, because the implementation provisions of the *Nitrogen Compounds and Related Effects TMDL* allowed interim limits for nitrite nitrogen, nitrite nitrogen, and nitrate plus nitrite nitrogen, for a duration of four years starting from the effective date of the TMDL.

[9] This limitation is derived from the final WLA, as set forth in the *Calleguas Creek Watershed Metals TMDL*, established by the Regional Water Board on June 8, 2006. The TMDL became effective on March 26, 2007.

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Minimum	Instant-aneous Max.	
Copper	lbs/day	--	--	0.12*WER-0.04 [10]	--	--	TMDL
Mercury	Lbs/month	0.015[11]	--	--	--	--	TMDL
Nickel	µg/L	127 [8]	--	254 [8]	--	--	TMDL
	lbs/day	--	--	0.2[9]	--	--	TMDL
Cyanide	µg/L	4.2	--	8.5	--	--	CTR & SIP
	lbs/day[1]	0.25	--	0.51	--	--	Calculated
Selenium	µg/L	4	--	9	--	--	CTR & SIP
	lbs/day[2]	0.24	--	0.54	--	--	Calculated
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--	MCL
	lbs/day[1]	0.24	--	--	--	--	Calculated
Aldrin	µg/L	0.00014	--	0.000281	--	--	CTR & SIP
	lbs/day[2]	0.000008	--	0.000017	--	--	Calculated
Alpha-BHC	µg/L	0.013	--	0.026	--	--	CTR & SIP
	lbs/day[2]	0.00079	--	0.0016	--	--	Calculated
Chlordane	µg/L	0.00059[12]	--	1.2 [12]	--	--	TMDL
4,4-DDD	µg/L	0.00084 [12]	--	0.0017 [12]	--	--	TMDL

REVISED TENTATIVE

This final effluent limitation will apply on March 26, 2017 (10 years after the effective date of the amendment) after on the effective date of this permitinterim limits, consistent with the interim WLAs, expire.

[10] This final mass-based limitation shall not become operative until March 2526, 2017 in accordance with the *Calleguas Creek Watershed Metals TMDL*, established by the Regional Water Board on June 8, 2006. This limitation is derived from the WLA for copper as set forth in said TMDL. The TMDL became effective on March 26, 2007. Consistent with the *Calleguas Creek Watershed Metals TMDL*, the ten-year compliance schedule is based on the estimated time-frame for completing the relevant implementation actions delineated in the TMDL as shown in Table 7-19.2 of Attachment A to Resolution No. R4-2006-012. If the Water Effect Ratio (WER) is set equal to the default value of 1, then the copper final mass-based WLA is equal to 0.08 lbs/day.

[11] This limitation does not become operative until March 2526, 2017 in accordance with in the *Calleguas Creek Watershed Metals TMDL,* established by the Regional Water Board on June 8, 2006. This limitation is derived from the WLA for Mercury, specified in pounds per month, as set forth in said TMDL. The TMDL became effective on March 2726, 2007. Consistent with the TMDL, the ten-year compliance schedule is based on the estimated time frame for completing the relevant implementation actions delineated in the TMDL and shown in Table 7-19.2 of Attachment A to Resolution No. R4-2006-012.The TMDL assigns interim WLAs, and allows a ten-year compliance schedule with re-evaluation of the interim WLA by March 25, 2012. Interim limits based on those interim WLAs have been incorporated into this NPDES Order and will apply on the effective date of the NPDES Order (See section IV.A.2 of the NPDES Order).

[12] This limitation shall not become operative until March 24, 2017 in accordance with the *Calleguas Creek Watershed Organochlorine Pesticide, Polychlorinated Biphenyls (PCB), and Siltation TMDL,* established by the Regional Water Board on July 7, 2005. The limitation is derived from the final WLA as set forth in said TMDL. The TMDL became effective on March 24, 2006. Prior to the effective date of the final WLA-based limits, the TMDL specifies interim WLAs, which may be re-evaluated five, ten, and fifteen years after the TMDL effective date based on State Implementation Policy procedures. Interim limits consistent with the interim WLAs have been incorporated into this NPDES Order and will apply on the effective date of this NPDES Order (See section IV.A.2 of the NPDES Order).

