CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. R4-2003-0083 (as Revised by Order No. R4-2004-0121)

NPDES PERMIT NO. CA0056294

CITY OF THOUSAND OAKS
HILL CANYON WASTEWATER TREATMENT PLANT

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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WASTE DISCHARGE REQUIREMENTS FOR CITY OF THOUSAND OAKS (Hill Canyon Wastewater Treatment Plant)

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

PURPOSE OF ORDER

1. City of Thousand Oaks (hereinafter the City or Discharger) discharges tertiary-treated wastewater, from its Hill Canyon Wastewater Treatment Plant (Hill Canyon WWTP) located in Camarillo, to North Fork Arroyo Conejo, a water of the United States. The discharge is regulated under waste discharge requirements contained in Order No. 96-044, adopted by this Regional Board on June 10, 1996. Order No. 96-044 also serves as a permit under the National Pollutant Discharge Elimination System (NPDES No. CA0056294).

2. On May 12, 1997, the Regional Board adopted Order No. 97-061, which revised the narrative turbidity effluent limitation so that it reflected the definition of filtered wastewater found in Title 22, California Code of Regulations (CCR). On September 29, 1997, the Regional Board adopted Order No. 97-123, which revised the NPDES permit to incorporate provisions from Resolution No. 97-10*, Support for Watershed Management in the Calleguas Creek Watershed*, into the permit and modify Hill Canyon WWTP's Monitoring and Reporting Program No. CI-4917. Aside from the two revisions, the Expiration date, and all other Limitations, Requirements, and Provisions of Order No. 96-044 were unchanged and remained in full force and effect. The modifications to the permit under Order 97-123 included: adding a finding regarding the Calleguas Creek Characterization Study, adding a footnote to the nitrogen effluent limitation and to the ammonia receiving water objective, and modifying the location of a receiving water station.

3. Order No. 96-044 has an expiration date of May 10, 2001. Section 122.6 of Title 40 Code of Federal Regulations (40 CFR) and section 2235.4 of Title 23 of the CCR state that an expired permit continues in force until the effective date of a new permit provided the permittee has timely submitted a complete application for a new permit. On November 9, 2000, the City filed a Report of Waste Discharge (ROWD) and applied to the Regional Board for reissuance of waste discharge requirements (WDR) and NPDES permit to discharge tertiary-treated wastewater. Therefore, the Discharger's permit has been administratively extended until the Regional Board acts on the new WDR and permit.

4. This Order is the reissuance of waste discharge requirements that serves as an NPDES permit for the Hill Canyon WWTP.

FACILITY AND TREATMENT PROCESS DESCRIPTION

5. The City owns and operates the Hill Canyon WWTP, a tertiary wastewater treatment plant located at 9600 Santa Rosa Road, Camarillo, California. Figure 1 shows the location of the plant. The Hill Canyon WWTP currently receives wastewater from the City of Thousand Oaks and unincorporated sections of Ventura County. The wastewater is a mixture of domestic and industrial wastewater. The latter is pretreated pursuant to 40 CFR Part 403 prior to discharge to the sewers.

6. The City developed a phased wastewater capital improvement program. The 15-year program was formulated to provide for the construction of the most critical facilities in the first phase, construction of primary regulatory compliance related facilities in the second phase, and construction of expansion and other replacement facilities in the third and final phase. Projects include nitrification and denitrification, additional secondary clarification, additional filtration, gravity belt thickening, belt press dewatering, power generation and distribution, and other projects to expand its treatment facility to a design capacity of 14.0 MGD. Bid opening for phase three of the upgrade is scheduled for April 17, 2003. The bid will be awarded approximately one month afterwards, on May 17, 2003.

7. For the ultimate design capacity of 14.0 MGD, the City of Thousand Oaks prepared a Final Environmental Impact Report (FEIR) and a Final Supplemental Environmental Impact Report (FSEIR) in accordance with the California Environmental Quality Act (Public Resource Code Section 21000 et seq.). The FSEIR addressed potential effects of the discharge on downstream surface waters, groundwaters, and flooding. On January 6, 1987, the Thousand Oaks City Council adopted and passes Resolution No. 87-1 that certifies the FEIR and FSEIR. The adoption of the resolution remained uncontested during the 30-day legal challenge period that followed.

8. The City reported in its ROWD that the Hill Canyon WWTP had a design capacity of 10.2 million gallons per day (mgd) and served approximately 115,000 people. However, on June 4, 2002, the City submitted a letter informing the Regional Board that phase two of the plant upgrade was complete, increasing Hill Canyon WWTP's design capacity to 12 MGD. On October 24, 2002, with the closure of the Olsen Road Water Reclamation Plant (WRP), the City permanently diverted all sewage (approximately 0.25 MGD) that would flow to its Olsen Road WRP to the Hill Canyon WWTP for treatment. Thus, the population served by the Hill Canyon WWTP increased by 2,500 people.

9. In July 2002, the City completed a Wastewater Interceptor Master Plan that presents a comprehensive assessment of the structural condition and hydraulic capacity of the City's interceptor system; establishes a ten year plan for capital improvements; and, presents a preliminary assessment of the City's capacity, management, operation, and maintenance (CMOM) program. This was done in anticipation of future sanitary sewer overflow regulations.

10. The United States Environmental Protection Agency (USEPA) and the Regional Board have classified Hill Canyon WWTP as a major discharger. It has a Threat to Water Quality and Complexity Rating of 1-A, pursuant to CCR Section 2200.

11. Treatment at the Hill Canyon WWTP consists of comminution/bar screening, aerated grit removal, primary clarification, primary flow equalization, conventional activated sludge treatment, secondary clarification, multimedia filtration, chlorination (sodium hypochlorite), and dechlorination (sodium bisulfite). Primary sludge is anaerobically digested. Sewage solids (sludge) separated from the wastewater are dewatered with a press and transported off site to Wasco, in Kern County, California. Bar screen debris is disposed of at a landfill. With the completion of phase three, the Hill Canyon WWTP will nitrify and denitrify. Figure 2 illustrates the schematic of wastewater flow.

12. **Water Recycling.** The Hill Canyon WWTP does not have water reuse requirements currently, but has investigated the feasibility of reuse for agriculture irrigation, and has submitted an application for water rights to the State Board. On February 6, 1998, the State Board, Division of Water Rights, issued Permit No. 20952, *Permit for Diversion and Use of Water*. The permit authorizes diversion of up to 21.7 cubic feet per second (cfs) (not to exceed 16,683 acre-feet) from Conejo Creek, for irrigation purposes by Camrosa Water District and Pleasant Valley County Water District. Camrosa Water District currently delivers reclaimed water, from a diversion facility, to Pleasant Valley County Water District.

13. ***Storm Water Management.*** The City diverts a portion of storm water runoff for treatment at the Hill Canyon WWTP. It has developed a Storm Water Pollution Prevention Plan (SWPPP) for storm water flows at the facility that do not enter the treatment system.

DISCHARGE OUTFALL AND RECEIVING WATER DESCRIPTION

14. The Hill Canyon WWTP discharges tertiary-treated wastewater to North Fork Arroyo Conejo, and untreated stormwater to North and South Forks of Arroyo Conejo, waters of the United States, above the estuary, within the Calleguas Creek Watershed Management Area, at the following discharge points:

    Discharge Serial No. 001: Discharges stormwater into North Fork Arroyo Conejo (approximate coordinates: Latitude 34° 13' 21" North, Longitude 118° 55' 17" West);

    Discharge Serial No. 002: Discharges stormwater into North Fork Arroyo Conejo (approximate coordinates: Latitude 34° 13' 17" North, Longitude 118° 55' 17" West);

    Discharge Serial No. 003: Discharges stormwater into North Fork Arroyo Conejo (approximate coordinates: Latitude 34° 13' 06" North, Longitude 118° 55' 21" West);

    Discharge Serial No. 004: Discharges stormwater into Sourth Fork Arroyo Conejo (approximate coordinates: Latitude 34° 12' 53" North, Longitude 118° 55' 14" West);

Discharge Serial No. 005: Discharges tertiary treated municipal and industrial wastewater into North Fork Arroyo Conejo (approximate coordinates: Latitude 34° 12' 38" North, Longitude 118° 55' 12" West);

Discharge Serial No. 006: Discharges stormwater into North Fork Arroyo Conejo (approximate coordinates: Latitude 34° 12' 48" North, Longitude 118° 55' 18" West); and,

Discharge Serial No. 007: Discharges stormwater into North Fork Arroyo Conejo (approximate coordinates: Latitude 34° 12' 54" North, Longitude 118° 55' 23" West).

During dry weather (May 1 – October 31), the primary sources of water flow in the receiving waters, downstream of the discharge point, is the Hill Canyon WWTP effluent and other NPDES-permitted discharges, including urban runoff conveyed through the municipal separate storm sewer systems (MS4). Storm water and dry weather urban runoff from MS4 are regulated under an NPDES permit, *Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within the Ventura County Flood Control District, County of Ventura, and the Cities of Ventura County* (Ventura Municipal Permit), NPDES Permit No. CAS004002.

15. The Ventura County Flood Control District channelized portions of Calleguas Creek to convey and control floodwater, and to prevent damage to homes located adjacent to the creek. Calleguas Creek is a water of the United States that conveys floodwater and urban runoff, along with treated water. The North and South Forks of Arroyo Conejo are unlined near the points of discharge. Groundwater recharge occurs incidentally, in these unlined areas of Arroyo Conejo and Calleguas Creek where the underlying sediments are highly transmissive to water as well as pollutants.

    Notwithstanding that segments located further downstream of the discharge are concrete-lined, the watershed supports a diversity of wildlife. Threatened and endangered species such as the peregrine falcon, least tern, light-footed clapper rail, and the brown pelican are found in Calleguas Creek and Mugu Lagoon.

DISCHARGE QUALITY

16. In 2000, the Discharger's discharge monitoring reports showed the following:

    - treated wastewater average annual flow rate of 10.3 mgd.
    - average annual removal rate of 98.6% and 99.1%, of BOD and total suspended solids, respectively.
    - 7-day median and daily maximum coliform values as <2 MPN/ 100 ml in the treated wastewater for ten of the twelve months of the year.

17. The characteristics of the wastewater discharged, based on data submitted in the 2000 annual summary discharge monitoring report, are as follows. Only the priority pollutants that were detected are shown below. Nondetected toxic priority pollutants and the detection limits are given in the factsheet. (Note: The "<" symbol indicates that the pollutant was not detected (ND) at that concentration level.)

