State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. R4-2005-0074

NPDES NO. CA0056014

WASTE DISCHARGE REQUIREMENTS FOR LAS VIRGENES MUNICIPAL WATER DISTRICT (TAPIA WATER RECLAMATION FACILITY)

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

PURPOSE OF ORDER

1. Las Virgenes Municipal Water District (hereinafter Las Virgenes or Discharger) discharges tertiary-treated wastewater from its Tapia Water Reclamation Facility (Tapia WRF) under Waste Discharge Requirements (WDRs) contained in two separate Orders. Order No. 97-135 regulates the discharges to Malibu Creek and Order No. 99-066 regulates the discharges to Arroyo Calabasas which is a tributary to the Los Angeles River. Order No. 97-135 and Order No. 99-066 were adopted by this Regional Board on November 3, 1997, and July 8, 1999, respectively. These two Orders also serve as permits under the National Pollutant Discharge Elimination System (NPDES No. CA0053953 and No. CA0064271), which regulate the discharge of treated wastewater to Malibu Creek and to the Los Angeles River respectively, which are waters of the State of California and of the United States.

   Amendments to NPDES Permits:

   There were amendments to both Orders:

   A. Order No. 97-135 (discharges to Malibu Creek): On April 13, 1998, the Regional Board adopted Order No. 98-030 amending Order No. 97-135. Again on December 9, 1999, Regional Board adopted Order No. 99-142 amending Order No. 98-030.

      a. Order No. 98-030: Order No. 97-135 contains a provision prohibiting discharges from Tapia to Malibu Creek from May 1st to November 1st each year, except under certain conditions. Implementation of the prohibition under Order No. 97-135 was subject to further discussions among the Regional Board, National Marine Fisheries Service (NMFS), U.S. Fish and wildlife Service (USFWS), and California Department of Fish and Game. After discussions among these Departments, it was concluded that Las Virgenes apply for an incidental "take"

permit as required by Endangered Species Act § 10(a)(1)(B). It was also recommended that a minimum flow of 2.5 ft^3/sec be maintained throughout the year to sustain endangered species.

Also, extreme weather conditions in the winter of 1998 caused the Malibu Lagoon remained open for an extended period. Heavy rains at that time also resulted in more runoff into the Malibu Creek and into the Lagoon, and created a condition resulting in less demand for reclaimed water during the period the discharge prohibition was in effect.

To address these issues, the following revisions were made to Order No. 97-135 through Order No. 98-030.

"I The Discharger shall not discharge as otherwise permitted by these requirements to Malibu Creek at any of its discharge points commencing either: (a) May 1st of each calendar year, or (b) the first natural closure of Malibu Lagoon by sand buildup, whichever is later, through and including October 31st of each calendar year. This prohibition will not be in effect during any of the following events:

Discharge Prohibition:

a. Treatment plant upset or other operational emergencies;
b. Storm events; or
c. The existence of minimal streamflow conditions that require flow augmentation in Malibu Creek to sustain endangered species.

ii. The Discharger shall submit an application for an Incidental Take Permit."

b. Order No. 99-142: On November 19, 1998, after a hearing on the petitions filed by the Discharger, the stake holders and other interested parties, the State Board adopted Order No. WQ 98-11 (remanded the Order No. 97-135), directing the Regional Board to make revisions consistent with the Findings and Conclusions in the remand order. As a result, the following became revisions to Order No. 97-135, adopted through Order No. 99-142.

i. Two changes were made to the Discharge Prohibition. The Discharge Prohibition was extended from April 15 to November 15; except during any of the following events: (No change in above mentioned exception "a")

b. Storm events as determined by the Executive Officer; or

c. The existence of minimal streamflow conditions that require flow augmentation in Malibu Creek to sustain endangered species as determined by the Executive Officer."

ii. Order No. 98-030 strengthened the permit Finding No. 27, found in Order No. 97-135, to reflect the State Board's conclusion that unseasonable freshwater

inputs from Tapia and other sources cause the Lagoon to flood and/or breach when it otherwise would not.

iii. Circumstances were defined under which exemptions to discharge prohibitions were allowed.

iv. Deleted a provision that otherwise would require the Discharger to apply for an Incidental Take Permit.

v. Changed the nitrate limitation as daily maximum from 10 mg/l to 8 mg/L.

vi. WQ 2001-03: The Discharger challenged the 8 mg/L limit in a petition to the State Board dated January 7, 2000. The State Board upheld the petition, and on February 15, 2001, adopted Order No. WQ-2001-03, changing the final nitrate limit back to 10 mg/L. The Order also stated that the Regional Board could, "after making adequate findings and otherwise complying with law" establish lower limitations in order to implement applicable water quality standards and protect beneficial uses in Malibu Creek and Lagoon.

B. Order No. 99-066 (discharges to Los Angeles River): During the discharge prohibition period for Malibu Creek and when there is no recycled water demand, the Discharger has the option to discharge up to 2 million gallons per day (mgd) of recycled water from Tapia WRF to the Los Angeles River. Order No. 99-066 contains a provision that allows the discharges from Tapia WRF to Los Angeles River from May 1st to November 1st of each calendar year during the time the discharge prohibition applies to Malibu Creek. However, Order No. 98-030, adopted on April 13, 1998, was amended by Order No.99-142 on December 9, 1999, and extended the discharge prohibition from May 1st through October 31st to April 15th though November 15th of each calendar year. Subsequently, the Discharger requested an amendment to Order No. 99-066 to reflect the changed prohibition made on December 9, 1999.

Also, the Discharger submitted a workplan on February 15, 2000, to relocate the discharge outfall from the Dry Canyon Creek to a lined portion of the Arroyo Calabasas.

Order No. 00-046: On April 13, 2000, the Regional Board adopted Order No. 00-046 amending Order No. 99-066 and incorporated the requested changes. The discharge period was changed from May 1st through October 31st to April 15th through November 15th of each calendar year.

2. Orders No. 97-135 and No. 99-066 have expiration dates of October 10, 2002, and November 15, 2001, respectively. Section 122.6 of Title 40, Code of Federal Regulations (40 CFR), and Section 2235.4 of Title 23, California Code of Regulations (CCR), state that an expired permit continues in force until the effective date of a new permit, provided that the permittee has made a timely submittal of a complete application for a new permit. On March 28, 2002, Las Virgenes filed a combined Report of Waste Discharge (ROWD) for

discharge points 001 (Malibu Creek discharge) and 005 (Los Angeles River discharge), and applied to the Regional Board for reissuance of WDRs and a NPDES permits. However, the Discharger requested that the two separate WDRs be combined into one new WDR that would regulate the discharge of tertiary-treated wastewater to both Malibu Creek and the Los Angeles River. Therefore, the Discharger's permits have been administratively extended until the Regional Board acts on the new WDR and permit.

3. This Order consolidates the WDRs contained in Orders No. 97-135 and No. 99-066, as requested, for the discharge into the Malibu Creek Watershed and the Los Angeles River Watershed.

4. This consolidated Order is the reissuance of WDRs and will serve as the Master NPDES permit for the Tapia WRF.

FACILITY AND TREATMENT PROCESS DESCRIPTION

5. The Tapia WRF (Tapia) is jointly owned by the Las Virgenes Municipal Water District (LVMWD) and Triunfo Sanitation Districts (TrSD). Tapia is located at 731 Malibu Canyon Road, in an unincorporated area of Los Angeles County. Figure 1 shows the location of Tapia including the service area. Tapia is a tertiary wastewater treatment plant, with a design capacity of 16.1 million gallons per day (mgd), that treats municipal wastewater from domestic, commercial, and industrial sources. In 2003, the annual average flow was 10.4 mgd. Currently, Tapia serves approximately 80,000 residents in western Los Angeles and eastern Ventura Counties (Agoura Hills, Calabasas, Hidden Hills, Thousand Oaks, Westlake Village) with a service area of over 109 square miles.

6. The United States Environmental Protection Agency (USEPA) and the Regional Board have classified the Tapia WRF as a major discharger. It has a Threat to Water Quality and Complexity rating of 1-A pursuant to Section 2200, Title 23, CCR.

7. Pursuant to 40 CFR, Part 403, the Tapia WRF developed, and has been implementing, an industrial wastewater Pretreatment Program, which has been approved by USEPA and the Regional Board.

8. In 1965, LVMWD and TrSD, in a joint venture, built the Tapia WRF which discharged 750,000 gallons per day of secondary treatment effluent by spray irrigation under Resolution No. 64-55. In 1968, the plant's design capacity was expanded to 2 mgd. From 1969 to 1980, year-round discharge to the Malibu Creek was prohibited by the Regional Board because of human health and nutrient concerns, and maximum use of reclaimed water for spray irrigation of fields was required. Discharge to Malibu Creek was allowed to occur only on a limited basis, under the following conditions: During, and immediately following, periods of rain when spray fields or percolation areas could not be used; and, between mid-November and mid-April, when reclamation and use of all spray fields had been maximized. In 1982, the plant's design capacity was expanded to 8 mgd and the Rancho Las Virgenes Farm was established for injection of biosolids. In 1984, a year-round discharge to the Creek was permitted after the tertiary filters were installed. In 1989, the plant was expanded to 10 mgd. In 1989, the Regional Board adopted Order No. 89-076, that permitted a phased

increase in the discharge rate up to 16.1 mgd. The construction of facilities for Tapia's treatment capacity expansion from 10 mgd to 16.1 mgd was completed in 1994.