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instant-aneous Minimum	Instant-aneous Max.	
4,4-DDE	µg/L	0.00059 [12~~1~~]	--	1.2 [12~~1~~]	--	--	TMDL
4,4-DDT	µg/L	0.00059 [12~~1~~]	--	1.2 [12~~1~~]	--	--	TMDL
Dieldrin	µg/L	0.00014 [12~~1~~]	--	0.00028 [12~~1~~]	--	--	TMDL
Heptachlor epoxide	µg/L	0.00011	--	0.00022	--	--	CTR & SIP
	lbs/day[1]	0.000007	--	0.000013	--	--	Calculated
PCBs	µg/L	0.00017 [12~~3~~]	--	0.00034 [12~~3~~]	--	--	TMDL
Toxaphene	µg/L	0.00016 [12]	--	0.00033 [12]	--	--	TMDL
Chlorpyrifos	µg/L	0.0133[13]	--	--	--	--	TMDL
Diazinon	µg/L	0.1 [13~~2~~]	--	0.1 [13~~2~~]	--	--	TMDL
Toxicity	TUc	1.0 [14]	--	--	--	--	TMDL

REVISED

TENTATIVE

[13] This limitation is derived from the final WLA as set forth in the *Calleguas Creek Watershed Toxicity TMDL,* established by the Regional Water Board on July 7, 2005. The TMDL became effective on March 24, 2006. Consistent with the TMDL, the final WLA-based limit became operative on March 24~~3~~, 2008. The interim limits specified in this TMDL lapsed prior to the date this permit was renewed. Therefore, only final WLA-based limits are incorporated into the permit.

[14] The *Calleguas Creek Watershed Toxicity TMDL* includes a WLA of 1.0 TUc for toxicity, which is required to be implemented in accordance with USEPA, State Board, and Regional Water Board resolutions, guidance and policy at the time of permit issuance or renewal. Consistent with the TMDL, the staff report, and a USEPA letter dated August 25, 2008, this toxicity "limit" will be implemented as a 1.6 TUc Daily Maximum and a 1.0 TUc monthly median trigger for initiation of the toxicity identification evaluation/toxicity reduction evaluation (TIE/TRE) process. Within 48 hours of knowledge of an exceedance of the 1.0 TUc, the Discharger shall conduct six accelerated tests within a 12-week period. If three of the six accelerated tests exceed 1.0 TUc, then the Discharger shall initiate the TIE/TRE process, per the protocols outlined in USEPA's "Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program" (2000)and any provision of this Order. Failure to complete the accelerated monitoring and/or failure to initiate the TIE/TRE process is enforceable by the Regional Water Board.

E. Interim Effluent Limitations

Interim effluent limitations are based upon the applicable TMDLs for the Calleguas Creek Watershed.

F. Land Discharge Specifications

Not Applicable.

G. Reclamation Specifications

The discharger currently recycles treated effluent and plans on increasing the amount of water it recycles. The production, distribution, and reuse of recycled water for direct, non-potable applications are presently regulated under Water Reclamation Requirements (WRR) Order No. 87-132, adopted by this Regional Water Board on September 28, 1987.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

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 Conejo Creek or Calleguas Creek.~~

B. Groundwater

Limitations in this Order must protect not only surface receiving water beneficial uses, but also, the beneficial uses of underlying groundwater where there is a recharge beneficial use of the surface water. In addition to a discharge to surface water, there is discharge that can impact groundwater. Sections of Conejo Creek and Calleguas Creek, near the Camarillo WRP discharge points, are designated as GWR beneficial use. Surface water from Conejo Creek and Calleguas Creek percolates into the Groundwater Basins listed in Table F-3b of this fact sheet. Since groundwater from these Basins is used to provide drinking water to the community, the groundwater aquifers should be protected. However, this Order and Monitoring and Reporting Program does not include requirement for groundwater monitoring because compliance will be determined at the end of pipe ~~none of the limitations are based upon the protection of MUN use of underlying groundwater~~. For constituents that have limitations, the limits are based upon Basin Plan and CTR, are also protective of the beneficial uses of groundwater.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorizes

REVISED

TENTATIVE

the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

REVISED

TENTATIVE

A. Influent Monitoring

Influent monitoring is required:

- To determine compliance with the permit conditions for BOD_5 20°C and suspended solids removal rates;
- To assess treatment plant performance;
- To assess the effectiveness of the Pretreatment Program (once a pretreatment program is in place); and,
- As a requirement of the Pollution Minimization Program

B. Effluent Monitoring

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

Monitoring for those pollutants expected to be present in the discharge from the facility, will be required as shown on the proposed MRP and as required in the SIP. The frequency of monitoring has been reduced for those pollutants which no longer have effluent limits, due to the fact that there is no longer any reasonable potential for those pollutants to cause or contribute to an exceedance of a water quality objective.

Pollutants with a limitation are required to monitor more frequently than those without a limit. Semi-annual monitoring for priority pollutants in the effluent is required in accordance with the Pretreatment requirements.