Table 1
Effluent Characteristics

CTR#	Constituent	Unit	Ave. or Range	Maximum	Minimum
	Flow	mgd	10.349	11.052	9.598
	pH	pH units	7.3	7.6	7.1
	Temperature (Nov. – April) (May – Oct.)	°F	71 winter 77 summer	72 79	70 74
	BOD_5 20°C	mg/L	2.6	3.8	<2
	Suspended solids	mg/L	2.1	3.4	1.6
	Settleable solids	ml/L	<0.1	<0.1	<0.1
	Total dissolved solids	mg/L	575	650	486
	Chloride	mg/L	123	132	115
	Sulfate	mg/L	123	138	114
	Boron	mg/L	0.67	0.74	0.60
	Total Phosphate	mg/L	7.2	13	3.3
	Turbidity	NTU	1.0	1.3	0.7
	Oil and grease	mg/L	<3 - <5	<5	<3
	Fluoride	mg/L	0.21	0.3	0.14
	Ammonia-N	mg/L	4.6	10.4	1.3
	Organic-N	mg/L	2	3.3	0.66
	Nitrate-N	mg/L	7.7	10.6	4.3
	Nitrite-N	mg/L	0.48	1.1	0.16
	Total Nitrogen	mg/L	14.8	21.5	11.9
	Aluminum	µg /L	77	101	53
	Cobalt	µg /L	1.6	1.6	<1
6	Copper	µg /L	70	70	<1
	Iron	µg /L	70	70	<20
	Manganese	µg /L	20	20	<1
13	Zinc	µg /L	47.5	73	22

APPLICABLE LAWS, PLANS, POLICIES AND REGULATIONS

18. ***Federal Clean Water Act***. The federal Clean Water Act (CWA) provides that no person may discharge pollutants from a point source into a water of the United States, except in conformance with an NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect and enhance water quality.

19. ***Basin Plan***. The Board adopted a revised *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) on June 13, 1994, amended on January 27, 1997, by Regional Board Resolution No. 97-02. This updated and consolidated plan represents the Board's master water quality control planning document and regulations. The revised Basin Plan

was approved by the State Board and the State of California Office of Administrative Law (OAL) on November 17, 1994, and February 23, 1995, respectively. The Basin Plan (i) designates beneficial uses for surface and groundwaters, (ii) sets narrative and numeric objectives that must be attained or maintained to protect the designated (existing and potential) beneficial uses and conform to the state and federal antidegradation policies, and (iii) includes implementation provisions, programs, and policies to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other state pertinent water quality policies and regulations. The 1994 Basin Plan was prepared to be consistent with all applicable State and Regional Board plans and policies adopted from 1994 and earlier. This Order implements the plans, policies and provisions of the Board' s Basin Plan.

20. ***Sources of Drinking Water Policy***. On May 19, 1988, the State 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 Board's SODW policy, on March 27, 1989, the Regional 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).*

21. Consistent with Regional Board Resolution No. 89-03 and State Board Resolution No. 88-63, in 1994 the Regional 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 Board's enabling resolution] until the Regional Board adopts [a special Basin Plan Amendment that incorporates a detailed review of the waters in the Region that should be exempted from the potential MUN designations arising from SODW policy and the Regional 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 Board finalizes the designations for these waters. This permit is designed to be consistent with the existing Basin Plan.

22. ***Beneficial Uses***. The designated beneficial uses in the Basin Plan for Arroyo Conejo, Conejo Creek, Calleguas Creek, and Mugu Lagoon:

A. For surface water:

Arroyo Conejo - Hydro Unit 403.64

Existing: groundwater recharge, freshwater replenishment, contact and non-

contact water recreation, warm freshwater habitat, and wildlife habitat;

Potential: municipal and domestic water supply;

The potential MUN beneficial use for the water body is consistent with Regional Board Resolution 89-03; however the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designed to protect the conditional designation.

Conejo Creek - Hydro Unit 403.12

Existing: industrial service supply, industrial process supply, agricultural supply, groundwater recharge, contact and non-contact water recreation, warm freshwater habitat, and wildlife habitat;

Potential: municipal and domestic water supply;

The potential MUN beneficial use for the water body is consistent with Regional Board Resolution 89-03; however the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designed to protect the conditional designation.

Calleguas Creek - Hydro Unit 403.12

Existing: industrial service supply, industrial process supply, agricultural supply, ground water recharge, contact and non-contact water recreation, warm freshwater habitat, and wildlife habitat;

Potential: municipal and domestic supply;

The potential MUN beneficial use for the water body is consistent with Regional Board Resolution 89-03; however the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designed to protect the conditional designation.

Calleguas Creek - Hydro Unit 403.11

Existing: agricultural supply, groundwater recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, rare, threatened or endangered species, and wetland habitat;

Potential: municipal and domestic supply;

The potential MUN beneficial use for the water body is consistent with Regional Board Resolution 89-03; however the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designed to protect the conditional designation.

Calleguas Creek Estuary - Hydro Unit 403.11

Existing: non-contact water recreation, commercial and sport fishing, estuarine habitat, wildlife habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, and wetland habitat;

Potential: navigation, water contact recreation;

Mugu Lagoon - Hydro Unit 403.11

Existing: navigation, non-contact water recreation, commercial and sport fishing, estuarine habitat, marine habitat, wildlife habitat, preservation of biological habitats, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, shellfish harvesting, and wetland habitat.

Potential: water contact recreation;

B. The beneficial uses of the receiving ground waters are:

Arroyo Santa Rosa (Ventura Central Basin) – DWR Basin No. 4-6

Existing- municipal and domestic supply, industrial service supply; industrial process supply; and, agricultural supply.

Pleasant Valley (Ventura Central Basin) – DWR Basin No. 4-6

Confined aquifers: Existing- municipal and domestic supply, industrial service supply; industrial process supply; and, agricultural supply.

Unconfined aquifers: Existing- industrial service supply; industrial process supply; and, agricultural supply;
Potential- municipal and domestic supply.

Oxnard Plain (Ventura Central Basin) - DWR Basin No. 4-4

Confined aquifers: Existing- municipal and domestic supply, industrial service

		supply; industrial process supply; and, agricultural supply.
Unconfined aquifers:	Existing-	municipal and domestic supply; and, agricultural supply;
	Potential-	industrial service supply.
Oxnard Forebay:	Existing-	municipal and domestic supply, industrial service supply; industrial process supply; and, agricultural supply.

23. ***Title 22 of the California Code of Regulations***. The California Department of Health Services established primary and secondary maximum contaminant levels (MCLs) for a number of chemical and radioactive contaminants. These MCLs can be found in Title 22, CCR (Title 22). Chapter 3 of the Basin Plan incorporates Title 22 by reference. Title 22 MCLs have been incorporated into NPDES permits and Non-Chapter 15 WDRs to protect the municipal and domestic supply (MUN) and groundwater recharge (GWR) beneficial uses.

Groundwater Recharge. The North and South Forks of Arroyo Conejo, near the Hill Canyon WWTP discharge points, are designated as GWR. Surface water from Arroyo Conejo Creek enters the Arroyo Santa Rosa, Pleasant Valley, and the Oxnard Plain Groundwater Basins. Since ground water from these basins is used to provide drinking water to people in Ventura, Title 22-based limits are needed to protect that drinking water supply. By limiting the contaminants in the Hill Canyon WWTP discharges, the amount of pollutants entering the surface waters and groundwater basins are correspondingly reduced. Once groundwater basins are contaminated, it may take years to clean up, depending on the pollutant. Compared to surface water pollution, investigations and remediation of groundwater are often more difficult, costly, and extremely slow. For these reasons Title 22-based limits will remain in the NPDES permit to protect the GWR use and the MUN use in the ultimate receiving water.

24. ***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. Similarly, the CWA (section 304(d)(4)(B)) and USEPA regulations (40 CFR section 131.12) require all NPDES permitting actions to be consistent with the federal antidegradation policy.

25. ***California Toxics Rule (CTR)***. The USEPA promulgated the CTR criteria that became effective on May 18, 2000 (codified as 40 CFR section 131.38). The CTR established water quality criteria for priority toxic pollutants in California's inland surface waterways. The CTR also provides for schedules of compliance not to exceed 5 years from the date of permit renewal for an existing discharger if the discharger demonstrates that it is infeasible to promptly comply with the CTR criteria. The human health criteria for carcinogens in the CTR is based on an incremental cancer risk level of one in a million (10^{-6}). USEPA recognizes that adoption of criteria at a different risk factor is outside of the scope of the CTR. However, States have the discretion to adopt water quality

criteria that result in a higher risk level, if the chosen risk level has been demonstrated to adequately protect the most highly exposed subpopulation, and all necessary public outreach participation has been conducted. This demonstration has not been conducted in California. Further, information that is available on highly exposed subpopulations in California supports the need to protect the general population at the 10^{-6} level. The discharger may undertake a study, in accordance with the procedures set forth in Chapter 3 of USEPA's Water Quality Standards Handbook: Second Edition (EPA-823-B-005a, August 1994) to demonstrate that a different risk level is more appropriate for discharges subject to this Order. Upon completion of the study, the State Board and Regional Board will review the results and determine if the risk level proposed is more appropriate. In the mean time, the State will continue using a 10^{-6} risk level, as it has done historically, to protect the population against carcinogenic pollutants.

26. ***State Implementation Plan (SIP).*** Anticipating USEPA's promulgation of the CTR, the State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (also known as the State Implementation Plan or SIP) on March 2, 2000. The SIP was amended by Resolution No. 2000-30, adopted on April 26, 2000, and the Office of Administrative Law approved the SIP on April 28, 2000. The SIP applies to discharges of toxic pollutants to inland surface waters, enclosed bays and estuaries of California which are subject to regulation under the State's Porter-Cologne Water Quality Control Act (Division 7 of the Water Code) and the Clean Water Act. The policy provides for the following:

    a. implementation procedures for the priority pollutant criteria promulgated by USEPA through the CTR and for the priority pollutant objectives established by Regional Water Quality Control Boards (RWQCBs) in their water quality control plans (Basin Plans);
    b. monitoring requirements for priority pollutants with insufficient data to determine reasonable potential;
    c. monitoring requirements for 2,3,7,8–TCDD equivalents; and,
    d. chronic toxicity control.

27. ***Watershed Approach.*** This Regional 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 Board's web site at *http://www.swrcb.ca.gov/rwqcb4/* and clicking on the word "Watersheds".

28. ***CWA 303(d) Listed Pollutants.*** On May 12, 1999, USEPA approved the State's 1998 list of impaired waterbodies prepared pursuant to CWA 303(d). The list (hereinafter referred to as the 303(d) list) identifies waterbodies where water quality standards are not expected to be met after the implementation of technology-based effluent limitations

on point sources (water quality-limited waterbodies).

Conejo Creek, Calleguas Creek, Mugu Lagoon, and its tributaries are on the 303(d) List for the following pollutants/stressors, from point and non-point sources:

Conejo Creek Reach 3 (Thousand Oaks City limit to Lynn Road) –
Hydrologic Unit 403.64

- Ammonia, algae, low dissolved oxygen/organic enrichment, sulfate, total dissolved solids, cadmium (in fish tissue), Chem A[1] pesticides (in fish tissue), chromium (in fish tissue), Dacthal (in fish tissue), DDT (in fish tissue), Endosulfan (in fish tissue), nickel (in fish tissue), silver (in fish tissue), toxaphene (in fish tissue & sediment).