9. Tapia treats both the liquid and solid fractions of the municipal wastewater. Treatment starts with coarse screening, grit removal, and primary sedimentation. The flow stream then separates into two routes, one for solids and the other for liquid. The liquid treatment route consists of secondary treatment, tertiary treatment, chlorination, and dechlorination. Prior to 1993, the principal solids treatment route was aerobic digestion at Tapia and land application at the Rancho Las Virgenes Farm. After startup of the Rancho Las Virgenes Composting Facility in 1993, the solids were anaerobically digested, dewaterd using centrifuges and then composted. See Figure 2 for the plant flow diagram.

10. The treatment facility consists of of primary, secondary, and tertiary treatment for the 16.1 mgd capacity. Currently, Las Virgenes uses five primary tanks to treat approximately 9 mgd total flow to the plant. For secondary treatment, Tapia employs an activated sludge process with fine bubble aeration, followed by single stage nitrification and secondary clarification. Tertiary treatment includes coagulant addition, flocculation, and physical filtration through a mono-media coal filter. Sodium hypochlorite solution is added for effluent disinfection, and sodium bisulfate is added for dechlorination.

11. Primary and secondary sludges from the wastewater treatment at Tapia are pumped to the Rancho Las Virgenes Composting Facility (Rancho), also operated by Las Virgenes, located at 3700 Las Virgenes Road, approximately three miles north of Tapia WRF. At Rancho, , the sludge is anaerobically digested, screened, dewatered, and composted to be used as soil amendment in plant nurseries, sod farms, and landscapes. Centrate from the composting facility is stored in a holding tank, and is returned within 24 hours via a sewage pipeline to the headworks at Tapia for treatment. This centrate is a significant source of nutrients for Tapia. Figure 2a shows the process flow diagram at Rancho.

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

13. On September 26, 2002, the Regional Board adopted WDRs, Order No. R4-2002-158, for Las Virgenes Water District authorizing the discharge of tertiary-treated wastewater from its Tapia WRF to Percolation Ponds (Constructed Wetlands). The percolation ponds are located immediately adjacent to Malibu Creek near the Tapia WRF. Las Virgenes plans to rehabilitate the percolation ponds and convert them to constructed wetlands to treat a portion of Malibu Creek flows for the removal of pathogens and nutrients. The wetlands will also be used approximately six weeks in the spring and six weeks in the fall to remove additional nutrients from the discharge and to dispose of surplus recycled water. The

constructed wetlands are designed and monitored to ensure that any water applied to the constructed wetlands does not reach Malibu Creek or Malibu Lagoon.

Construction of the wetlands is on hold pending issuance of a permit from the California Coastal Commission.

Modifications to Treatment Plant.

14. Biological Nutrient Reduction (BNR) Facility: Time Schedule Order No. 97-136 provided Tapia with a compliance schedule to achieve compliance with the water quality objectives for nitrogen compounds. The District prepared a Nutrient Reduction Master Plan in January 2002, to identify facilities needed to consistently meet nitrate limits in Malibu Creek and the Los Angeles River.

Centrate Equalization Project: The biosolids generated from wastewater treatment at the Tapia WRF are pumped to Rancho for further treatment. At Rancho, the biosolids are anaerobically digested, dewatered through cetrifuges, and composted. The centrate generated from dewatering the anaerobically digested sludge which has a very high concentration of ammonia which is stored in a wet well and returned to Tapia WRF for treatment at a regulated rate. Centrate return to Tapia historically has impacted the activated sludge treatment process. Return of centrate to Las Virgenes WRF creates higher air demand for complete nitrification. To reduce the high ammonia load in the centrate, biological and physical/chemical alternatives for the reduction of total inorganic nitrogen in the centrate were considered.

Las Virgenes is considering retrofitting/rehabilitating the farm tanks to perform centrate flow pacing, so that the centrate flow can be spread out over 24 hours a day, seven days a week instead of the current seven hours a day, five days a week. It is expected that this would level out the spikes in nitrogen concentrations at Tapia that are caused from centrate return flows, and result in lower, more consistent nitrogen concentrations, as well as an increase in nitrogen removal efficiency.

On April 22, 2005, Las Virgenes met with Regional Board staff and submitted a Technical Memorandum on "Nutrient Reduction Measures for Nitrogen and Phosphorus". The objective of this nutrient reduction master plan is to look at the feasibility of converting Tapia WRF into a 12 mgd, membrane bioreactor (MBR) process with reverse osmosis (RO) treatment of the MBR effluent to meet the final effluent nutrient limitations.

Las Virgenes indicates that it will take at least four and a half years to make changes to the Tapia facility to meet the final limits. Assuming a start date of February 6, 2006 (the closest Joint Powers Authority board meeting to December 23, 2005, if the permit is adopted on November 3, 2005) preliminary design and CEQA would be complete by December 2006. Because the facility is in the Coastal Zone, a Coastal Commission permit would be required and may take at least a year, to December 2007. The design would be complete and a Notice to Proceed could be issued by December 2008. An 18-month construction period results in operational facilities by December 2010. Several approvals required for the project are outside Las Virgenes's control, such as a delay in

obtaining the Coastal permit, and would increase the time to complete the project. It is also necessary to provide centrate equalization facilities to achieve the final limit of 8 mg/L. Las Virgenes awarded a design contract for these facilities on September 27, 2005, and the design could be complete by June 2006. The facilities should be operational by May or June 2007.

15 Tapia WRF is also experiencing difficulty in meeting the effluent limit for dichlorobromomethane (DCBM). To achieve compliance with the DCBM final limit, in 2001, Las Virgenes made changes to the treatment plant's disinfection system to limit the formation of DCBM in the effluent. DCBM is one of the disinfectant byproducts formed by the chlorination, of wastewater. Las Virgenes replaced chlorine gas chlorination with sodium hypochlorite solution chlorination and sulfur dioxide with sodium bisulfite dechlorination, to disinfect their wastewater, thus limiting free chlorine molecules in the effluent (free chlorine triggers the formation of DCBM). But changes in the chlorination system did not yield significant reduction in DCBM concentrations.

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

17 ***Storm Water Management.*** Tapia WRF has developed a Storm Water Pollution Prevention Plan (SWPPP) for storm water that traverses the plant but does not enter the treatment system. Storm water in the Tapia WRF is collected by a series of diversion storm drains that route storm flow around hardscapes, and collect stormwater for diversion to the plant process.

DISCHARGE OUTFALL AND RECEIVING WATER DESCRIPTION

18. The Tapia WRF discharges tertiary-treated wastewater to Malibu Creek and to the Los Angeles River, waters of the United States, at the following locations. Tapia WRF discharges to Malibu Creek primarily during winter time and occasionally to the Los Angeles River Between April 15 to November 15 when there is reduced demand on recycled water. Tapia's tertiary-treated effluent is reclaimed year-round for irrigation or industrial uses throughout the Malibu Creek Watershed, and the excess is discharged directly into Malibu Creek. During summer months, discharge from Tapia WRF to Malibu Creek is significantly reduced due to increased sales of reclaimed water to irrigation customers.

Malibu Creek, Malibu Lagoon and Surfrider Beach (Malibu Beach):

Malibu Creek flows year round except during extended drought periods when flows in the Creek are minimal. The reach immediately above Malibu Lagoon usually dries each fall for periods ranging from a few weeks (wet years) to several months (dry years). The main stem of Malibu Creek originates as an overflow from Malibu Lake. Approximately one mile

upstream from Tapia, Las Virgenes Creek joins Malibu Creek from the north. Malibu Creek passes through Malibu Creek State Park and the Tapia Segment of Malibu Creek State Park which is owned and operated by California Department of Parks and Recreation. Tapia discharges into Malibu Creek in the Monte Nido area at two points, one upstream and one downstream of the confluence with Cold Creek. Below Monte Nido, Malibu Creek courses through Malibu Canyon, spills over Rindge Dam and emerges into a small alluvial plain, adjacent to Sierra Retreat and the City of Malibu Civic Center. At its mouth, Malibu Creek forms a lagoon at the ocean shore. This area constitutes Malibu Lagoon State Park. The Surfrider Beach (Malibu Beach) is located adjacent to the Malibu Lagoon, and is owned by the state and managed by Los Angeles County.

The Malibu Lagoon is closed by a sand bar during low flow months. The sandbar reduces the amount of creek and lagoon water directly reaching the surfzone at Surfrider Beach. The input of imported water into the Malibu Creek watershed has resulted in significant freshwater flows into Malibu Lagoon. The high water level in the Lagoon caused flooding of roads and properties in the Malibu Colony area and saturated the ground under the Cross Creek Shopping Center, which resulted in a septic tank overflow. Due to freshwater inputs, in the past, the sand bar was breached periodically by California Department of Parks and Recreation during the dry season by artificial means. Artificial breaching of the sandbar has now been prohibited by the Army Corps of Engineers because it resulted in lower water levels, increased tidal interaction, increased salinity and potential impacts on lagoon fauna and flora. Rapid changes in salinity after breaching are a likely cause in low species diversity in lagoon invertebrates. During winter months, the Lagoon is usually open to the ocean due to sustained flow in Malibu Creek.