Endocrine disrupting and pharmaceutical chemical analyses are being collected for information purposes; there are no standards for those contaminants and no standards are anticipated at this time and analytical methods may not be widely available.

The changes in the effluent monitoring are summarized in the following table.

Table F-7. Effluent Monitoring Program Comparison Table

Parameter	Monitoring Frequency (2003 Permit)	Monitoring Frequency (200~~8~~11 Permit)
Total waste flow	Continuous	No change
Turbidity	Continuous	No change
Total residual chlorine	Continuous	No change
Total residual chlorine	Continuous	Daily
Total coliform	Daily	Weekly
Fecal coliform	Daily	Weekly
E.coli	--	Weekly
Temperature	Weekly	No change
pH	Weekly	No change
Settleable solids	Weekly	No change
Suspended solids	Weekly	No change
BOD_5 20°C	Weekly	No change
Oil and Grease	Monthly	Quarterly
Dissolved oxygen	Monthly	Quarterly
Total dissolved solids	Monthly	No change
Chloride	Monthly	No change
Sulfate	Monthly	No change
Boron	Monthly	No change
Fluoride	Monthly	Quarterly
Ammonia nitrogen	Monthly	No change
Nitrate nitrogen	Monthly	No change
Nitrite nitrogen	Monthly	No change
Organic nitrogen	Monthly	No change
Total kjeldahl nitrogen (TKN)	Monthly	No change
Total nitrogen	Monthly	No change
Total phosphorus	Monthly	No change
Orthophosphate-P	Monthly	Quarterly
Algal biomass (Chlorophyll A)	Monthly	--
Surfactants (MBAS)	Monthly	No change
Surfactants (CTAS)	Monthly	Quarterly
Total hardness ($CaCO_3$)	Weekly	Monthly
Radioactivity	Semiannually	No change
Chronic toxicity	Monthly	No change
Acute toxicity	Quarterly	No change
Antimony	Quarterly	Monthly
Arsenic	Quarterly	Monthly
Beryllium	Quarterly	semiannually

REVISED TENTATIVE

Parameter	Monitoring Frequency (2003 Permit)	Monitoring Frequency (20~~08~~11 Permit)
Cadmium	Quarterly	Monthly
Chromium III	Quarterly	Semiannually
Chromium VI	Quarterly	Semiannually
Copper	Quarterly	Monthly
Iron	Quarterly	No change
Lead	Quarterly	Semiannually
Mercury	Quarterly	Monthly
Nickel	Quarterly	Monthly
Selenium	Quarterly	Monthly
Silver	Quarterly	Semiannually
Thallium	Semiannually	No change
Zinc	Quarterly	Semiannually
Cyanide	Monthly	No change
Asbestos	Annually	--
2,3,7,8-TCDD	Quarterly	Semiannually
Bromoform	Quarterly	Semiannually
Dibromochloromethane	Quarterly	Semiannually
Chloroform	Quarterly	Semiannually
Bromodichloromethane	Quarterly	Semiannually
Tetrachloroethylene	Quarterly	Semiannually
Bis(2-ethylhexyl)phthalate	Monthly	No change
1,4-Dichlorobenzene	Quarterly	Semiannually
Gamma-BHC (Lindane)	Quarterly	Semiannually
Aldrin	Semiannually	Quarterly
Alpha-BHC	Semiannually	Quarterly
Chlordane	Quarterly	Quarterly
4-4'-DDT	Semiannually	Quarterly
4,4'-DDE	Monthly	Quarterly
4,4'-DDD	Monthly	Quarterly
Dieldrin	Semiannually	Quarterly
Alpha-Endosulfan	Semiannually	No change
Endrin	Quarterly	semiannually
Heptachlor epoxide	Semiannually	Quarterly
Polychlorinated biphenyls (PCBs)	Semiannually	Quarterly
Aroclor 1254	Monthly	Quarterly
Remaining USEPA Priority Pollutants (excluding asbestos)	Semiannually	No change
Methoxychlor	Quarterly	--
Barium	Quarterly	--
2,4-D	Quarterly	--
2,4,5-TP(Silvex)	Quarterly	--
Halomethanes	Quarterly	Semiannually
Ammonium perchlorate	Annually	Semiannually
1,4-Dioxane	Annually	Semiannually
1,2,3-Trichloropropane	Annually	Semiannually
Chlorpyrifos	--	Quarterly
Diazinon	--	Quarterly
Toxaphene	Quarterly	No change
Emerging chemicals	Annually	Semiannually
Endocrine disrupting chemicals	--	Biennially
Pharmaceuticals & CECs	--	Biennially