Conejo Creek Reach 2 (Santa Rosa Road to Thousand Oaks City limit) –
Hydrologic Unit 403.63

- Ammonia, algae, chloride, low DO/organic enrichment, sulfates, total dissolved solids, toxicity, cadmium (in fish tissue), Chem A pesticides (in fish tissue), chromium (in fish tissue), Dacthal (in fish tissue), DDT (in fish tissue), Endosulfan (in fish tissue), nickel (in fish tissue), silver (in fish tissue), toxaphene (in fish tissue & sediment).

Conejo Creek Reach 1 (confluence with Calleguas Creek to Santa Rosa Road) –
Hydrologic Unit 403.12

- Algae, Ammonia, Organic enrichment/ low dissolved oxygen, Sulfates, Total dissolved solids, Toxicity, Cadmium (in fish tissue), Chem A pesticides (in fish tissue), Chromium (in fish tissue), Dacthal (in fish tissue), DDT (in fish tissue), Endosulfan (in fish tissue), Nickel (in fish tissue), Silver (in fish tissue), and Toxaphene (in fish tissue and sediment).

Calleguas Creek Reach 1(Estuary to 0.5 miles South of Broome Rd.) --
Hydrologic Unit 405.15

- Ammonia, Nitrogen, Toxicity, Sediment Toxicity, Chem A pesticides (in fish tissue), Chlordane (in fish tissue), DDT (in fish tissue and sediment), Endosulfan (in fish tissue), PCBs (in fish tissue), and Toxaphene (in fish tissue and sediment).

Calleguas Creek Reach 2 (0.5 miles South of Broome Road to Potrero Road) --
Hydrologic Unit 403.12

- Ammonia, Nitrogen, Toxicity, Sediment Toxicity, Chem A pesticides (in fish tissue), Chlordane (in fish tissue), Dacthal (in fish tissue), DDT (in fish tissue and sediment), Endosulfan (in fish tissue), PCBs (in fish tissue), and Toxaphene (in fish tissue and

[1] Chem A refers to the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene.

sediment).

Calleguas Creek Reach 3 (Potrero Road to Somis Road) -- Hydrologic Unit 403.12

- Chloride, total dissolved solids, Nitrate and nitrite.

Mugu Lagoon -- Hydrologic unit 403.11

- Copper, Mercury, Nickel, Nitrogen, Zinc, Chlordane (in fish tissue), Dacthal (in fish tissue), DDT (in fish tissue and sediment), Endosulfdan (in fish tissue), PCBs (in fish tissue), Sediment toxicity, and Sedimentation/Siltation.

The Regional Board revised the 303(d) list in 2002 and submitted the draft to the State Board for approval. The State Board had scheduled the draft 303(d) list, dated October 15, 2002, for approval at two of its meetings, however the item was postponed to hold additional workshops and to allow more time for the public to submit comments. The draft 303(d) list dated October 15, 2002, was revised on January 13, 2003, based on comments received. The draft 303(d) list, dated January 13, 2003, was adopted by the State Board at its February 4, 2003 meeting. The adopted 303(d) list is currently being reviewed by USEPA and is waiting approval.

29. ***Total Maximum Daily Loads.*** A Total Maximum Daily Load (TMDL) is a determination of the amount of a pollutant from point, nonpoint, and natural background sources, with a margin of safety, that may be discharged to a water quality-limited water body. The regulatory requirements for TMDL are codified in 40 CFR section 130.7. Section 303(d) of the CWA requires that TMDLs must be developed for the pollutants of concern which impact the water quality of water bodies on the 303(d) list. Under the March 23, 1999, amended consent decree between the USEPA and Heal the Bay, et al., (Case No. C 98-4825 SBA, *Heal the Bay, Santa Monica Bay Keeper, et al. v. Browner, et.al.),* TMDLs for chloride in Calleguas Creek must be completed by March 2002; nutrients by March 2002; pesticides, historic pesticides, and PCBs by March 2005; and metals by 2006. The remaining TMDLs, such as sulfates are tentatively scheduled for completion in the 2003/2004 fiscal year.

Chloride TMDL and Chloride Limits. On March 22, 2002, the consent decree deadline for the establishment of a chloride TMDL, USEPA Region 9, established the Calleguas Creek Total Maximum Daily Load for chloride. Subsequently, on October 17, 2002, the State Board adopted Order WQO 2002-0017, in the matter of the petition of the City of Simi Valley, City of Thousand Oaks, Camarillo Sanitary District, Camrosa Water District, and Ventura County Waterworks District No. 1, which provided a stay, maintaining the 190 mg/L chloride interim effluent limitation of prior Regional Board resolutions and contained in the existing NPDES permits for the aforementioned POTWs. Consistent with the State Board's stay, upon expiration of the stay, the accompanying Order or its successors will be reopened and modified to include appropriate final effluent limits for chloride.

Nitrogen Compounds and Related Effects TMDL. On October 24, 2002, the Regional Board adopted Resolution No. 2002-017, *Amendment to the Basin Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in Calleguas Creek (Nitrogen Compounds and Related Effects TMDL)*. The State Board approved the *Nitrogen Compounds and Related Effects TMDL* on March 19, 2003. Presently the TMDL is awaiting final approvals from the Office of Administrative Law and U.S. EPA.

30. Pursuant to this Regional Board's watershed initiative framework, the Calleguas Creek Watershed Management Area was the targeted watershed for fiscal year 2001-2002. However, the NPDES permit renewals were re-scheduled so that provisions of the CTR and SIP could be incorporated into the permits.

In January 1996, the Regional Board published the *Calleguas Creek Preliminary Report: Water Quality* (State of the Watershed Report). This document contains a summary of water quality problems and issues in the Calleguas Creek Watershed, describes Calleguas Creek and its tributaries, presents an overview of the existing monitoring data, and suggests that further monitoring is required. In December 2001, the Regional Board published the *Watershed Management Initiative.*

As described in the State of the Watershed Report and in Chapter 2.10 of the *Watershed Management Initiative*, the Calleguas Creek Watershed drains a 343 square mile area of southern Ventura County and a small portion of western Los Angeles County. The northern boundary of the watershed is formed by the Santa Susana Mountains, South Mountain, and Oak Ridge. The southern boundary is formed by the Simi Hills and Santa Monica Mountains. Urban development is largely restricted to the City limits of Simi Valley, Moorpark, Thousand Oaks, and Camarillo. Although some residential development has occurred along the slopes of the watershed, most upland areas are still open space. Agricultural activities, primarily the cultivation of orchards and row crops are spread out along the valleys and on the Oxnard Plain. Mugu Lagoon, located at the mouth of the watershed is one of the few remaining significant saltwater wetland habitats in southern California. Groundwater supplies are critical to agricultural operations and to the sand and gravel mining industry in the watershed.

31. ***Performance Goals***. In Order No. 96-044, the Regional Board implemented the Water Quality Task Force[2] recommendations on the use of performance goals, rather than performance-based limits, when appropriate. In the absence of an Inland Surface Water Plan and Enclosed Bays and Estuaries Plan, performance goals were intended to minimize pollutant loadings (primarily toxics) and, at the same time, maintain the incentive for future voluntary improvement of water quality whenever feasible, without the imposition of more stringent limits based on improved performance. Effluent performance goals were not enforceable limitations or standards. This Order does not contain performance goals, but rather implements controls as referenced below to

[2] *Working Together for an Affordable Clean Water Environment*. A final report presented to the California Regional Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September 1993.

reflect technology-based effluent limits and water quality-based effluent limits (WQBELs).

REGULATORY BASIS FOR EFFLUENT LIMITS AND DISCHARGE REQUIREMENTS

32. ***Water Quality Objectives and Effluent Limits***. Water Quality Objectives (WQOs) and effluent limitations in this permit are based on:
- The plans, policies and water quality standards (beneficial uses + objectives + antidegradation policy) contained in the 1994 *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*, as amended, including chemical constituent limitations established by incorporating the California Code of Regulations, Title 22, maximum contaminant levels designed to protect the existing drinking water use of the receiving groundwaters;
- California Toxics Rule (40 CFR 131.38);
- The State Board's "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California" (the State Implementation Plan or SIP);
- USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs Final May 31, 1996;
- USEPA Whole Effluent Toxicity (WET) Control Policy July 1994;
- Applicable Federal Laws and Regulations
  - Federal Clean Water Act, and
  - 40 CFR sections 122 125, and 131, among others; and,
- Best professional judgment (pursuant to 40 CFR section 122.44).

33. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that water quality based effluent limits may be set based on USEPA criteria and supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

34. U.S. EPA regulations, policy, and guidance documents upon which Best Professional Judgment (BPJ) was developed include, in part:

- Inspectors Guide for Evaluation of Municipal Wastewater Treatment Plants, April 1979 (EPA/430/9-79-010);
- Fate of Priority Pollutants in Publicly Owned Treatment Works Pilot Study October 1979 (EPA-440/1-79-300);
- Technical Support Document for Water Quality Based Toxics Control March 1991 (EPA-505/ 2-90-001); and,
- USEPA NPDES Permit Writers' Manual, December 1996 (EPA-833-B-96-003).

35. ***Mass and Concentration Limits.*** 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at its discretion, to express limits in additional units (e.g., concentration units). The regulations

mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents; however, the mass-based limits are inappropriate during wet weather flows when plant flows may exceed design capacity. Therefore, during storm events when flows exceed design capacity, only concentration-based limits are applicable.

36. **Maximum Daily Effluent Limitations.** Pursuant to 40 CFR section 122.45(d)(2), for a POTW's continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. It is impracticable to only include average weekly and average monthly effluent limitations for certain pollutants in the permit, because a single daily discharge of certain pollutants, in excess amounts, can cause violations of water quality objectives. The effects of certain pollutants on aquatic organisms are often rapid. For many pollutants, an average weekly or average monthly effluent limitation alone is not sufficiently protective of beneficial uses. As a result, maximum daily effluent limitations, as referenced in 40 CFR section 122.45(d)(1), are included in the permit for certain constituents as discussed in the Fact Sheet accompanying this Order.

37. ***Pretreatment.*** Pursuant to 40 CFR Part 403, the City developed and has implemented an approved industrial wastewater pretreatment program. This Order requires implementation of the approved pretreatment program.

38. ***Sewage Sludge.*** To implement CWA section 405(d), on February 19, 1993, USEPA promulgated 40 CFR Part 503 to regulate the use and disposal of municipal sewage sludge. This Order implements the regulations and it is the responsibility of the Discharger to comply with said regulations, which are enforceable by USEPA.

39. ***Storm Water.*** CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR section 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State 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 Board Order No. 97-03-DWQ.

General NPDES permit No. CAS000001 is applicable to storm water discharges from the Hill Canyon WWTP's premises. On March 27, 1992, the City filed a Notice of Intent to comply with the requirements of the general permit. The City developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Board's Order No. 97-03-DWQ.