The following are the discharge points to Malibu Creek:

a. Discharge Serial No. 001 - Primary Discharge Point to Malibu Creek.

Latitude: 34^0 04' 55"
Longitude: 118^0 42' 28"

Discharge No. 001 is the primary discharge outfall into Malibu Creek, located adjacent to the treatment plant.

The waste discharged to Malibu Creek shall be limited by this Order to winter months from November 16 through April 14 of each calendar year.

b. Discharge Serial No. 002 - Reservoir No. 2 Outfall.

Latitude: 34^0 08' 40"
Longitude: 118^0 41' 50"

Discharge No. 002 is used to release surplus effluent from Las Virgenes' Reservoir #2 which stores water for distribution to the recycled water system. Reservoir #2 has a capacity of 17 million gallons, which is less than a two-day supply during the high demand in summer. Overflow from this reservoir is discharged to Las

Virgenes Creek, a tributary to Malibu Creek, near the Las Virgenes Municipal Water District headquarters building located at 4232 Las Virgenes Road in Calabasas. Stormwater runoff enters the reservoir and causes overflow. Such discharges are unintentional and infrequent.

c. Discharge Serial No. 003 - Above County Gauging Station.

Latitude: 34^0 40' 40"
Longitude: 118^0 42' 03"

Discharge No. 003 is 0.2 miles downstream of Cold Creek and is no longer used routinely. No reclaimed water has been discharged at this location except during the storms of 1998. . This discharge location was established along with the percolation ponds to offer a bypass option in times of extremely high flow conditions to regulate flow and protect the pond structures.

Los Angeles River Discharge:

Las Virgenes Municipal Water District moved Discharge Serial No. 005 to a location further downstream, in a fully-lined section of the Arroyo Calabasas Creek, to eliminate the potential impacts of the discharge on the soft-bottomed portions of Dry Canyon Creek. Order No. 99-066 was amended on April 13, 2000, through Order No. 00-046, to incorporate this new discharge location.

Discharge Serial No. 005 – Discharge point to Arroyo Calabasas Creek a tributary to the Upper Los Angeles River.

Latitude: 34° 9' 21"
Longitude: 118° 38' 34"

DISCHARGE PROHIBITION FOR MALIBU CREEK

19. Santa Monica Bay Watershed includes Santa Monica Bay and the surrounding land area that drains naturally into the Bay, including the Malibu Creek Watershed. The Creek flows through a steep-sided canyon to Malibu Lagoon and Surfrider Beach. The Santa Monica Bay Restoration Commission, formerly known as the Santa Monica Bay Restoration Project (SMBRP) developed the *Santa Monica Bay Restoration Plan* (BRP) that serves as the blueprint for the restoration and enhancement of the Bay. The Regional Board plays a leading role in the implementation of the plan. Two of the proposed priorities of the plan are reduction of pollutants of concern at the source (which includes municipal wastewater treatment plants) and implementation of mass emission caps on some of the pollutants of concern.

20. The Malibu Creek Watershed Advisory Council (Council) became part of the Santa Monica Bay Restoration Project as a BRP implementing committee. As part of overall watershed

management, the Council has identified the reduction of freshwater flows to the Lagoon, reduction of nutrients to the Creek and Lagoon, protection of human health in the Creek, Lagoon, and surfzone, and restoration of a fully functioning Lagoon, as high priorities. Previous investigations conducted for the SMBRP showed pathogens were detected in summer runoff at four storm drain or channel locations. Possible sources of pathogen contamination include pet and livestock feces, illicit sewer connections to the storm drains, leaking sewer lines, malfunctioning septic systems, and improper waste disposal by recreational vehicles, campers or transients. Additional potential sources of human pathogens in nearshore waters include sewage overflows into storm drains, small boat waste discharges, and bathers.

21. The *Malibu Creek Watershed Natural Resources Plan* completed in July 1995 by the Natural Resources Conservation Service (NRCS) demonstrated significant increases in flow in Malibu Creek from urban runoff. The U.S. Fish and Wildlife Service listed the Tidewater Goby (*Eucyclogobius newberry*) as an endangered species in February 1994. On August 18, 1997, the National Marine Fisheries Service listed the Southern California Steelhead Trout (*Oncorhynchus mykiss*) as an endangered species. The tidewater goby historically existed in Malibu Lagoon but died out in the 1950's. A tidewater goby population was successfully reintroduced to the Lagoon on April 5, in 1991. Population surveys conducted by the Resource Conservation District of the Santa Monica Mountains and UCLA show that the Goby population has remained stable since their reintroduction. Malibu Creek has the southernmost known sustained run of steelhead trout in North America.

22. Los Angeles County Lifeguards favor reduced flow to the Lagoon, and thus, less time with an open sandbar during the dry season, because of a standing riptide current that developed around the mouth of the creek opening and because they can not drive emergency vehicles across the Creek mouth area to provide emergency service to the west side of Surfrider Beach.

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

DISCHARGE PROHIBITION EXEMPTION FOR MALIBU CREEK

24. A provision in this Order prohibits discharges from Tapia to Malibu Creek from April 15 to November 15 of each calendar year from all discharge points, except under certain conditions. These conditions include:

    i. Treatment plant upset or other operational emergencies;
    ii. Storm events as determined by the Executive Officer; or
    iii. The existence of minimal streamflow conditions that require flow augmentation in Malibu Creek to sustain endangered species as determined by the Executive Officer.

For purposes of the prohibition, the exemptions are better defined later in this Order.

25. The Discharger has submitted a "Rain Impact Analysis" (February 1999) and updated analysis (May 2005) to determine the impact of rain events on Tapia inflows and recycled water demand (i.e., how long it takes for recycled water demand to return to normal). The analysis also includes the spray field recovery time under both short-term rain events during the prohibition, and long-term winter rain events during unusually wet winters (average rainfall exceeding the 90th percentile of rainfall since 1883). These parameters are contingent on the magnitude and timing of rain event(s) and evapotranspiration. The analysis showed that it takes approximately four days (with 0.43 inches of rain) for recycled water demand to return to pre-rain capacity. Following extremely wet winters, recycled water demand and spray field recovery times depend directly on the volume of rainfall received and plant water demand (evapotranspiration) following the cessation of winter storms. When plant water demand is less than the cumulative rainfall, soils are still saturated on April 15, impacting both recycled water demand and spray field absorption capacity. These impacts end when cumulative plant water demand exceeds cumulative rainfall, and varies from one to several weeks after April 15th depending on the severity of winter rain events.

    If Las Virgenes cannot reuse all effluent during rain events, the Discharger has the option to discharge to the Los Angeles River.

    Based on the foregoing, this Order allows storm events during the prohibition as an exemption to the discharge prohibition when the storm intensity is over 0.4 inches at the Plant rain gauge. Below 0.4 inches subject to conditions in Attachment SW-1, the Executive Officer may grant approval to discharge.

26. In the past, The National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service, and California Department of Fish and Game have expressed concern over the summer discharge prohibition because it may cause adverse modification of habitat of the Southern California Steelhead Trout and other potential impacts to aquatic life..

    Las Virgenes contracted Entrix, Inc., to undertake a study on the minimum streamflow in Malibu Creek with respect to the steelhead trout habitat. The study entitled "*Minimum Flow Recommendations for Malibu Creek*" (Entrix, Inc., 1999), recommends that a minimum streamflow be maintained in Malibu Creek and discussed three levels of streamflow – 2.5, 3.5 and 4.5 cfs and the quantity of aquatic habitat associated with each. NMFS evaluated the three alternative flow levels and in a letter to the Regional Board dated April 12, 2000, discussed the advantages and disadvantages of the three levels of streamflow.

    While NMFS contended that the lower streamflow alternatives, 2.5 and 3.5 cfs, would likely result in less stream habitat for steelhead trout than the 4.5 cfs alternative, they also pointed out that these lower flow alternatives might be beneficial by producing lower water velocities which would favor the formation of cool-water refuge in pools. However, most importantly, each alternative is likely to eliminate late-summer, low-flow days.

Most years flows are sufficient to preclude the need to augment stream flows. However, in 2004 flows fell below the recommended thresholds in late summer, and Tapia released surplus recycled water for 22 days to augment streamflows, terminating the release upon the onset of rain on October 9th. This release, which followed the 2.5 cfs minimum flow criteria, failed to achieve flows of 2.5 cfs at the County gauging station, but field observations and measurements verified that the augmentation was sufficient to sustain creek flows in the reach below Rindge Dam and to re-wet a 100 m dry section of the creek immediately above Cross Creek Road without causing either a breach of Malibu Lagoon or a rise in the lagoon's elevation.

This Order therefore allows discharge from Tapia during the prohibition period to maintain a streamflow of 2.5 cfs at the Los Angeles County gauging station F-130-R. This flow is likely to eliminate late-summer, low flow days in the reach from Rindge Dam to Cross Creek Road in Malibu Creek, the section of Malibu Creek occupied by steelhead trout, while minimizing flows into Malibu Lagoon. It also requires Las Virgenes to monitor the Creek flow so that the 2.5 cfs flow can be maintained in this reach through augmentation from Tapia.