REVISED TENTATIVE

REVISED TENTATIVE

C. WET Testing Requirements

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

This requirement establishes conditions and protocol by which compliance with the TMDL 1.0 TUc WLA for toxicity will be demonstrated, by implementing a 1.6 TUc Daily Maximum WQBEL and a 1.0 TUc M~~m~~onthly M~~m~~edian ~~trigger~~WQBEL that also triggers initiation~~ for initiation~~ of the toxicity identification evaluation (TIE)/toxicity reduction evaluation (TRE) process. This approach is consistent with the TMDL Implementation section, section 4.0 of the SIP, NPDES regulations, USEPA correspondence, and ~~with~~ USEPA guidance documents. Conditions include required monitoring and evaluation of the effluent for acute and chronic toxicity and a 1.0 TUc numerical value for chronic toxicity, to be used as an effluent limitation that also 'triggers' ~~for initiating~~initiation of accelerated monitoring and toxicity reduction evaluation(s).

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water.

2. Groundwater

Groundwater monitoring will not be~~is~~ required at this time~~to determine compliance with groundwater limitations and to track impacts to the groundwater basins~~.

E. Other Monitoring Requirements

1. Watershed Monitoring and Bioassessment Monitoring

The goals of the Watershed-wide Monitoring Program including the bioassessment monitoring for the Calleguas Creek Watershed are to:

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

REVISED

TENTATIVE

VII. RATIONALE FOR PROVISIONS

A. Standard 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.

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

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 C.F.R. p~~P~~art 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

a. Constituents of Emerging Concern in the Effluent.

i. 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 Constituents of Emerging Concern (CECs).

REVISED TENTATIVE

ii. Despite recent improvements in analytical science, there is still a paucity of data. CECs are largely unregulated chemicals, for which water quality standards or state notification levels have not been established.

iii. In recent years, this Regional Water Board has incorporated monitoring of a select group of CECs into the NPDES permits issued to POTWs and will continuously take same actions for the upcoming renewal and new NPDES permits. We need to expand our knowledge of occurrence while coordinating with EPA, Southern California Coastal Water Research Project (SCCWRP), and others to determine further risk and follow-up actions.

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 Board for approval within 90 days of the effective date of this permit. See Section VI.C.2.b. in the accompanying Order for detail.

c. Antidegraedation Analysis and Engineering Report for Proposed Plant Expansion. This provision is based on the State Water Resources Control Board Resolution No. 68-16, which requires the Regional Water Board in regulation the discharge of waste to maintain high quality waters of the State, the Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. This provision requires the Discharger to clarify it has increase plant capacity through the addition of new treatment system(s) to obtain alternative effluent limitations for the discharge from the treatment system(s). This provision requires the Discharger to report specific time schedules for the plants projects. This provision requires the Discharger to submit report to the Regional Water Board for approval.

d. Operations Plan for Proposed Expansion. This provision is based on s~~S~~ection 13385(j)(1)(D) of the California Water Code and allows a time period not to exceed 90 days in which the Discharger may adjust and test the treatment system(s). This provision requires the Discharger to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting and testing to prevent violations.

e. Treatment Plant Capacity. The treatment plant capacity study required by this Order shall serve as an indicator for the Regional Water Board regarding Facility's increasing hydraulic capacity and growth in the service area.

3. Best Management Practices and Pollution Prevention

Pollutant Minimization Program. This provision is based on the requirements of section 2.4.5 of the SIP.

REVISED TENTATIVE

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 C.F.R. 122.41(e) and the previous Order.

5. Special Provisions for Municipal Facilities (POTWs Only)

a. **Biosolids Requirements.** To implement CWA section 405(d), on February 19, 1993, USEPA promulgated 40 C.F.R. ~~P~~part 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the Discharger to comply with said regulations that are enforceable by USEPA because California has not been delegated the authority to implement this program. The Discharger is also responsible for compliance with WDRs and NPDES permits for the generation, transport and application of biosolids issued by the State Water Board, other Regional Water Boards, Arizona Department of Environmental Quality or USEPA, to whose jurisdiction the Facility's biosolids will be transported and applied.

b. This permit contains pretreatment requirements consistent with applicable effluent limitations, national standards of performance, and toxic and performance effluent standards established pursuant to sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, 404, 405, and 501 of the CWA, and amendments thereto. This permit contains requirements for the implementation of an effective pretreatment program pursuant to section 307 of the CWA; 40 C.F.R. p~~P~~arts 35 and 403; and/or section 2233, Title 23, California Code of Regulations.

c. **Spill Reporting Requirements.** This Order established a reporting protocol for how different types of spills, overflow or bypasses of raw or partially treated sewage from its collection system or treatment plant covered by this Order shall be reported to regulatory agencies.