40. ***Clean Water Act Effluent Limitations***. Numeric and narrative effluent limitations are established pursuant to Section 301 (Effluent Limitations), Section 302 (Water Quality-Related Effluent Limitations), Section 303 (Water Quality Standards and Implementation Plans), Section 304 (Information and Guidelines [Effluent]), Section 305 (Water Quality Inventory), Section 307 (Toxic and Pretreatment Effluent Standards), and Section 402 (NPDES) of the CWA. The CWA and amendments thereto are applicable to the discharges herein.

41. ***Antibacksliding.*** Antibacksliding provisions are contained in Sections 303(d)(4) and 402(o) of the CWA and in 40 CFR section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions. Section 402(o)(2) outlines six exceptions where effluent limitations may be relaxed.

42. ***Applicable Water Quality Objectives***. 40 CFR section 122.44(d)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial use.

The Basin Plan includes narrative and numeric Water Quality Objectives (WQOs). The CTR promulgates numeric aquatic life criteria for 23 toxic pollutants and numeric human health criteria for 57 toxic pollutants. A compliance schedule provision in the CTR and the SIP authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on the federal CTR criteria when certain conditions are met. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that WQBELs may be set based on USEPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

43. ***Types of Pollutants***. For CWA regulatory purposes, pollutants are grouped into three general categories under the NPDES program: conventional, toxic, and non-conventional. By definition, there are five conventional pollutants (listed in 40 CFR section 401.16): 5-day biochemical oxygen demand, total suspended solids, fecal coliform, pH, and oil and grease. Toxic or "priority" pollutants are those defined in Section 307(a)(1) of the CWA (and listed in 40 CFR section 401.12 and 40 CFR Part 423, Appendix A) and include metals and organic compounds. Non-conventional pollutants are those which do not fall under either of the two previously described categories and include such parameters as ammonia, phosphorous, chemical oxygen demand, whole effluent toxicity, etc.

44. ***Technology-Based Limits for Municipal Facilities (POTWs).*** Technology-based effluent limits 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 EPA 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 CFR Part 133. These technology-based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of five-day biochemical oxygen demand, total suspended solids, and pH.

45. ***Water Quality Based Effluent Limits (WQBELs)***. Water quality-based effluent limits are designed to protect the quality of the receiving water by ensuring that State water quality standards are met by discharges from an industrial/municipal point source. If, after technology-based effluent limits are applied, a point source discharge will cause, have the reasonable potential to cause, or contribute to an exceedance of an applicable water quality criterion, then 40 CFR section 122.44(d)(1) requires that the permit contain a WQBEL. Although the CWA establishes explicit technology-based requirements for POTWs, Congress did not exempt POTWs from additional regulation to protect water quality standards. As a result, POTWs are also subject to WQBELs. Applicable water quality standards for Conejo Creek, Calleguas Creek, and Mugu Lagoon are contained in the Basin Plan and CTR, as described in previous findings.

46. ***Water Quality Based Effluent Limitations for Toxic Pollutants.*** Toxic substances are regulated in this permit by WQBELs derived from the 1994 Basin Plan, the CTR, and/or best professional judgment (BPJ) pursuant to 40 CFR section 122.44. If a discharge causes, has a reasonable potential to cause, or contribute to a receiving water excursion above a narrative or numeric objective within a State water quality standard, federal law and regulations, as specified in 40 CFR section 122.44(d)(1)(i), and in part, the SIP, require the establishment of WQBELs that will protect water quality. As documented in Table R and the fact sheet, pollutants exhibiting reasonable potential in the discharge, authorized in this Order, are identified in the Reasonable Potential Analysis (RPA) section and have final effluent limits. The discharger is required to gather the appropriate data and the Regional Board will determine if final effluent limits are needed. If final limits are needed, the permit will be reopened and limits will be included in the permit.

47. ***Basis for Effluent Limits for 303(d) Listed Pollutants.*** For 303(d) listed pollutants, the Regional Board plans to develop and adopt total maximum daily loads (TMDLs) which will specify wasteload allocations (WLAs) for point sources and load allocations (LA) for non-point sources, as appropriate. Following the adoption of TMDLs by the Regional Board, NPDES permits will be issued, and where appropriate, reopened to include effluent limits consistent with the assumptions of the TMDL, based on applicable WLAs. In the absence of a TMDL, the permits will include water quality-based effluent limitations derived as provided in the CTR and SIP (if applicable). These effluent limits are based on criteria applied end-of-pipe as explained in part IX.A.5 of the accompanying fact sheet.

48. ***Mixing Zones and Dilution Credits.*** Mixing zones and dilution credits are not allowed in this Order. Allowance of a mixing zone is in the Regional Board's discretion under Section 1.4.2 of the SIP and under the Basin Plan (Basin Plan Chapter 4, page 30). If the discharger subsequently conducts appropriate mixing zone and dilution credit studies, the Regional Board can evaluate the propriety of granting a mixing zone or establishing dilution credits. The Regional Board has concluded mixing zones and dilution credits would be inappropriate to grant, at this time, in light of the following factors:

- The Hill Canyon WWTP discharge contributes the largest flow (up to 12 MGD or 18.6 cfs) into Arroyo Conejo in the vicinity of the discharge point and it overwhelms the receiving water (1.1 cfs upstream of the discharge) providing limited mixing and dilution;
- Even in the absence of the Hill Canyon WWTP discharge, the receiving water primarily consists of nuisance flows and other effluents, limiting its ability to assimilate additional waste;
- Several reaches of Arroyo Conejo, Conejo Creek, Calleguas Creek, and Mugu Lagoon [including those subject to this Order] are 303(d) listed (i.e, impaired) for certain constituents;
- Impaired waters do not have the capacity to assimilate pollutants of concern at concentrations greater than the applicable objective;
- For the protection of the beneficial uses, such as rare, threatened, or endangered species.
- For the protection of warm freshwater habitat;
- For the protection of the beneficial uses, such as estuarine habitat; marine habitat; wildlife habitat;
- Because a mixing zone study has not been conducted; and
- Because a hydrologic model of the discharge and the receiving water has not been conducted.

49. Specific effluent limitations for each constituent contained in this order were developed in accordance with the foregoing laws, regulations, plans, policies, and guidance. The specific methodology and example calculations are documented in the fact sheet prepared by Regional Board staff that accompanies this Order.

REASONABLE POTENTIAL ANALYSIS

50. As specified in 40 CFR section 122.44(d)(1)(i), permits are required to include limits for all pollutants "which the Director (defined as the Regional Administrator, State Director, or authorized representative in 40 CFR section 122.2) determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard."

A. Using the method described in the TSD, the Regional Board has conducted Reasonable Potential Analyses (RPA) for Chronic toxicity (Table C2 of the accompanying fact sheet) using the discharger's effluent data from their ROWD and annual self monitoring reports. Chronic toxicity effluent data is summarized in Table C1 of the accompanying fact sheet. The RPA compares the effluent

data with USEPA's I TUc water quality criteria. The Discharger's effluent demonstrated chronic toxicity during the last permit cycle. Based on this information, the Regional Board has determined that there is a reasonable potential that the discharge will cause toxicity in the receiving water and, consistent with SIP section 4, the Order contains a numeric effluent limitation for chronic toxicity. The circumstances warranting a numeric chronic toxicity effluent limitation are presently under review by the State Water Resources Control Board (State Board) in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. The State Board's decision is expected in July 2003. In the event the State Board removes the numeric chronic toxicity effluent limitation from the Los Coyotes/Long Beach permits or replaces the limit with a narrative chronic toxicity effluent limitation, this Order contains a reopener to allow the Regional Board to modify this permit, if necessary, consistent with the State Board order on the Los Coyotes/Long Beach Petitions.

B. Using the method described in the SIP, the Regional Board has conducted Reasonable Potential Analyses (RPA) using the discharger's effluent data contained in Table D. The RPA compares the effluent data with water quality objectives in the Basin Plan and CTR.

a. ***Reasonable Potential Determination.*** The RPA (per the SIP) involves identifying the observed maximum pollutant concentration in the effluent (MEC) for each constituent based on the effluent concentration data. There are three tiers to determining reasonable potential. If any of the following three tiers is triggered, then reasonable potential exists:

1. For the first tier, the MEC is compared with the lowest applicable Water Quality Objective (WQO), which has been adjusted for pH, hardness and translator data, if appropriate. If the MEC is greater than the (adjusted) WQO, then there is reasonable potential for the constituent to cause or contribute to an excursion above the WQO and a WQBEL is required. However, if the pollutant was not detected in any of the effluent samples and all of the reported detection limits are greater than or equal to the WQO, proceed with Tier 2. The Regional Board exercised its discretion in identifying all available, valid, relevant, representative data and information in accordance with SIP Section 1.2 (page 8).

2. For the second tier, if the MEC is less than the adjusted WQO, then the observed maximum ambient background concentration (B) for the pollutant is compared with the adjusted WQO. If B is greater than the adjusted WQO, then a WQBEL is required. If B is less than the WQO, then a limit is only required under certain circumstances to protect beneficial uses. If a constituent was not detected in any of the effluent samples and all of the detection limits are greater than or equal to the adjusted WQO, then the ambient background water quality concentration is compared with

the adjusted WQO. The Regional Board exercised its discretion in identifying all available, applicable ambient background data in accordance with SIP Section 1.4.3 (page 16).

3. For the third tier, other information is used to determine RPA, such as the current CWA 303(d) List. Section 1.3 of the SIP describes the type of information that can be considered in Tier 3.

For all parameters that have reasonable potential to cause or contribute to an exceedance of a WQO/criteria, numeric WQBELs are required. Section 1.4, Step 5 of the SIP (page 8) states that maximum daily effluent limitations (MDELs) shall be used for POTWs in place of average weekly limitations. WQBELs are based on CTR, USEPA water quality criteria, and Basin Plan objectives.

If the data are unavailable or insufficient to conduct an RPA for a pollutant, or if all reported detection limits of the pollutant in the effluent are greater than or equal to the WQO, the Regional Board will establish interim requirements, in accordance with Section 2.2.2 of the SIP, that require additional monitoring for the pollutant in place of a WQBEL. Upon completion of the required monitoring, the Regional Board shall use the gathered data to conduct a RPA and determine if a WQBEL is required. However, if Tier 1 or Tier 3 triggered reasonable potential for a pollutant, then the lack of receiving water data for Tier 2 evaluation would not inhibit the establishing WQBELs in the permit.

A numeric limit has not been prescribed for a toxic constituent if it has been determined that it has no reasonable potential to cause or contribute to excursions of water quality standards. However, if the constituent had a limit in the previous permit derived from Quality Criteria for Water 1986 [EPA 440/5-86-001, May 1, 1986 (Gold Book)], from other EPA guidance documents, and from California Code of Regulations (Title 22) maximum contaminant levels, and if none of the Antibacksliding exceptions apply, then the limit will be retained. A narrative limit to comply with all water quality objectives is provided in *Standard Provisions* for the priority pollutants which have no available numeric criteria.

b. ***RPA Data***. The RPA was based on effluent monitoring data for July 1998 through December 2002, and interim monitoring results from April 2002 to December 2002. Table R (Table R1) of the fact sheet summarizes the RPA, lists the constituents, and where available, the lowest, adjusted WQO, the MEC, the "Reasonable Potential" result, and the limits from the previous permit.