DISCHARGE QUALITY DESCRIPTION

27. Discharger's Annual Monitoring Report from 1999 to 2003 showed the following:

    A. Treated wastewater average annual effluent flow rate of 9.5 mgd.

    B. Average annual removal rate of 98.8% and >99%, for BOD and total suspended solids, respectively.

    C. 7-day median and daily maximum coliform values as 2.2 and 6.9-coliform forming units (CFU)/ 100 ml in the treated wastewater.

28. The characteristics of the treated wastewater discharged, based on data submitted in the 2003 Annual summary discharge monitoring report, are as follows in Table 1. The "<" symbol indicates that the pollutant was not detected (ND) at that concentration level. It is not known if the pollutant was present at a lower concentration.

Table 1 - 2003 Annual Summary Effluent Monitoring Summary

CTR#	Constituent	Unit	Average	Maximum	Minimum
	Flow	mgd	9.3	16.5	6.9
	pH	pH units	7.1	7.7	6.2
	Temperature	°C	22.7	28	4
	$BOD_{5@20°C}$	mg/L	2.4	5.8	<2
	Suspended solids	mg/L	1.2	6.2	<0.5
	Settleable solids	ml/L	<0.1	<0.1	<0.1
	Total dissolved solids	mg/L	827	1300	700
	Chloride	mg/L	153	170	133
	Sulfate	mg/L	205	307	171

Table 1 - 2003 Annual Summary Effluent Monitoring Summary					
CTR#	Constituent	Unit	Average	Maximum	Minimum
	Boron	mg/L	0.42	0.5	0.4
	Phosphate	mg/L	2.53	3.1	1.3
	Turbidity (24-HR composite)	NTU	0.55	1.5	0.2
	Oil and grease	mg/L	<2	<2	<2
	Fluoride	mg/L	0.28	0.4	0.2
	MBAS	mg/L	<0.08	0.1	<0.1
	Residual Chlorine (Dechlorinated)	mg/L	<0.1	<0.1	<0.1
	Total Coliform	CFU/ 100mL	---	12	1.1
	Ammonia-N	mg/L	<0.2	<0.2	<0.2
	Organic-N	mg/L	0.74	0.9	0.6
	Nitrate-N	mg/L	13.7	21	7
	Nitrite-N	mg/L	<0.004	0.02	<0.01
The following Priority Pollutants detected in effluent above their respective water quality criteria requiring limits (From 1999-2004)					
7	Cyanide	µg/L	10	10	10
8	Selenium	µg/L	3.58	12	2
14	Bis(2-ethylhexyl)phthalate	µg/L	4.75	40	5
16	Dichlorobromomethane	µg/L	36	62	19
The following Priority Pollutants detected in receiving water above their respective water quality criteria requiring limits (From 1999-2004)					
60	Mercury (Malibu Creek)	µg/L	0.0144	0.1	0.01
97	Mercury (Los Angeles River)	µg/L	0.0599	0.22	0.01
4	Cadmium (Malibu Creek)	µg/L	1.183	13	0.2
6	Copper (Malibu Creek)	µg/L	13.93	73	3
111	Lead (Malibu Creek)	µg/L	3.6	31.7	0.3

The remainder of the priority pollutants were either non-detect (ND) or detected below their respective water quality criteria.

29. 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. However, the circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential were 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]. On September 16, 2003, at a public hearing, the State Board adopted Order No. WQO 2003-0012, deferring the issue of numeric chronic toxicity effluent limitations until Phase II of the SIP is adopted. In the mean time, the State Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1 TUc trigger, in the Long Beach and Los Coyotes WRP NPDES permits. This permit contains a similar chronic toxicity effluent limitation. This Order also contains a reopener to allow the Regional Board to modify the permit, if necessary, consistent with any new policy, law, or regulation.

APPLICABLE PLANS, POLICIES AND REGULATIONS

30. ***Federal Clean Water Act*** - Section 301(a) of the federal Clean Water Act (CWA) requires that point source discharges of pollutants to a water of the United States must be in conformance with a NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality. CWA section 402 authorizes the USEPA or States with an approved NPDES Program to issue NPDES permits. The State of California has an approved NPDES Program.

31. ***Basin Plan*** - The Regional Board adopted a revised *Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) on June 13, 1994, and amended by various Regional Board resolutions. This updated and consolidated plan represents the Board's master quality control planning document and regulations. The State Water Resources Control Board (State Board) and the State of California Office of Administrative Law (OAL) approved the revised Basin Plan on November 17, 1994, and February 23, 1995, respectively. On May 26, 2000, the USEPA approved the revised Basin Plan except for the implementation plan for potential municipal and domestic supply (MUN) designated water bodies, which is not applicable to this discharge.

    Ammonia Water Quality Objective (WQO). The 1994 Basin Plan contained water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board, with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of Aquatic Life.* Resolution No. 2002-011 was approved by the State Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively, and are now in effect. The final effluent limitations for ammonia prescribed in this Order are based on the revised ammonia criteria (see Attachment H) and apply at the end of pipe.

    Chloride WQO for Malibu Creek discharge. The chloride effluent limitations for discharge to Malibu Creek remains unchanged at 500 mg/L.

    Chloride WQO for Los Angeles River discharge (005 discharge). The 1994 Basin Plan contained water quality objectives for chloride in Table 3-8. However, the chloride objectives for some waterbodies were revised on January 27, 1997, by the Regional Board, with the adoption of Resolution No. 97-02, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters.* Resolution No. 97-02 was approved by the State Board, the Office of Administrative Law, and USEPA on October 23, 1997, January 9, 1998, and February 5, 1998, respectively, and are now in effect. The chloride WQO was revised from 150 mg/L to 190 mg/L, for the following segments of the Los Angeles River:

    a. Between Sepulveda Flood Control Basin and Figueroa Street (including Burbank Western Channel only), and

b. Between Figueroa Street and the Estuary (including Rio Hondo below Santa Ana Freeway only).

The final effluent limitations for chloride prescribed in this Order for Discharge Serial No. 005 are based on the revised chloride WQOs for Los Angeles River and apply at the end of pipe.

The Basin Plan (i) designates beneficial uses for surface and groundwater, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated (existing and potential) beneficial uses and conform to the State's antidegradation policy, 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 pertinent water quality policies and regulations. The 1994 Basin Plan was prepared to be consistent with all State and Regional Board plans and policies adopted in 1994 and earlier. This Order implements the plans, policies, and provisions of the Board's Basin Plan.

32. ***Sources of Drinking Water Policy*** - On May 19, 1988, the State Water Resources Control Board (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).*

33. **Potential Municipal and Domestic Supply (P* MUN).** 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.

34. ***State Implementation Plan (SIP) and California Toxics Rule (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, 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 in the 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 Federal Clean Water Act (CWA). This policy also establishes the following:

a. Implementation provisions for priority pollutant criteria promulgated by USEPA through the California Toxics Rule (CTR) and for priority pollutant objectives established by Regional Water Quality Control Boards 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 provisions.

The CTR became effective on May 18, 2000 (codified as 40 CFR, Part 131.38). The SIP (which implements CTR criteria) was revised by the State Board on February 24, 2005, and became effective on May 31, 2005. Toxic pollutant limits are prescribed in this Order to implement the CTR and Basin Plan.

In the CTR, USEPA promulgated criteria that protects the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens. USEPA recognizes that adoption of 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 it can demonstrate that the chosen risk level is adequately protective of the most highly exposed subpopulation, and has completed all necessary public participation. This demonstration has not happened in California. Further, the 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 factor is more appropriate. Upon completion of the study, the State Board will review the results and determine if the risk factor needs to be changed. 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.

35. ***Alaska Rule.*** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for Clean Water Act (CWA) purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the *Alaska rule*), new and revised standards submitted to USEPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to

USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by EPA.

36. ***Beneficial Uses*** - The designated beneficial uses in the Basin Plan for Malibu Creek, the Los Angeles River, and their contiguous waters are:

A. The beneficial uses of Malibu Creek:

Malibu Creek - Hydrologic Unit 404.21	
Existing:	Water contact recreation[1]; noncontact water recreation; warm freshwater habitat; cold freshwater habitat; wild life habitat; rare, threatened, or endangered species habitat; migration of aquatic organisms[2]; spawning, reproduction, and/or early development habitat; and wetland habitat[3].
Potential:	municipal and domestic supply[4] ; and industrial service supply.
Malibu Lagoon - Hydrologic Unit 404.21	
Existing:	Navigation; water contact recreation[1]; noncontact water recreation; estuarine and marine habitats; wildlife habitat; rare, threatened, or endangered species habitats; migration of aquatic organisms[2]; spawning, reproduction, and/or early development habitat; and wetland habitat[3].
Malibu Beach (Surfrider Beach) - Hydrologic Unit 404.21	
Existing:	Navigation; water contact recreation[1]; noncontact water recreation; commercial and sport fishing; marine habitats; wildlife habitat; rare, threatened, or endangered species; migration of aquatic organisms[2]; spawning, reproduction, and/or early development habitat; and shellfish harvesting.