The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006. The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. The Discharger must comply with both the General Order and this Order.

REVISED TENTATIVE

6. Other Special Provisions

Not applicable.

7. Compliance Schedules

The compliance schedules and the interim limits in section IV.A.2.a of the accompanying NPDES Order are authorized under TMDLs (Basin Plan Amendments) which have been adopted by the Los Angeles Regional Board and approved by USEPA. Interim limits and compliance schedules for TDS, sulfate, and chloride had been provided in an administratively issued Time Schedule Order ~~if~~because the permit effective date preceded the TMDL effective date. However, the Regional Water Board cannot extend the TSO, because the conditions under section 13385(j)(3)(C)(ii)(II) of the CWC did not apply to Camarillo SD's discharge. The stakeholders in the Calleguas Creek Watershed are embarking on a watershed-wide solution to salt management, which will include reverse osmosis treatment of potable water and construction of a brine line for brine disposal. The dischargers need time to complete the capital improvement projects. The *Calleguas Creek Watershed Salts TMDL* includes tasks and milestone dates for the various phases of the project.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Camarillo Water Reclamation Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided by posting a notice in a newspaper of local circulation and by posting a notice at the Camarillo Water Reclamation Plant.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments regarding the tentative Order dated February 17, 2011, must be received at

REVISED TENTATIVE

the Regional Water Board offices by 12 p.m. (Noon) on March 21, 2011, and by 12 p.m. (Noon) on March 30, 2011 (with respect to the letter dated March 24, 2011, transmitting proposed changes in final effluent limitations for copper).

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: April 14, 2011
Time: 9:00 AM
Location: Metropolitan Water District of Southern California
Board Room
700 N. Alameda Street
Los Angeles, CA

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/losangeles/ where you can access the current agenda for changes in dates and locations.

D. Nature of Hearing

This proceeding will be a formal adjudicatory proceeding. For such proceedings, the Regional Water Board follows procedures established by the State Water Resources Control Board. These procedures are set forth in regulations commencing with section 647 of Title 23 of the CCR, in particular, Article 2, commencing with section 648.

E. Parties to the Hearing

The following are the parties to this proceeding:
Camarillo Sanitary District

Any other persons requesting party status must submit a written or electronic request to staff not later than 20 business days before the hearing. All parties will be notified if other persons are so designated.

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments regarding

REVISED TENTATIVE

the Tentative Order, dated February 17, 2011, must be received no later than 12 p.m. (Noon) on **March 21, 2011**, as described in section VIII.B above.

Comments or evidence received after that date will be submitted, ex agenda, to the Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

G. Hearing Procedure

The board meeting, of which this hearing is a part, will start at 9:00 a.m. Interested persons are invited to attend. When the agenda item is called, staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to three minutes or less for each interested person, depending on the number of interested persons wishing to be heard.

Parties or interested persons with similar concerns or opinions are encouraged to choose one representative to speak, and are encouraged to coordinate their presentations with each other. Parties will be advised after the receipt of public comments, but prior to the date of the hearing, of the amount of time each is allocated for presentations. That decision will be based upon the complexity and number of issues under consideration, the extent to which the parties have coordinated, the number of parties and interested persons anticipated, and the time available for the hearing. The parties are invited to contact staff not later than March 31, 2011 (two weeks prior to the hearing) to discuss how much time they believe is necessary for their presentations, and staff will endeavor to accommodate reasonable requests. At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

The Board does not generally require the prior identification of witnesses or the cross examination of witnesses, or other procedures not specified in this notice. Parties or persons with special procedural requests or requests for alternative hearing procedures should contact staff, who will endeavor to accommodate reasonable requests. Objections to any procedure to be used during this hearing must be submitted in writing no later than close of business 15 business days prior to the date of the hearing. (Any objections related to the amount of time allocated for parties' presentations must be submitted within two business days of notice thereof, if that date is less than 15 business days before the hearing.) Absent such objections, any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the CCR. Procedural objections will not be entertained at the hearing.

REVISED TENTATIVE

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on **May 5, 2011**. A continuance will not extend any time set forth herein.

H. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

I. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576-6600.

J. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

K. Additional Information

Requests for additional information or questions regarding this order should be directed to Veronica Cuevas at (213) 576-6662.

REVISED TENTATIVE