Metals Water Quality Objective. For metals, the lowest applicable Water Quality Objective (WQO) was expressed as total recoverable, and where applicable, adjusted for hardness. A spreadsheet was used to

calculate the total recoverable CTR criteria (Table R2). Hardness values from samples collected in the receiving water upstream of the discharge point were averaged and used to determine the appropriate CTR WQO for those hardness-dependent metals. Individual hardness values were capped at 400 mg/L to obtain the resulting average hardness of 400 mg/L.

Interim Monitoring Requirements. In accordance with the SIP, the Regional Board may impose interim monitoring requirements upon the Discharger, so that the Discharger obtains adequate ambient, background water data for priority pollutants upstream of the discharge point as well as suitable effluent data. The Executive Officer directed the Discharger to begin an interim monitoring program to collect eighteen data points. The Discharger collected the eighteen required samples and reported the results quarterly to the Regional Board. After additional information is gathered, and prior to April 2003, Regional Board staff will conduct RPA once again, to determine if additional numeric limitations are necessary. Section 1.3, Step 8, of the SIP authorizes the Regional Board to use the gathered data to conduct RPA, as outlined in Steps 1 through 7, and determine if a water quality-based effluent limitation is required.

A reopener provision is included in this Order that allows the permit to be reopened to allow the inclusion of new numeric limitations for any constituent that exhibits reasonable potential to cause or contribute to exceedance of applicable water quality objectives.

For some priority pollutants, the applicable water quality objectives are below the levels that current technology can measure. Section 2.4.5 of the SIP discusses how compliance will be determined in those cases. The Discharger should work with the laboratory to lower detection levels to meet applicable and reliable detection limits; follow procedures set forth in 40 CFR Part 136; and, report the status of their findings in the annual report. During the term of the permit, if and when monitoring with lowered detection limits shows any of the priority pollutants at levels exceeding the applicable WQOs, the discharger will be required to initiate source identification and control for the particular pollutant. Appendix 4 of the SIP lists the minimum levels and laboratory techniques for each constituent.

The numeric limitations contained in this Order are intended to protect and maintain existing, intermittent, and potential beneficial uses of the receiving waters. Environmental benefits provided by these limitations are reasonable and necessary.

51. The Order is consistent with State and Federal antidegradation policies in that it does not authorize a change or relaxation in the manner or level of treatment, even though it does authorize an increase in the quantity of wastewater discharged by the facility. The quality

of the discharge is expected to remain the same consistent with antidegradation policies. The accompanying monitoring and reporting program requires continued data collection and if monitoring data show a reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the permit will be reopened to incorporate appropriate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for potential and existing uses and conforms with antidegradation policies and antibacksliding provisions.

52. ***Pollutant Minimization Program.*** This Order provides for the use of a Pollutant Minimization Program, developed in conformance with Section 2.4.5.1 of the SIP, when there is evidence that a priority pollutant is present in the Discharger's effluent above an effluent limitation.

INTERIM REQUIREMENTS

53. **Nitrogen Compounds & Related Effects.** The *Nitrogen Compounds and Related Effects* TMDL adopted by the Regional Board on October 24, 2002, includes waste load allocations for ammonia (NH_3), nitrite as nitrogen (NO_2–N), nitrate as nitrogen (NO_3–N), and total nitrogen (NO_2–N + NO_3–N). The TMDL authorizes interim limits (expressed as interim waste allocations) for total nitrogen (NO_3-N + NO_2-N). The interim waste load allocation applies until four years after the effective date of the TMDL. In addition, the Nutrient TMDL authorized, at the discretion of the Regional Board, interim limits for ammonia extending until no later than October 24, 2004, for POTWs that are not able to achieve immediate compliance with the ammonia waste load allocation.

Once the TMDL is effective, the TMDL's interim waste load allocations may be used, consistent with Section 303(d)(4)(A) and other applicable federal laws and regulations, to develop an interim effluent limitation in the NPDES. Until that approval, however, appropriate limits cannot be specified in the NPDES permit. As a result, a separate time schedule order proscribes the appropriate nutrient limits initially. Because the Regional Board knows the interim waste load allocations and the ammonia waste load allocation, the Order includes alternate *Nitrogen Compounds and Related Effects* limits, triggered on the effective date of the TMDLs. When approved by U.S. EPA, the TMDL will be effective and the interim waste load allocation for total nitrogen and the waste load allocation for ammonia will apply to the discharge, along with an interim limit for ammonia. The Executive Officer will notify the discharger when the U.S. EPA approves the Nutrient TMDL, but the notice will not effect the application of the interim limits.

54. ***Ammonia***. The 1994 Basin Plan provides that to protect aquatic life, the total ammonia concentrations in receiving waters shall not exceed the objectives for the corresponding in-stream conditions given in Tables 3-1 to 3-4 of the Basin Plan. The objectives for total ammonia take into account the effect of un-ionized ammonia on aquatic habitat. Compliance with this requirement was required by June 14, 2002.

On April 25, 2002, the Regional Board adopted Resolution No. 2002-011, Amendment to the Water Quality Control Plan for the Los Angeles Region to update the Ammonia

Objetives for Inland Surface Waters (including enclosed bays, estuaries, and wetlands) with Beneficial Use designations for protection of "Aquatic Life." On April 30, 2003, the State Board adopted the Regional Board's Basin Plan Amendment. Upon approval bythe Office of Administrative Law and USEPA, Resolution 2002-011 will update the current 1994 Basin Plan objectives for ammonia to be consistent with USEPA's criteria.

The City has worked with the Calleguas Creek Watershed Management Plan Committee to develop a watershed-wide solution to the ammonia nitrogen water quality problem. The City will upgrade its Hill Canyon WWTP so that it nitrifies and denitrifies, thereby meeting the waste load allocations in the *Nitrogen Compounds and Related Effects TMDL* for Calleguas Creek Watershed. Additionally, the Dischargers have the option to participate in a water effects ratio (WER) study to develop a site specific objective for ammonia. If the Discharger chooses to participate in a WER study, then the WER study must be completed within three years of the effective date of the TMDL.

The City will not be able to immediately comply with the ammonia as nitrogen effluent limitation and needs time to come into compliance with the ammonia as nitrogen effluent limitation. The accompanying Time Schedule Order requires the City to comply with the ammonia as nitrogen limitation by October 24, 2004. However, the Regional Board's Nitrogen Compounds and Related Effects TMDL includes explicit authority to incorporate interim ammonia effluent limitations into this permit. If approved by U.S. EPA, the TMDL would allow the limits specified in the accompanying Time Schedule Order to be incorporated into the NPDES permit as interim limits expiring on October 24, 2004. The decision to include interim limits in the permit is at the discretion of the Regional Board. The Regional Board has determined that the City will not be able to immediately comply with the ammonia limits and waste load allocation, and believes it is appropriate to allow a compliance schedule for ammonia. In the interest of efficiency, this order provides interim limits for ammonia that become applicable if the Nitrogen Compounds and Related Effects TMDL is approved by U.S. EPA.

55. Because there is reasonable potential, the ammonia objective, which was a receiving water quality objective in the previous permit, is a WQBEL. The numeric limits for total ammonia applicable to the Hill Canyon WWTP discharge are contained in Basin Plan Tables 3-2 and 3-4 (Attachment H of this Order).

This Order does not contain a statistically derived water quality based effluent limitation (WQBEL) for ammonia. Instead, the ammonia limit was taken directly from the Basin Plan Tables. This was done to prevent backsliding issues that might arise from the Ammonia Basin Plan Amendment (Resolution No. R02-011), adopted by the Regional Board on April 25, 2002. The Amendment updates the existing ammonia objectives in the 1994 Basin Plan with the 1999 USEPA criteria. The existing criteria for ammonia in the Basin Plan Tables are more stringent than the recently adopted ammonia criteria. Once the Ammonia Basin Plan Amendment has been approved by the Office of Administrative Law, and after it becomes effective, then the Regional Board will reopen the NPDES permit to update the ammonia effluent limits. At that time, WQBELs will be developed for ammonia.

56. ***Copper, Mercury, Cyanide, Dibromochloromethane, Dichlorobromomethane, 4,4-DDD, and 4,4-DDE.*** Data submitted in previous self-monitoring reports indicated that these constituents have been detected in the effluent or in the receiving water, at least once, at a concentration greater than the limits prescribed in this Order. The Hill Canyon WWTP, therefore, may not be able to achieve consistent compliance with the CTR-based final effluent limit for these constituents. The City has the option of conducting studies to obtain the necessary data to develop site-specific objectives for copper, mercury, cyanide, dichlorobromomethane, dibromochloromethane, 4,4-DDD, and 4,4-DDE for the protection of human health from the consumption of fish and shellfish taken from the receiving waters. However, the City should prepare and submit a draft workplan to the Regional Board for review and approval, prior to implementing the study.

57. 40 CFR section 131.38(e) provides conditions under which interim effluent limits and compliance schedules may be issued, but the current Basin Plan does not allow inclusion of interim limits and compliance schedules in NPDES permits for effluent limits. The CTR and SIP allow inclusion of interim limits in NPDES permits for CTR-based priority pollutants. The CTR provides for a five-year maximum compliance schedule, while the SIP allows for longer, TMDL-based compliance schedule. However, the USEPA has yet to approve the longer compliance schedules. Therefore, this Order includes interim limits and compliance schedules for CTR-based priority pollutants limits for a maximum of five years, when the Discharger has been determined to have problems in meeting the new limits. This Order also includes a reopener to allow the Regional Board to grant TMDL-based compliance schedules if the USEPA approves the longer compliance schedule provisions of the SIP. For new non-CTR-based limits (ammonia as nitrogen) prescribed in this Order based on Basin Plan's WQO, for which the Discharger will not be able to meet immediately, interim limits and compliance dates are provided in the accompanying Time Schedule Order.

58. In conformance with the CTR and the relevant provisions of SIP Section 2.1, the Discharger has submitted documentation that diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutants entering the POTW. In addition, the Discharger already has in place a source control and pollutant minimization approach through its existing pollutant minimization strategies and through the pretreatment program. The duration of interim requirements established in this Order was developed in coordination with Regional Board staff and the Discharger, and the proposed schedule is as short as practicable. The five-year compliance schedule is based on the maximum allowable compliance schedule.

PUBLIC NOTIFICATION AND CEQA COMPLIANCE

59. The Regional Board has notified the Discharger and interested agencies and persons of its intent to renew waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

60. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

61. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and is effective 50 days from the date of adoption because of significant public comment, in accordance with federal law, provided the Regional Administrator, U.S. EPA, has no objections.

62. Pursuant to California Water Code Section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, California, 95812, within 30 days of adoption of the Order.