The beneficial uses of the Los Angeles River:

Los Angeles River upstream of Figueroa Street- Hydrologic Unit 405.21	
Existing:	groundwater recharge; water contact[1] and non-contact water recreation; warm freshwater habitat, wildlife, and wetland[3] habitat.
Potential:	municipal and domestic supply[4] ; and industrial service supply.
Los Angeles River downstream of Figueroa Street - Hydrologic Unit 405.15	
Existing:	groundwater recharge; water contact[1] and non-contact water recreation; warm freshwater habitat.
Potential:	municipal and domestic supply[4] ; industrial services supply; and wildlife habitat.
Los Angeles River downstream of Figueroa Street - Hydrologic Unit 405.12	
Existing:	groundwater recharge; water contact[1] and non-contact water recreation; rare, threatened, or endangered species; warm freshwater, wildlife, and marine habitat.
Potential:	municipal and domestic supply[4] ; and industrial services supply;

	industrial process supply; migration of aquatic organisms; spawning, reproduction, and/or early development; and shellfish harvesting.
Los Angeles River Estuary - Hydrologic Unit 405.12	
Existing:	industrial service supply; navigation; water contact[1] and non-contact water recreation; commercial and sport fishing; estuarine habitat[5]; marine habitat; wildlife habitat; rare, threatened, or endangered species; migration of aquatic organisms[2]; spawning, reproduction, and/or early development[2]; and wetland[3] habitat.
Potential:	Shellfish harvesting.

Footnote:

[1]. The Los Angeles County Department of Public Works posted signs prohibiting access to the Los Angeles River. However, there is public contact in the downstream areas; hence, the quality of treated wastewater discharged to both Malibu Creek and the Los Angeles River must be such that no health hazard is created.

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

[3]. This wetland habitat may be associated with only a portion of the waterbody. Any regulatory action would require a detailed analysis of the area.

[4]. Municipal and domestic supply uses were designated for the State Water Resources Control Board Order No. 88-63 and Regional Board Resolution No. 89-003. However, the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designated to protect the conditional designation.

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

B. The beneficial uses of the receiving groundwater:

1. The beneficial uses of the receiving groundwater for Malibu Creek:

Santa Monica Mountains-Southern Slopes – DWR Basin No.[1] 4-22	
Malibu Valley	
Existing:	agriculture supply
Potential:	municipal and domestic supply and industrial service supply

2. The beneficial uses of the receiving groundwater for Los Angeles River:

The Los Angeles River traverses through the San Fernando Ground Water Basin before it enters into the Los Angeles Coastal Groundwater Basin.

San Fernando Valley Basin – DWR Basin No.[1] 4-12	
West of Highway 405	
Existing:	municipal and domestic supply, industrial service supply, industrial process supply, and agriculture supply
Potential:	None
East of Highway 405 (overall)	
Existing:	municipal and domestic supply, industrial service supply, industrial process supply, and agriculture supply
Potential:	None
Narrows area (below confluence of Verdugo Wash with the Los Angeles River)	
Existing:	municipal and domestic supply, industrial service supply, industrial process supply, and agriculture supply
Potential	None

Los Angeles Coastal Plain – DWR Basin No.[1] 4-11	
Central Basin	
Existing:	municipal and domestic supply, industrial service supply, industrial process supply, and agriculture supply
Potential:	None
West Coast Basin	
Existing:	municipal and domestic supply, industrial service supply, industrial process supply, and agriculture supply
Potential:	None

Footnote:

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

C. The requirements in this Order are intended to protect designated beneficial uses and enhance the water quality of the watershed. Effluent limits must protect both existing and potential beneficial uses.

D. Consistent with Regional Board Resolution No. 89-03 and State Board Resolution No. 88-63, all inland surface waters in Table 2-1 of the 1994 Basin Plan are designated existing, intermittent, or potential for Municipal and Domestic Supply (MUN).

37. ***Title 22 of the California Code of Regulations*** - The California Department of Health Services established primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water. These MCLs are codified in Title 22, California Code of Regulations (Title 22). The Basin Plan (Chapter 3)

incorporates Title 22 primary MCLs by reference. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. Title 22 primary MCLs have been used as bases for effluent limitations in WDRs and NPDES permits to protect the groundwater recharge beneficial use when that receiving groundwater is designated as MUN. Also, the Basin Plan specifies that "Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Therefore the secondary MCL's, which are limits based on aesthetic, organoleptic standards, are also incorporated into this permit to protect groundwater quality.

38. Groundwater Recharge (GWR). Sections of Los Angeles River, located downstream of the Tapia WRP discharge point, are designated as GWR. Tapia WRF discharges to Arroyo Calabasas Creek which is a tributary to Upper Los Angeles River Groundwater Basin. Since groundwater from this Basin is used to provide drinking water to over one million people, Title 22-based limits are needed to protect that drinking water supply where there is reasonable potential for the contaminant to be present in the discharge. By limiting the contaminants in the Tapia WRF 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.

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

40. ***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 Malibu Creek Watershed and Los Angeles River 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".

Malibu Creek Watershed:

Pursuant to this Regional Board's watershed initiative framework, the Malibu Creek Watershed Management Area was the targeted watershed for fiscal year 2001-2002 but is being considered for this current fiscal year 2005-2006.

Los Angeles River Watershed:

Pursuant to this Regional Board's watershed initiative framework, the Los Angeles River Watershed Management Area was the targeted watershed for fiscal year 1997-1999, but is being considered in this current fiscal year 2005-2006.

REGULATORY BASES FOR EFFLUENT AND DISCHARGE REQUIREMENTS

41. ***Water Quality Objectives and Effluent Limits -*** *Water* Quality Objectives (WQOs) and effluent limitations in this permit are based on:

A. Applicable State Regulations/Policies/Guidances

a. 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;

b. California Toxics Rule (40 CFR 131.38);

c. 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);

d. Administrative Procedures Manual and Administrative Procedure Updates; and,

e. Porter-Cologne Water Quality Act (Water Code § 13000 et seq.);

B. Applicable Federal Regulations/Policies/Guidances

a. Federal Clean Water Act;

b. 40 CFR, Parts 122, 131, among others;

c. Best Professional Judgment (pursuant to 40 CFR 122.44);

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

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

f. Inspectors Guide for Evaluation of Municipal Wastewater Treatment Plants, April 1979 (EPA/430/9-79-010);

g. Fate of Priority Pollutants in Publicly Owned Treatment Works Pilot Study October 1979 (EPA-440/1-79-300);

h. *Technical Support Document for Water Quality Based Toxics Control,* March 1991 (EPA-505/ 2-90-001);

i. *U.S. EPA NPDES Permit Writers' Manual,* December 1996 (EPA-833-B-96-003); and,

j. USEPA's *National Recommended Water Quality Criteria: 2002*, November 2002 (EPA-822-R-02-047)

A full list of the Docket reference materials is in Attachment I.

Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR, Part 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.

42. ***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 their 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, except during wet-weather, storm events that cause flows to the treatment plant to exceed the plant's design capacity. Therefore, during storm events, when flows exceed design capacity, only concentration-based limits are applicable.

43. ***Maximum Daily Effluent Limitations*** - Pursuant to 40 CFR, Section 122.45(d)(2), for POTWs 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 in the permits, 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.

44. ***Pretreatment*** - Pursuant to 40 CFR, Section 403, the Tapia WRF developed and has been implementing an approved industrial wastewater Pretreatment Program. This Order requires Tapia WRF to continue the implementation of the approved Pretreatment Program and modifications thereof.

45. ***Sludge Disposal*** - To implement CWA Section 405(d), on February 19, 1993, the 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. It is the responsibility of the Tapia WRF to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program.

46. ***Storm Water Management*** - 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 to regulate storm water discharges associated with industrial activity.

    General NPDES Permit No. CAS000001 is applicable to storm water discharges from the Tapia WRF premises. On April 9, 1992, the Tapia WRF filed a Notice of Intent to comply with the requirements of the general permit. Tapia WRF developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Board's Order No. 97-03-DWQ.

47. ***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.

48. ***Antibacksliding Policies*** - 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.

49. ***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 24 toxic pollutants and numeric human health criteria for 92 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. CTR's Compliance Schedule provisions sunseted on May 18, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed five years from issuance or past May 17, 2010, which ever is sooner. 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.

50. ***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 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 401.15 and 40 CFR 423, Appendix A) and include heavy 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.

51. ***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 USEPA develop secondary treatment standards for POTWs as defined in Section 304(d)(1). Based on this statutory requirement, USEPA developed national secondary treatment regulations, which are specified in 40 CFR 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.

52. ***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 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 Malibu Creek and Los Angeles River are contained in the Basin Plan and CTR, as described in previous findings.

53. ***Water Quality Based Effluent Limitations for Toxic Pollutants*** - Toxic substances are regulated in this permit by water quality based effluent limitations derived from the 1994 Basin Plan, the CTR, and/or best professional judgment (BPJ) pursuant to Part 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 122.44(d)(1)(i), and in part, the SIP, require the establishment of WQBELs that will protect water quality. As documented in 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. Reasonable potential was not triggered for some of the 126 priority pollutants and final limits cannot be determined at this time. 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.

54. ***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.

55. ***303(d) Listed Pollutants*** - On July 25, 2003, USEPA approved the State's most recent list of impaired waterbodies. The list (hereinafter referred to as the 303(d) list) was prepared in accordance with Section 303(d) of the Federal Clean Water Act to identify specific impaired waterbodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources.

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

A. Malibu Beach - Hydrologic Unit 404.21:
Beach closures and DDT (Fish consumption advisory for DDT);

B. Malibu Creek - Hydrologic Unit 404.21:

Fish Barriers, high coliform count, nutrients (algae), scum/foam-unnatural, sedimentation/siltation and trash;

C. Malibu Lagoon - Hydrologic Unit 404.21:
Benthic community effects, enteric viruses, eutrophic, high coliform count, pH (possible sources might be septic systems, stormdrains, and birds), shellfish harvesting advisory, and swimming restrictions; and,

D. Malibu Lagoon Beach (Surfrider Beach) - Hydrologic Unit 404.21:
Beach closures, DDT (Fish consumption advisory for DDT), high coliform count, and PCBs (Fish consumption advisory for PCBs).

Los Angeles River:
Los Angeles River, Los Angeles River Estuary, and their tributaries are on the 303(d) List.

A. Los Angeles River Reach 4 (Sepulveda Drive to Sepulveda Dam) – Hydrologic Unit 405.21: Ammonia, high coliform count, lead, nutrients, odors, and scum/foam-unnatural;

B. Los Angeles River Reach 3 (Figueroa Street to Riverside Drive) – Hydrologic Unit 405.21: Ammonia, nutrients, odors, and scum/foam-unnatural;

C. Los Angeles River Reach 2 (Carson to Figueroa Street) – Hydrologic Unit 405.15: Ammonia, high coliform count, lead, nutrients (algae), odors, oil, and scum/foam-unnatural;

D. Los Angeles River Reach 1 (Estuary to Carson Street) – Hydrologic Unit 405.12: Total aluminum, ammonia, dissolved cadmium, dissolved copper, and high coliform count; and,

E. Los Angeles River Estuary – Hydrologic Unit 405.12: Chlordane, DDT, Lead, PCBs, and Zinc.

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

a. Malibu Creek TMDLs

1. Bacteria TMDL for Malibu Creek discharge. According to the TMDL schedule, under the amended consent decree, Heal the Bay, Santa Monica Bay Keeper, et al. v. Browner, et al. (March 23, 1999), a bacteria TMDL needed to be established by March 22, 2003. On December 13, 2004, the Regional Board adopted Resolution No. 2004-019R, amendment to the Water Quality Control Plan for the

Los Angeles Region to incorporate a Total Maximum Daily Load for bacteria in the Malibu Creek Watershed, which serves as the bacteria TMDL for Malibu Creek.

2. Nutrient TMDL for Malibu Creek discharge established by EPA. The Nutrient TMDL for Malibu Creek for total nitrogen and total phosphorous was developed and established by EPA in March 2003. The EPA TMDL included a numeric target of 1 mg/L for total nitrogen during the summer (April 15 to November 15) to control algal biomass, and a winter numeric target of 8 mg/L, based on the Basin Plan numeric objective of 10 mg/L (with an implicit 20% margin of safety). EPA also established a 0.1 mg/L numeric target for total phosphorous during the summer and no target during winter months. The USEPA's TMDL finds that because there is a discharge prohibition during the summer months, discharge will have an insignificant effect on average summer loads and that it is therefore unnecessary to account for them in the cumulative loading allowed under the TMDL.

3. Nutrient TMDL for Malibu Creek discharge under development. Based on recent scientific studies, the Regional Board Staff is currently proposing a new TMDL numeric target of 1 mg/L for total nitrogen during both summer and winter seasons. The Malibu Creek Nutrient TMDL is scheduled for Regional Board's consideration in the coming months.

b. Los Angeles River TMDL

According to the Los Angeles River TMDL schedule, under the amended consent decree, Heal the Bay, Santa Monica Bay Keeper, et al. v. Browner, et al. (March 23, 1999), the trash, nitrogen, and metals TMDLs for the Los Angeles River must be completed by March 2001, March 2003, and March 2004, respectively. The coliform TMDL for Los Angeles Harbor is scheduled for completion by March 2006.

1. Nitrogen Compounds TMDL. On July 10, 2003, the Regional Board adopted Resolution No. 2003-009, *Amendment to the Basin Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River (Nitrogen Compounds TMDL).* On November 19, 2003, the State Board approved *the Nitrogen Compounds TMDL.* However, on December 4, 2003, the Regional Board revised the Nitrogen Compound TMDL by adopting Resolution No. 2003-016, *Revision of Interim Effluent Limits for Ammonia in the Amendment to the Water Quality Control Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River.* Resolution No. 2003-016 only revised the portion of the Nitrogen Compounds TMDL containing interim limits for total ammonia as nitrogen, for the Glendale and Tillman WRPs. All other portions of the TMDL remained unchanged. The Nitrogen Compounds TMDL is awaiting OAL and USEPA approval.

2. Trash TMDL. On January 25, 2001, the Regional Board adopted Resolution No. 01-006. However, on September 19, 2001, the Regional Board reconsidered Resolution No. 01-006 and adopted Resolution No. 2001-013, *Amendment to the*

Basin Plan for the Los Angeles Region to Incorporate a TMDL for Trash in the Los Angeles River (Trash TMDL), which supercedes Resolution No. 01-006. On February 19, 2002, the State Board adopted Resolution No. 02-038, approving the Regional Board's Trash TMDL. OAL and USEPA subsequently approved the Trash TMDL later that year.

3. Metal TMDL. The Metal TMDL for Los Angeles River for copper, lead, cadmium and zinc is tentatively scheduled for consideration by the Regional Board in June 2005. Reasonable Potential Analysis (RPA) showed exeedances of water quality objectives in receiving water for these metals. Therefore, numerical limitations have been prescribed for these metals in this permit. However, when the Metal TMDL has been approved by the State Board, OAL and USEPA, TMDL Water Quality Objectives (WQO) for these metals will become effective.

57. ***Mixing Zones, Water Effects Ratio, and Dilution Credits*** - Mixing zones, dilution credits, water effects ratio (WER) and attenuation factors 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, WER studies and dilution credit studies, the Regional Board can evaluate the propriety of granting a mixing zone, WER 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:

A. Tapia WRP discharge contributes one of the largest flow (effluent dominated) into the Malibu Creek and Los Angeles River watershed when discharged, in the vicinity of the discharge point where it overwhelms the receiving water providing very limited mixing and dilution;

B. Even in the absence of the Tapia WRF discharge, the receiving water primarily consists of nuisance flows and other effluents, limiting its assimilative capacity;

C. Malibu Creek, Malibu Lagoon and Surfrider Beach and, several reaches of the Los Angeles River [including those subject to this Order] are 303(d) listed (i.e., impaired) for certain constituents;

D. Impaired waters do not have the capacity to assimilate pollutants of concern at concentrations greater than the applicable objective;

E. For the protection of the beneficial uses is listed on Finding 33 (Beneficial Uses);

F. Consistent with Antidegradation Policies;

G. Because a mixing zone study has not been conducted;

H. Because hydrologic models of the discharge and the receiving waters have not been conducted; and,

I. Because a WER study has not been completed.

58. 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

59. As specified in 40 CFR, Part 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, Part 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 Analysis (RPA) for:

1. Chronic Toxicity - RPA was conducted for Chronic Toxicity (Table R1 of the accompanying Fact Sheet) using the discharger's effluent data from their ROWD and annual self monitoring reports. The RPA compares the effluent data with USEPA's 1 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 narrative effluent limitation for Chronic Toxicity. The circumstances warranting a numeric Chronic Toxicity effluent limitation were reviewed by the State Water Resources Control Board (State Board) in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, the State Board adopted Order No. WQO 2003-0012, deferring the numeric chronic toxicity effluent limitation issue until the adoption of Phase II of the SIP, and replaced the numeric chronic toxicity effluent limitation with a narrative effluent limitation for the time being.

2. Ammonia and other Nitrogen Species – RPA was conducted for Ammonia, Nitrate plus Nitrite as Nitrogen, Nitrite Nitrogen, and MBAS (Table R1 of the accompanying Fact Sheet) using the Discharger's effluent data from their self monitoring reports. Temperature, pH, Ammonia-Nitrogen, Nitrate plus Nitrite as Nitrogen, Nitrite Nitrogen and MBAS effluent data is summarized in Table R1 of the accompanying Fact Sheet. The RPA compares the effluent data with the Basin Plan water quality objectives (WQOs). The Discharger's effluent exceeded the Basin Plan WQOs for Ammonia, Nitrate plus Nitrite as Nitrogen, and Nitrite Nitrogen, 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 or contribute to an exceedance of the Basin Plan WQOs and, consistent with 40 CFR 122.44(d), the Order contains numeric effluent limitations for Ammonia, Nitrate plus Nitrite as Nitrogen, and Nitrite Nitrogen,

based on this corresponding Basin Plan WQO, and TMDL Waste Load Allocations.