63. The issuance of waste discharge requirements that serve as an NPDES Permit for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 (California Environmental Quality Act) of the Public Resources Code in accordance with California Water Code Section 13389.

IT IS HEREBY ORDERED that the City of Thousand Oaks, as operator of the Hill Canyon Wastewater Treatment Plant, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

I. DISCHARGE REQUIREMENTS

A. Effluent Limitations

1. Wastes discharged shall be limited to treated municipal wastewater, construction dewatering groundwater, and stormwater, only, as proposed in the ROWD.

2. The discharge of an effluent with constituents in excess of the following limits is prohibited:

(a) Conventional and nonconventional pollutants for Discharge Serial No. 005:

Constituent	Units	Discharge Limitations		
		Daily Maximum[1]	7-Day Average[2]	Monthly Average
BOD_5 20°C	mg/L	45	30	20
	lbs/day[3]	4,500	3,000	2,000
Suspended solids	mg/L	45	40	15
	lbs/day[3]	4,500	4,000	1,500
Settleable solids	ml/L	0.3	--	0.1
Oil and grease	mg/L	15	--	10
	lbs/day[3]	1,500	--	1,000

Constituent	Units	Discharge Limitations		
		Daily Maximum[1]	7-Day Average[2]	Monthly Average
Total residual chlorine	mg/L	0.1[4]	--	--
Total dissolved solids	mg/L	--	--	850
	lbs/day[3]	--	--	85,000
MBAS[5]	mg/L	--	--	0.5
	lbs/day[3]	--	--	50
Chloride	lbs/day	10,100[6]	--	--
	lbs/day	9,700[7]	--	--
Sulfate	mg/L	--	--	250
	lbs/day[3]	--	--	25,000
Boron	mg/L	--	--	1.0
	lbs/day[3]	--	--	100
Fluoride	mg/L	--	--	1.6
	lbs/day[3]	--	--	160
Total inorganic nitrogen	mg/L	--	--	10[8]
(Nitrate + nitrite as nitrogen)	mg/L	--	--	9[9]
	mg/L	38.32[10]	--	36.03[10]
	lbs/day[3]	--	--	1000
Total ammonia	mg/L	[11]	--	[11]
	mg/L	--	--	3.14[12]
	lbs/day	[3]	--	[3]
	mg/L	--	--	27[13]
Nitrite-N (as N)	mg/L	--	--	0.9[14]

[1] The daily maximum effluent concentration limit shall apply to both flow weighted 24-hour composite samples and grab samples, as specified in the Monitoring and Reporting Program (Attachment T).

[2] As defined in Standard Provisions, Attachment N.

[3] The mass emission rates are based on the existing plant design flow rate of 12.0 mgd, and are calculated as follows: Flow(MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. Design flow is anticipated to increase to 14 MGD by the fall 2005. At that time, compliance with the mass-based limits will be based upon a 14 MGD design flow. 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.

[4] Based on results of continuous monitoring, total residual chlorine concentration of up to 0.3 mg/L, at the point in the treatment train immediately following dechlorination, shall not be considered violations of this requirement provided the total duration of such excursions do not exceed 15 minutes during any 24-hour period. Peaks in excess of 0.3 mg/L lasting less than three minutes shall not be considered a violation of this requirement.

[5] Unlined reaches of Arroyo Conejo downstream of the discharge points are designated with the beneficial use of groundwater recharge (GWR) in the Basin Plan. In order to protect the underlying drinking water basins, this Title 22-based limit is prescribed.

[6] This is the waste load allocation (WLA) under routine conditions, according to the Chloride TMDL promulgated by USEPA on March 22, 2002.

[7] This is the waste load allocation (WLA) under drought conditions, according to the Chloride TMDL promulgated by USEPA on March 22, 2002.

[8] This is the water quality objective for nitrate plus nitrite as nitrogen in the current Basin Plan. This effluent limitation applies immediately and will stay in effect until the Nutrient TMDL for Calleguas Creek, Resolution 2002-017, *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* (*Nitrogen Compounds and Related Effects TMDL)*, is approved by USEPA (i.e., the effective date of the TMDL). At that time, the interim effluent limitation accompanying table footnote [10] will be effective. If U.S. EPA does not approve the *Nitrogen Compounds and Related Effects TMDL*, this effluent limitation will remain in effect until revised by the Regional Board.

[9] This is the waste load allocation, according to the *Nitrogen Compounds and Related Effects TMDL* adopted by the Regional Board on October 24, 2002. The waste load allocation will ultimately serve as the effluent limitation for the discharge. This limit becomes effective four years after the USEPA approves the *Nitrogen Compounds and Related Effects TMDL*, and will supercede any previously applicable effluent limitations for Total Inorganic Nitrogen. If U.S. EPA does not approve the *Nitrogen Compounds and Related Effects TMDL*, this effluent limitation will not apply.

[10] This is the interim limit for nitrate plus nitrite as nitrogen, according to the *Nitrogen Compounds and Related Effects TMDL* adopted by the Regional Board on October 24, 2002. This interim limit becomes effective when the USEPA approves the *Nitrogen Compounds and Related Effects TMDL* for Calleguas Creek Watershed and ends four years from the effective date of the *Nitrogen Compounds and Related Effects* TMDL. This interim limit will supercede the effluent limitation specified accompanying table footnote [8] and will remain in effect until superceded by the effluent limitation specified accompanying table footnote [9]. If U.S. EPA does not approve the *Nitrogen Compounds and Related Effects TMDL*, this effluent limitation will not apply.

[11] The City must meet the total ammonia limitations contained in Attachment H, Basin Plan Tables 3-2 and 3-4, for the protection of freshwater aquatic habitat, by June 14, 2002. At a future date, these Ammonia Tables will be replaced with the 1999 USEPA Ammonia Update criteria for ammonia, according to the Ammonia Basin Plan Amendment, Resolution No. 2002-011 (adopted by the Los Angeles Regional Board on April 25, 2002). Following State Board, Office of Administrative Law, and USEPA approval of the Ammonia Basin Plan Amendment, the Regional Board will reopen this NPDES permit to revise the ammonia effluent limits using the new criteria. However, following State Board, Office of Administrative Law, and USEPA approval of the *Nitrogen Compounds and Related Effects* TMDL, the waste load allocation is the final limit for ammonia and will replace other ammonia limits in the NPDES permit.

Table 3-2. One-hour Average Concentration for Ammonia for waters designated as WARM (Salmonids or other sensitive coldwater species absent) :

	Temperature °C				
pH	**0**	**5**	**10**	**15**	**20**
Un-ionized ammonia (mg/liter NH_3)					
6.5	0.0091	0.0129	0.0182	0.026	0.036
6.75	0.0149	0.021	0.030	0.042	0.059
7.0	0.023	0.033	0.046	0.066	0.093
7.25	0.034	0.048	0.068	0.095	0.135
7.5	0.045	0.064	0.091	0.128	0.181
7.75	0.056	0.080	0.113	0.159	0.22
8.0	0.065	0.092	0.130	0.184	0.26
8.25	0.065	0.092	0.130	0.184	0.26

	Temperature °C				
pH	**0**	**5**	**10**	**15**	**20**
8.5	0.065	0.092	0.130	0.184	0.26
8.75	0.065	0.092	0.130	0.184	0.26
9.0	0.065	0.092	0.130	0.184	0.26
Total ammonia (mg/liter NH_3)					
6.5	35	33	31	30	29
6.75	32	30	28	27	27
7.0	28	26	25	24	23
7.25	23	22	20	19.7	19.2
7.5	17.4	16.3	15.5	14.9	14.6
7.75	12.2	11.4	10.9	10.5	10.3
8.0	8	7.5	7.1	6.9	6.8
8.25	4.5	4.2	4.1	4.0	3.9
8.5	2.6	2.4	2.3	2.3	2.3
8.75	1.47	1.4	1.37	1.38	1.42
9.0	0.86	0.83	0.83	0.86	0.91

Table 3-4. Four-day Average Concentration for Ammonia for waters designated as WARM (Salmonids or other sensitive coldwater species absent) :

	Temperature, °C						
pH	**0**	**5**	**10**	**15**	**20**	**25**	**30**
Un-ionized ammonia (mg/liter NH_3)							
6.5	0.0008	0.0011	0.0016	0.0022	0.0031	0.0031	0.0031
6.75	0.0014	0.0020	0.0028	0.0039	0.0055	0.0055	0.0055
7.0	0.0025	0.0035	0.0049	0.0070	0.0099	0.0099	0.0099
7.25	0.0044	0.0062	0.0088	0.0124	0.0175	0.0175	0.0175
7.5	0.0078	0.0111	0.0156	0.022	0.031	0.031	0.031
7.75	0.0129	0.0182	0.026	0.036	0.051	0.051	0.051
8.0	0.0149	0.021	0.030	0.042	0.059	0.059	0.059
8.25	0.0149	0.021	0.030	0.042	0.059	0.059	0.059
8.5	0.0149	0.021	0.030	0.042	0.059	0.059	0.059
8.75	0.0149	0.021	0.030	0.042	0.059	0.059	0.059
9.0	0.0149	0.021	0.030	0.042	0.059	0.059	0.059
Total ammonia (mg/liter NH_3)							
6.5	3.0	2.8	2.7	2.5	2.5	1.73	1.23
6.75	3.0	2.8	2.7	2.6	2.5	1.74	1.23
7.0	3.0	2.8	2.7	2.6	2.5	1.74	1.23
7.25	3.0	2.8	2.7	2.6	2.5	1.75	1.24
7.5	3.0	2.8	2.7	2.6	2.5	1.76	1.25
7.75	2.8	2.6	2.5	2.4	2.3	1.65	1.18
8.0	1.82	1.7	1.62	1.57	1.55	1.10	0.79
8.25	1.03	0.97	0.93	0.90	0.90	0.64	0.47
8.5	0.58	0.55	0.53	0.53	0.53	0.39	0.29
8.75	0.34	0.32	0.31	0.31	0.32	0.24	0.190
9.0	0.195	0.189	0.189	0.195	0.21	0.163	0.133

[12] This is waste load allocation for ammonia, according to the *Nitrogen Compounds and Related Effects* TMDL adopted by the Regional Board on October 24, 2002. This limitation will apply on October 24, 2004, provided U.S. EPA approves the *Nitrogen Compounds and Related Effects TMDL*. If U.S. EPA does not approve the *Nitrogen Compounds and Related Effects TMDL*, then this effluent limitation will not apply.

[13] Under the authority of the *Nitrogen Compounds and Related Effects TMDL* this interim limit will supercede the effluent limitation specified accompanying table footnote [11] upon the effective date of the *Nitrogen Compounds and Related Effects TMDL* and will remain in effect until superceded by the effluent limitation specified accompanying table footnote [12]. If U.S. EPA does not approve the *Nitrogen Compounds and Related Effects TMDL*, then this effluent limitation will not apply.

[14] This is the waste load allocation, according to the *Nitrogen Compounds and Related Effects TMDL* adopted by the Regional Board on October 24, 2002. The waste load allocation will ultimately serve as the effluent limitation for the discharge. This limit becomes effective four years after the USEPA approves the *Nitrogen Compounds and Related Effects TMDL*, and will supercede any previously applicable effluent limitations for Nitrite Nitrogen. If U.S. EPA does not approve the *Nitrogen Compounds and Related Effects TMDL*, this effluent limitation will not apply.

(b) Toxic pollutants for Discharge Serial No. 005:

CTR # [1]	Constituent	Units	Discharge Limitations	
			Monthly Average[2]	Daily Maximum
1	Antimony	µg/L	6	--
		lbs/day[4]	0.6	--
2	Arsenic[3]	µg/L	50	--
		lbs/day[4]	5	--
4	Cadmium[3]	µg/L	5	--
		lbs/day[4]	0.5	--
5b	Chromium VI[3]	µg/L	50	--
		lbs/day[4]	5	--
6	Copper [3]	µg/L	17	52
		lbs/day[4]	1.7	5.2
7	Lead[3]	µg/L	50	--
		lbs/day[4]	5	--
8	Mercury	µg/L	0.051[5], [6]	0.14[5], [6]
		lbs/day[4]	0.0051	0.014
9	Nickel[3]	µg/L	100	--
		lbs/day[4]	10	--
10	Selenium[3]	µg/L	50	--
		lbs/day[4]	5	--
11	Silver[3]	µg/L	50	--
		lbs/day[4]	5	--
12	Thallium	µg/L	2	--
		lbs/day[4]	0.2	--
13	Zinc[3]	µg/L	5000	--
		lbs/day[4]	500	--
14	Cyanide	µg/L	4.2[5], [6]	8.5[5], [6]
		lbs/day[4]	0.42	0.85
19	Benzene	µg/L	1	--
		lbs/day[4]	0.1	--

CTR # [1]	Constituent	Units	Discharge Limitations	
			Monthly Average[2]	Daily Maximum
23	Dibromochloromethane	µg/L	34	106
		lbs/day[4]	3.4	10.6
27	Dichlorobromomethane	µg/L	46	137
		lbs/day[4]	4.6	13.7
36	Methylene chloride	µg/L	5	--
	(Dichloromethane)	lbs/day[4]	0.5	--
38	Tetrachloroethylene	µg/L	5	--
		lbs/day[4]	0.5	--
39	Toluene	µg/L	150	--
		lbs/day[4]	15	--
46	2,4-Dichlorophenol	µg/L	93	--
		lbs/day[4]	9.3	--
52	3-Methyl-4-chlorophenol	µg/L	300	--
	(P-chloro-m-cresol)	lbs/day[4]	30	--
53	Pentachlorophenol	µg/L	1	--
		lbs/day[4]	0.1	--
54	Phenol	µg/L	300	--
		lbs/day[4]	30	--
55	2,4,6-Trichlorophenol	µg/L	2.1	--
		lbs/day[4]	0.21	--
68	Bis(2-Ethylhexyl)phthalate	µg/L	4	--
		lbs/day[4]	0.4	--
75	1,2-Dichlorobenzene	µg/L	600	--
		lbs/day[4]	60	--
76	1,3-Dichlorobenzene	µg/L	600	--
		lbs/day[4]	60	--
77	1,4-Dichlorobenzene	µg/L	5	--
		lbs/day[4]	0.5	--
86	Fluoranthene	µg/L	300	--
		lbs/day[4]	30	--
102	Aldrin	µg/L	3	--
		lbs/day[4]	0.3	--
103	Alpha-BHC	µg/L	0.7	--
		lbs/day[4]	0.07	--
104	Beta-BHC	µg/L	0.3	--
		lbs/day[4]	0.03	--
105	Lindane (gamma-BHC)	µg/L	0.2	--
		lbs/day[4]	0.02	--
107	Chlordane	µg/L	0.1	--
		lbs/day[4]	0.01	--
109	4,4-DDE	µg/L	0.00059 [5], [6]	0.0012 [5], [6]
		lbs/day[4]	0.000059	0.00012

CTR # [1]	Constituent	Units	Discharge Limitations	
			Monthly Average[2]	Daily Maximum
110	4,4-DDD	µg/L	0.00084 [5], [6]	0.0017 [5], [6]
		lbs/day[4]	0.000084	0.00017
111	Dieldrin	µg/L	2.5	--
		lbs/day[4]	0.25	--
115	Endrin	µg/L	2	--
		lbs/day[4]	0.2	--
117	Heptachlor	µg/L	0.01	--
		lbs/day[4]	0.001	--
118	Heptachlor epoxide	µg/L	0.01	--
		lbs/day[4]	0.001	--
126	Toxaphene	µg/L	3	--
		lbs/day[4]	0.3	--
	Barium	µg/L	1,000	--
		lbs/day[4]	100	--
	Iron	µg/L	300	--
		lbs/day[4]	30	--
	Methoxychlor	µg/L	40	--
		lbs/day[4]	4	--
	2,4-D	µg/L	70	--
		lbs/day[4]	7	--
	2,4,5-TP (Silvex)	µg/L	50	--
		lbs/day[4]	5	--
	Halomethanes [7]	µg/L	80	--
		lbs/day[4]	8	--
	Manganese	µg/L	50	--
		lbs/day[4]	5	--
	Aluminum	µg/L	1000	--
		lbs/day[4]	100	--
	Tributyltin	µg/L	0.026	--
		lbs/day[4]	0.0026	--
	Polynuclear aromatic	µg/L	0.0028	--
	Hydrocarbons (PAHs)	lbs/day[4]	0.00028	--

[1] This number corresponds to the compound number found in Table 1 of CTR. It is simply the order in which the 126 priority pollutants were listed in 40 CFR section 131.38 (b)(1).

[2] Compliance may be determined from a single analysis or from the average of the initial analysis and three additional analyses within the month taken one week apart after the results of the initial analysis are obtained.

[3] Concentration expressed as total recoverable.

[4] The mass emission rates are based on the existing plant design flow rate of 12.0 mgd, and are calculated as follows: Flow(MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. Design flow is anticipated to increase to 14 MGD by the fall 2005. At that time, compliance with the mass-based limits will be based upon a

14 MGD design flow. 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.

[5] For priority pollutants, Section 2.4.5 of CTR *Compliance Determination*, reads, "Dischargers shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported ML."

[6] This effluent limitation will not be in effect until May 10, 2008, and until that time the Discharger shall comply with the interim limits established in I.B.(7) below.

[7] Halomethanes shall mean the sum of bromoform, bromodichloromethane, chloroform, and dibromochloromethane.

B. Other Effluent Limitations

1. The pH of wastes discharged shall at all times be within the range of 6.5 to 8.5.

2. The temperature of wastes discharged shall not exceed 100°F.

3. Pursuant to 40 CFR sections 133.102(a)(3) and 133.102(b)(3), the 30-day average percent removal by weight for BOD and total suspended solids 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.

4. Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the CCR, or subsequent revisions.

5. The wastes discharged to water courses shall at all times be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if the median number of coliform organisms at some point in the treatment process does not exceed 2.2 per 100 milliliters, and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last seven (7) days for which an analysis has been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and disinfection processes.

6. For the protection of the water contact recreation beneficial use, the turbidity of the filtered wastewater (a) shall not exceed a daily average of 2 Nephelometric turbidity units (NTUs), and (b) shall not exceed 5 NTU's more than 5 percent of the time (72 minutes) during any 24 hour period.

7. Interim Effluent Limitations

a. The Discharger shall comply immediately with the following interim effluent limit until May 10, 2008. Thereafter, the Discharger shall comply with the limitations specified in Section I.A.2.b. of this Order:

Constituent	Units	Monthly Average **
Copper	µg/L	27
Mercury	µg/L	2
Cyanide	µg/L	5.2
Dibromochloromethane	µg/L	80
Dichlorobromomethane	µg/L	80
4,4-DDE	µg/L	0.05
4,4-DDD	µg/L	0.05

** Interim effluent limits were derived statistically at 95% confidence level for monthly averages and at the 99% confidence level for the daily maximum interim limits. Effluent performance data from July 1998 through December 2002 and the *Plimit*™ program, which is based on Appendix E of the TSD, were used to calculate the interim limits. Effluent values (x_i) are assumed to be lognormally distributed for data sets containing all detects, and delta log-normally distributed for data sets containing detects and non-detects. In the case of mercury and cyanide, the monthly average interim limit was set as the limit in the existing permit (order No. 96-044), in accordance with SIP section 2.2.1 which reads, Numeric interim limitations for the pollutant must be based on current treatment facility performance or on existing permit limitations, whichever is more stringent." In the case of 4,4-DDD and 4,4-DDE, the calculated interim value was less than the method detection level (MDL), therefore the interim limit was set equal to the MDL.

b. The Discharger shall submit quarterly progress reports (January 15, April 15, July 15 and October 15) to describe the progress of studies and/or actions undertaken to reduce these compounds in the effluent, and to achieve compliance with the limits in this Order by the above-mentioned deadline. The first progress report shall be received at the Regional board by October 15, 2003.

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

C. Toxicity Requirements

1. Effluent Acute Toxicity Limitation and Requirements:

a. The acute toxicity of the effluent shall be such that: (i) the average survival in the undiluted effluent for any three (3) consecutive 96-

hour static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.

b. If either of the above requirements (1.a.i or 1.a.ii) is not met, the Discharger shall conduct six additional tests over a six-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 3 business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing. However, if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

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

d. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. 4917 (Attachment T).

2. Effluent Chronic Toxicity Limitation and Requirements:

a. 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.

b. There shall be no chronic toxicity in the effluent discharge.

c. If the chronic toxicity of the effluent exceeds the monthly median of 1.0 TU_c, the Discharger shall immediately implement accelerated chronic toxicity testing according to MRP No. 4917, Section VI.D.2.d. If any three out of the initial test and the six accelerated tests results exceed 1.0 TU_c, the Discharger shall

initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in Section I.C.4, below.

d. The Discharger shall conduct chronic toxicity monitoring as specified in MRP No. 4917.

e. This permit may be reopened to include effluent limitations for pollutants found to be causing chronic toxicity and to include numeric chronic toxicity effluent limitations based on direction from the State Water Resources Control Board or failure of the Discharger to comply fully with the TRE/TIE requirements.

3. Receiving Water Chronic Toxicity Limitation and Requirements:

a. There shall be not chronic toxicity in ambient waters as a result of wastes discharged.

b. Receiving water and effluent toxicity sampling and testing shall be performed on the same day.

c. If the chronic toxicity in the receiving water, immediately downstream of the discharge, exceeds the monthly median of 1.0 TU_c in a critical life stage test and the toxicity is a result of the effluent waste discharge, then the Discharger shall immediately implement accelerated chronic toxicity testing according to monitoring and Reporting Program 4917, Section VI.D.2.d. If two of the six tests exceed 1.0 TU_c, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in Section I.C.4, below.

d. If the results of the chronic toxicity testing at an upstream receiving water station is greater than the results of the testing downstream, and the result of the effluent chronic toxicity test is less than or equal to 1 TUc, then accelerated monitoring does not need to be implemented.

4. Preparation of an Initial Investigation TRE Workplan

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. If the Regional Board Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manual, *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* [EPA/833B-99/002, August 1999] and any other relevant USEPA document as guidance. This workplan shall describe the steps the

Discharger intends to follow if toxicity is detected, and should include, at a minimum:

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

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

iii. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section VI.D.5 for guidance manuals.

D. Receiving Water Limitations

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 (or above 70°F if the ambient receiving water temperature is less than 60 °F) due to the discharge of effluent at the receiving water station located downstream of the discharge. Natural conditions shall be determined on a case-by-case basis.

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. In fresh waters designated for contact recreation (REC-1), the following geometric mean limits and single sample limits shall apply for fecal coliform concentrations in the receiving waters, as a result of wastes discharged:

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

   b. Single Sample Limits
      1. E.coli density shall not exceed 235/100 mL.
      2. 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 contain radionuclides in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in accumulation of radionuclides in the food web to an extent that present a hazard to human, plant, animal, or aquatic life.

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

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.

II. BIOSOLIDS REQUIREMENTS

To implement CWA Section 405(d), on February 19, 1993, USEPA promulgated 40 CFR 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. Since the State of California, hence the Regional Board, has not been delegated the authority to implement the sludge program, enforcement of the sludge requirements contained in this Order and permit shall be the sole responsibility of USEPA. However, any reports submitted to USEPA shall also be furnished to the Regional Board. The City is also responsible for compliance with waste discharge requirements for the generation, transport, and application of biosolids issued by the State Board or other Regional boards to which jurisdiction of the City's biosolids are transported and applied.

III. PRETREATMENT REQUIREMENTS

A. 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 and to USEPA in writing and shall not become effective until approved by the Executive Officer and the USEPA Regional Administrator in accordance with procedures established in 40 CFR 403.18.

B. The Discharger shall implement and enforce its approved pretreatment program. The Discharger shall be responsible and liable for the performance of all pretreatment requirements contained in Federal Regulations 40 CFR Part 403, including subsequent regulatory revisions thereof. Where Part 403 or subsequent revision places mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall complete the required actions within six months from the effective date of this Order or the effective date of the 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 non-compliance with acceptable standards and requirements as provided in the Federal Clean Water Act and/or the California Water Code.

C. The Discharger shall update its pretreatment local limits to meet the requirements of this Order. Within 60 days of the effective date of this Order, the Discharger shall submit the plan and schedule for updating the local limits for approval of the Executive Officer.

D. The Discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the 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 that do not comply with the standards. The Discharger shall require industrial users subject to 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.

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

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

(2) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;

(3) Implement the programmatic functions as provided in 40 CFR 403.8(f)(2); and

(4) Provide the requisite funding of personnel to implement the pretreatment program as provided in 40 CFR 403.8 (f) (3).

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

V. PROVISIONS

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

B. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic, and pretreatment effluent standards, and all federal regulations established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the Federal Clean Water Act and amendments thereto.

C. This Order includes the attached *Monitoring and Reporting Program* (Attachment T). If there is any conflict between provisions stated in Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail.

D. This Order includes the attached *Standard Provisions and General Monitoring and Reporting Requirements* (*Standard Provisions*) (Attachment N). If there is any conflict between provisions stated herein and the Standard Provisions, those provisions stated herein prevail.

E. The Discharger shall comply with the requirements of the State Board's General NPDES Permit No. CAS000001 and *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities* (Order No. 97-03-DWQ) by continuing to implement a SWPPP and conducting the required monitoring.

F. Compliance Determination

1. Compliance with single constituent effluent limitations – If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (See reporting requirement III.A. of MRP), then the Discharger is out of compliance.

2. Compliance with monthly average limitations – In determining compliance with monthly average limitations, the following provisions shall apply to all constituents:

   a. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the monthly average limit for that constituent, the Discharger will have demonstrated compliance with the monthly average limit for that month.

   b. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the monthly average limit for that constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after the sample was obtained, whichever is later.

      When all sample results are greater than or equal to the reported minimum Level (see Reporting Requirement III.A. of MRP), the numeric average of the analytical results of these four samples will be used for compliance determination.

When one or more sample results are reported as "Non-Detected (ND)" or "Detected, but not Quantified (DNQ)" (see Reporting Requirement III.D. of MRP), the median value of these four samples will be used for compliance determination. If one or both of the median values is ND or DNQ, the median will be the lower of the two middle values.

c. In the event of noncompliance with a monthly average effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the monthly average limitation has been demonstrated.

d. If only one sample was obtained for the month or for a monthly period and the result exceeded the monthly average, then the Discharger is in violation of the monthly average limit.

3. Compliance with effluent limitations expressed as a sum of several constituents – If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero.

4. Compliance with effluent limitations expressed as a median – In determining compliance with a median limitation, the analytical results in a set of data will be arranged in order of magnitude (either increasing or decreasing order); and

a. If the number of measurements (n) is odd, then the median will be calculated as = $X_{(n+1)/2}$, or

b. If the number of measurements (n) is even, then the median will be calculated as = $[X_{n/2} + X_{(n/2)+1}]$, i.e. the midpoint between the n/2 and n/2+1 data points.

Consecutive exceedances of the coliform 7-day median effluent limitation, which take place within a calendar week and result from a single operational upset, shall be treated as a single violation.

G. In calculating mass emission rates and the monthly average concentrations, use one half of the method detection limit for "Not Detected" (ND) and the estimated concentration for "Detected but Not Quantified" (DNQ).

H. Pollutant Minimization Program (PMP)

1. The goal of the PMP is to reduce all potential sources of a pollutant through minimization (control) strategies, including pollution prevention measures, in order 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 completion and implementation of a Pollution Prevention Plan, required in accordance with California Water Code Section 13263.3(d) shall fulfill the PMP requirement in this section.

2. The Discharger shall develop a PMP, in accordance with Section 2.4.5.1., of the SIP, if all of the following conditions are true, and shall submit the PMP to the Regional Board within 120 days of determining the conditions are true:

   a. The calculated effluent limitation is less than the reported minimum level (ML);
   b. The concentration of the pollutant is reported as detected but not quantified (DNQ); and,
   c. There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

3. The Discharger shall develop a PMP, in accordance with Section 2.4.5.1., of the SIP, if all of the following conditions are true, and shall submit the PMP to the Regional Board within 120 days of determining the conditions are true:

   a. the calculated effluent limitation is less than the method detection limit (MDL);
   b. The concentration of the pollutant is reported as “Non-Detected”, ND;
   c. There is evidence that the pollutant is present in the effluent above the calculated effluent limitation.

4. The Discharger shall consider the following in determining whether the pollutant is present in the effluent at levels above the calculated effluent limitation:

   a. health advisories for fish consumption;
   b. presence of whole effluent toxicity;
   c. results of benthic or aquatic organism tissue sampling;
   d. sample results from analytical methods more sensitive than methods included in the permit;

e. the concentration of the pollutant is reported as DNQ and the effluent limitation is less than the method detection limit.

5. Elements of a PMP. The PMP shall include actions and submittals acceptable to the Regional board including, but not limited to, the following:

a. An annual review and semiannual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other bio-uptake sampling;

b. Quarterly monitoring for the reportable pollutant in the influent to the wastewater treatment system;

c. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant in the effluent at or below the calculated effluent limitation;

d. Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy; and,

e. An annual status report that shall be sent to the Regional Board including:
- All PMP monitoring results for the previous year;
- A list of potential sources of the reportable pollutant;
- A summary of all action taken in accordance with control strategy; and,
- A description of actions to be taken in the following year.

I. The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of a plant upset or outage due to power failure or other causes, the discharge of raw or inadequately treated sewage does not occur. Following Edison power restoration to the Hill Canyon WWTP, as a result of a scheduled back-up power generator test, or as a result of a plant-wide electrical power outage due to lightning or other unforseen natural causes, the Discharger shall be granted no more than one hour to check all process equipment and insure its proper operation. All exceedances of effluent discharge limitations resulting from the power outage, occurring within that timeframe, will not be considered violations, provided the City exercised reasonable efforts to restart the process equipment and restore normal operating conditions.

J. The Discharger may conduct studies to obtain data in support of developing site-specific objectives for 4,4-DDE, 4,4-DDD, and Aroclor 1254 for the protection of human health from consumption of organisms. In such event, the Discharger shall submit to the Regional Board a detailed workplan for these studies by June

27, 2003; however, the Executive Officer may extend the due date for this workplan by a period not to exceed six months. The workplan shall provide a schedule consistent with Effluent limitation A.7.a. for the development and adoption of site specific objectives for 4,4-DDE, 4,4-DDD, and Aroclor 1254.

K. This Order may be reopened and modified to revise Title 22-based effluent limitations as appropriate, if the Discharger conducts studies to gather data which demonstrates, to the satisfaction of the Regional Board, that dilution/attenuation is appropriate.

L. The Discharger shall comply with all applicable water quality objectives for receiving waters, including the toxic criteria in 40 CFR Part 131.36, as specified in this permit.

VI. REOPENERS AND MODIFICATIONS

A. This Order may be reopened and modified, in accordance with SIP Section 2.2.2.A, to incorporate new limits based on future reasonable potential analysis to be conducted, upon completion of the collection of additional data by the Discharger. Not withstanding the foregoing, in the event that reasonable potential analyses indicate that a pollutant has reasonable potential, the Regional Board staff shall bring an appropriate modification to the Regional Board, at the next practicable Board meeting.

B. This Order may be reopened and modified to incorporate, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, the proposed watershed monitoring program.

C. This Order may be modified, in accordance with the provisions set forth in 40 CFR sections 122 and 124, to include new MLs.

D. This Order may be reopened and modified, to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of the Ammonia objective, or the adoption of a TMDL for Calleguas Creek Watershed.

E. This Order may be reopened and modified to include TMDL-based compliance schedules, upon a proper demonstration by the Discharger and developed in accordance with section 2.1 of the SIP, if and when the USEPA approves the TMDL-based compliance schedules provision of the SIP.

F. This Order may be reopened and modified to revise the chronic toxicity effluent limitation, to the extent necessary, to be consistent with State Board precedential decisions in the Los Coyotes/Long Beach Petitions.

G. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 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 and permit, endangerment to human health or the environment resulting from the permitted activity.

VII. EXPIRATION DATE

This Order expires on May 10, 2008.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

VIII. RESCISSION

Order Nos. 96-044, 97-061, and 97-123, adopted by this Regional Board on June 10, 1996, May 12, 1997, and September 29, 1997, respectively, are hereby rescinded, except for enforcement purposes.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 5, 2003.

ORIGINAL SIGNED BY

Dennis A. Dickerson
Executive Officer

ATTACHMENT 1
MAP

ATTACHMENT 2
WASTEWATER PROCESS DIAGRAM