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

1. ***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:

   a. 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 water quality-based effluent limitation (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 5).

   b. For the second tier, the observed maximum ambient background concentration (B) for the pollutant is compared with the adjusted WQO. If B is greater than the adjusted WQO, and the pollutant was present in the effluent, then a WQBEL is required because the effluent has reasonable potential to contribute to an exceedance of the WQO. The Regional Board exercised its discretion in identifying all available, applicable ambient background data in accordance with SIP Section 1.4.3 (Page 18).

   c. 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 10) states that MDELs shall be used for publicly-owned treatment works (POTWs) in place of average weekly limitations. WQBELs are based on CTR, USEPA water quality criteria, applicable TMDLs, and Basin Plan objectives.

If the data are unavailable or insufficient to conduct the RPA for the pollutant, or if all reported detection limits of the pollutant in the effluent are greater than or equal to the WQO, the Regional Board shall require additional monitoring, in accordance with Section 1.3. of the SIP. The effluent monitoring data from January 1998 to December 2004 indicate that the following constituents were not detected and their lowest detection limits were greater than their WQO: benzidine, benzo(a)anthracene, benzo(a)pyrene, bemzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, 3,3'-dichlorobenzidine, hexachlorobenzene, indeno(1,2,3-cd)pyrene, aldrin, chlordane, 4,4'-DDT, 4,4'-DDE, 4,4'-DDD, dieldrin, heptachlor, heptachlor epoxide, PCBs, and toxaphene.

Therefore these constituents require interim monitoring requirements. 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.

Upon completion of the required monitoring, the Regional Board shall use the gathered data to conduct 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 prohibit the establishing of WQBELs in the permit.

A numerical 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, 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.

2. ***RPA Data -*** . The RPA was based on effluent monitoring data for January 1998 through November 2004, including interim monitoring results from July 2001 to December 2002. Table R2 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.

   a. **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 (Table R3) was used to calculate the total recoverable CTR criteria. 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 greater than 400 mg/L were capped at 400 prior to calculating the average hardness. All the hardness values for both Malibu Creek and Los Angeles River showed greater than 400 mg/L. Therefore, a hardness value of 400 mg/L, was used to calculate CTR WQO. This is consistent with the preamble to the CTR, contained in federal register Section E.f. *Hardness* (p.31692), 40 CFR Part 131.

b. **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 for the duration of 18 months, beginning in July 2001. The Discharger collected the eighteen required samples and reported the results quarterly to the Regional Board. After additional information is gathered, 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.

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

d. Regional Board staff have determined that cyanide, selenium, mercury, bis(2ethylhexyl)phthalate and dichlorobromomethane in effluent showed the potential to exceed respective CTR criteria and Basin Plan WQO, and, therefore, require CTR-based and Basin Plan-based effluent limitations. Because copper, lead, and cadmium were detected in the effluent, and because receiving water concentrations exceed the respective CTR criteria, limitations have been prescribed for these constituents.

60. This Order is consistent with State and Federal antidegradation policies in that it does not authorize a change in the quantity of treated wastewater discharged by the facility, nor

does it authorize a change or relaxation in the manner or level of treatment. As a result, both the quantity and quality of the discharge are 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.

61. ***Pollutant Minimization Program*** - The Discharger shall be required to develop a Pollutant Minimization Program (PMP), in accordance with Section 2.4.5.1. of the SIP, when there is evidence that the priority pollutant is present in the effluent above an effluent limitation.

62. The Discharger shall propose a plan with a logical sequence of actions to achieve full compliance with the limits in this Order. The first phase of the plan is to investigate the sources of the high levels of contaminants in the collection system. If the sources can be identified, source reduction measures (including, when appropriate, Pollution Minimization Plans) will be instituted. At the time this Order is considered, Tapia WRF is unsure whether or not all sources contributing to the high contaminant levels can be identified. Therefore, a parallel effort will be made to evaluate the appropriateness of Site Specific Objectives (SSO) and, where appropriate, Use Attainability Analyses (UAA), and modifications to and/or construction of treatment facilities. If it is determined that a SSO or UAA is necessary and appropriate, Tapia WRF will submit a written request for a SSO study, accompanied by a preliminary commitment to fund the study, to the Regional Board. The Discharger will then develop a workplan and submit it to the Regional Board for approval prior to the initiation of the studies.

INTERIM REQUIREMENTS

63. ***Cyanide, Selenium, Mercury, Bis(2-ethylhexyl)phthalate and Dichlorobromomethane*** - Data submitted in previous self-monitoring reports indicated that cyanide, selenium, bis(2-ethylhexyl)phthalate, and dichlorobromomethane have been detected in the effluent, at least once, at a concentration greater than the limits prescribed in this Order. Tapia WRF, therefore, may not be able to achieve consistent compliance with the CTR-based final effluent limits for cyanide and selenium and, with Title 22 based limits for bis(2-ethylhexyl)phthalate and dichlorobromomethane. Tapia WRF has the option to conduct studies to obtain the necessary data to develop site-specific objectives for cyanide, selenium, bis(2-ethylhexyl)phthalate and dichlorobromomethane. Accordingly, Tapia WRF shall prepare and submit a draft workplan to the Regional Board for review and approval, prior to implementing the study, if they have opted to conduct the study.

64. 40 CFR, Section 131.38(e) provides conditions under which interim effluent limits and compliance schedules may be issued. The SIP allows inclusion of interim limits in NPDES permits for CTR-based priority pollutants. CTR's Compliance Schedule provisions sunseted on May 18, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed five years from issuance or past May 17, 2010, which ever is sooner. The SIP also 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. 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 the non-CTR-based nitrate (both the Malibu Creek discharge and the Los Angeles River discharge) and bis(2-ethylhexyl)phthalate limits (Los Angeles River discharge), 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 schedules are provided in the accompanying Time Schedule Order.

65. On January 30, 2003, the Regional Board adopted *Resolution No. 2003-001, Resolution Amending the Water Quality Control Plan for the Los Angeles Region to Incorporate Language Authorizing Compliance Schedules in NPDES Permits* (Compliance Schedule Resolution). Resolution No. 2003-001 was approved by State Board, OAL, and USEPA on June 18, 2003, August 18, 2003, and February 10, 2004, respectively, and is now in effect. The *Compliance Schedule Resolution* allows compliance schedules in NPDES permits for effluent limits that implement TMDLs for new, revised or newly interpreted water quality standards. Since the limits for nitrate and bis(2-ethylhexyl)phthalate are neither new, nor newly interpreted water quality standards, the Basin Plan Amendment for compliance schedules does not apply to these pollutants.

66. 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. However, the Discharger anticipates it will take longer than five years to achieve the final limits.

PUBLIC NOTIFICATION AND CEQA COMPLIANCE

67. The action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code §21100, et. seq.) in accordance with California Water Code §13389.

68. 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.

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

70. 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 (August 26, 2005) from the date of its adoption because of significant public comment, in accordance with federal law, provided the Regional Administrator, USEPA has no objections.

71. 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.

IT IS HEREBY ORDERED that the Las Virgenes Municipal Water District, as the owner and operator of the Tapia Water Reclamation Facility, 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 PROHIBITION

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

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

B. Qualifying storm events as determined by the Executive Officer –

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

1. The rainfall event produces 0.4 inches or greater of precipitation in 24 hours at the Facility Rain Gauge; and
2. The Malibu Lagoon Sand Bar is open; and
3. The spray fields at Rancho Las Virgenes Farm are saturated; and
4. There is no demand for recycled water; and
5. The capacity to send wastewater to the Los Angeles River has been exhausted; and
6. All other disposal options are exhausted.

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

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

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

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

II. DISCHARGE REQUIREMENTS

A. Effluent Limitations

1. Wastes discharged shall be limited to tertiary treated municipal and industrial wastewater only, discharged from Serial No. 001, 002 and 003 into Malibu Creek and Serial No. 005 into the Los Angeles River 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:

i. Effluent limitations that apply to both Discharge Serial Nos. 001, 002 and 003 into Malibu Creek and Discharge Serial No. 005 into the Los Angeles River:

Constituent	Units	Discharge Limitations		
		Monthly Average[1]	Weekly Average[1]	Daily Maximum[2]
Settleable solids	ml/L	0.1	--	0.2
Suspended solids	mg/L	5.0		10.0
	lbs/day[3]	671		1,343
Oil and grease	mg/L	5	--	10
	lbs/day[3]	671	--	1,343
$BOD_{5@20°C}$	mg/L	10		20
	lbs/day[3]	1,343		2,686
Total residual chlorine	mg/L	--	--	0.1[4]

ii. Effluent discharge limitations for Malibu Creek through Discharge Serial Nos. 001, 002 and 003:

Constituent	Units	Discharge Limitations		
		Monthly Average[1]	Weekly Average[1]	Daily Maximum[2]
Total dissolved solids	mg/L	2000	--	--
	lbs/day[3]	268,600	--	--
Chloride	mg/L	500	--	--
	lbs/day[3]	67,137	--	--
Sulfate	mg/L	500	--	--
	lbs/day[3]	67,137	--	--
Boron	mg/L	2	--	--
	lbs/day[3]	269	--	--
Detergents (as MBAS)	mg/L	0.5	--	--
	lbs/day[3]	67	--	--
Total ammonia (as N)	mg/L	[9]	--	[8]
	lbs/day	[3]	--	[3]

iii. Nutrient Limits For Malibu Creek through Discharge Serial Nos. 001, 002 and 003:

a. For Summer Months (April 15 - November 15)

Constituent	Units	Discharge Limitations		
		Monthly Average[1]	Weekly Average[1]	Daily Maximum[2]
Nitrate + Nitrite (as N)	mg/L	8	--	--
	lbs/day[3]	1074	--	--
Total Phosphorus	mg/L	3#	--	--
	lbs/day[3]	402	--	--

EPA Established Nutrient Limits for Malibu Creek

b. For Winter Months (November 16 - April 14)

Constituent	Units	Discharge Limitations		
		Monthly Average[1]	Weekly Average[1]	Daily Maximum[2]
Nitrate + Nitrite (as N)	mg/L	8	--	--
	lbs/day[3]	1,074	--	--
Total Phosphorus	mg/L	3#		4#
	lbs/day[3]	402		805

iv. Effluent Discharge Limitations for Los Angeles River through Discharge Serial No. 005:

Constituent	Units	Discharge Limitations		
		Monthly Average[1]	Weekly Average[1]	Daily Maximum[2]
Total dissolved solids	mg/L	950	--	--
	lbs/day[3]	127,560	--	--
Chloride	mg/L	190 [5]	--	--
	lbs/day[3]	25,512	--	--
Sulfate	mg/L	300	--	--
	lbs/day[3]	40,282	--	--
Boron	mg/L	1.5	--	--
	lbs/day[3]	201	--	--
Fluoride	mg/L	1.6	--	--
	lbs/day[3]	215	--	--
Detergents (as MBAS)	mg/L	0.5	--	--
	lbs/day[3]	67	--	--
Nitrate + Nitrite (as N)	mg/L	8 [6]	--	--
	lbs/day[3]	1074	--	--
Nitrite (as N)	mg/L	1[6]	--	--
	lbs/day[3]	134	--	--
Nitrate (as N)	mg/L	8[6]		

Constituent	Units	Discharge Limitations		
		Monthly Average[1]	Weekly Average[1]	Daily Maximum[2]
	lbs/day[3]	1074		
Total ammonia (as N)	mg/L	[9]	--	[8]
	lbs/day[3]	[3]	--	[3]
	mg/L	2.3 [7]	--	10.1 [7]
Total Phosphorus	mg/L	3#		4#
	lbs/day[3]	402		805

Footnotes:

EPA did not establish a phosphorus limit for winter months for discharge to Malibu Creek. Antidegradation policy dictates that the existing permit limit be retained which applies to both Malibu Creek and the Los Angeles River discharge because eutrophication and algal growth occurs downstream of the Tapia discharge in Malibu Creek due to nutrient loading. Because the limit was based upon plant performance, no additional treatment is needed in order to comply with this limit.

Limits based on statistical analysis on performance data from January 2000 through October 2004, using P-limit software or maximum detected effluent concentration.

[1] Average Monthly Discharge Limitation means the highest allowable average of daily discharge over a calendar month, calculated as the sum of all daily discharges measured during that month divided by the number of days on which monitoring was performed.

Average Weekly Discharge Limitation means the highest allowable average of daily discharge over a calendar week, calculated as the sum of all daily discharges measured during that week divided by the number of days on which monitoring was performed.

[2] 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. It may apply to grab samples if the collection of composite samples for those constituents is not appropriate because of instability of the constituents.

[3] The mass emission rates are based on the existing plant design flow rate of 16.1 mgd, and are calculated as follows: Flow(MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. However, if the design capacity is reduced to achieve NDN process, the mass-based effluent limitation will accordingly be modified upon certification and approval of de-rated treatment plant capacity. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

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

[5] In accordance with the Resolution 98-027, adopted by the Regional Board on April 13, 1998, the chloride limitation has been increased from 150 to 190 mg/L.

[6] This is the water quality objective for nitrate plus nitrite as nitrogen and nitrite nitrogen in the current Basin Plan. This effluent limitation applies immediately and will stay in effect until the Nutrient TMDL for the Los Angeles River, Resolution No. 2003-009, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds in the Los Angeles River* (*Nitrogen Compounds TMDL*), is approved by USEPA (i.e., the effective date of the TMDL). The WLA for total nitrogen will be 8 mg/L. If U.S. EPA does not approve the *Nitrogen Compounds TMDL*, this effluent

limitation will remain in effect until revised by the Regional Board.

[7] This is the waste load allocation (WLA) for ammonia, according to the Nitrogen TMDL Resolution No. 2003-009, adopted by the Regional Board on July 10, 2003. The waste load allocation will ultimately serve as the effluent limitation for the discharge. This limit becomes effective after the USEPA approves the Nitrogen TMDL. If U.S. EPA does not approve the *Nitrogen TMDL*, this effluent limitation and its *corresponding mass-based effluent limitation will not apply.*

[8] The Discharger must comply with the updated ammonia water quality objectives in the Basin Plan, Table 3-1 (Attachment H) which resulted from Resolution No. 2002-011 adopted by the Regional Board on April 25, 2002.

For compliance with Criteria Maximum Concentration (CMC) in the Attachment H, the pH sample collected in the receiving water downstream of the discharge and the ammonia nitrogen sample collected in the effluent, shall be taken and reported at the same time. Should there be no receiving water present, the pH of the effluent at the end of pipe shall be determined and reported.

[9] The Discharger must comply with the updated ammonia water quality objectives in the Basin Plan, Table 3-3 (Attachment H) which resulted from Resolution No. 2002-011 adopted by the Regional Board on April 25, 2002.

For compliance with Criteria Continuous Concentration (CCC) in the Attachment H, the pH and temperature samples collected in the receiving water downstream of the discharge and the ammonia nitrogen sample collected in the effluent, shall be taken and reported at the same time. Shall there be no receiving water present, the pH and temperature of the effluent at the end of pipe shall be determined and reported.

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b. Toxic pollutants:

i. <u>Effluent Limitations that apply to both Discharge Serial Nos. 001, 002 and 003 into Malibu Creek and Discharge Serial No. 005 into the Los Angeles River:</u>

CTR #[1]	Constituent	Units	Discharge Limitations	
			Monthly Average[2]	Daily Maximum
14	Cyanide	µg/L	4.6[5] [6]	9.9[5] [6]
		lbs/day[4]	0.617	1.329
68	Selenium	µg/L	3.4[5] [6]	9.5[5] [6]
		lbs/day[4]	0.456	1.275
38	Dichlorobromomethane	µg/L	46	64
		lbs/day[4]	6.2	8.6

ii. Additional Effluent Limitation for Discharge Serial Nos. 001, 002 and 003 into Malibu Creek:

CTR #[1]	Constituent	Units	Discharge Limitations	
			Monthly Average[2]	Daily Maximum
16	Bis(2ethylhexyl)phthalate[4][6]	µg/L	5.9	17
		lbs/day[4]	0.8	2.28
8	Mercury	µg/L	0.051[5]	0.151[5]
		lbs/day[4]	0.0068	0.020

iii. Additional Effluent Limitations for Discharge Serial No. 005 into the Los Angeles River:

CTR #[1]	Constituent	Units	Discharge Limitations	
			Monthly Average[2]	Daily Maximum
16	Bis(2ethylhexyl)phthalate[4][6]	µg/L	4[7]	--
		lbs/day[4]	0.53	--
6	Copper[3], *	µg/L	19[5]	52[5]
		lbs/day[4]	2.55	6.98
6	Copper[3], #	µg/L	30	---
		lbs/day[4]	4.0	---
6	Copper[3], ##	µg/L	17	---
		lbs/day[4]	2.3	---
7	Lead[3], *	µg/L	10[5]	32[5]
		lbs/day[4]	1.34	4.29[5]
7	Lead[3], #	µg/L	22	---
		lbs/day[4]	2.9	---
7	Lead[3], ##	µg/L	62	---
		lbs/day[4]	8.3	---
4	Cadmium[3], *	µg/L	4[5]	12[5]
		lbs/day[4]	0.537	1.611
4	Cadmium[3], ##	µg/L	3.1	---
		lbs/day[4]	0.4	---
13	Zinc [3], ##	µg/L	159	---
		lbs/day[4]	21.3	---
8	Mercury	µg/L	0.051[5]	0.163[5]
		lbs/day[4]	0.0068	0.0218

Footnotes:

* RPA triggered limits. These limits will be replaced by Waste Load allocations (WLAs) once TMDLs for these pollutants are adopted and become effective.

\# This is the WLA, according to the Los Angeles River Metals TMDL adopted by the Regional Board in June 2005. The WLA will ultimately serve as the effluent limitation for the discharge. This limit becomes effective after USEPA approves the Los Angeles River Metals TMDL. If USEPA does not approve the TMDL this effluent limitation and its corresponding mass-based limitation will not apply.

This is the WLA, according to the Los Angeles River Metals TMDL adopted by the Regional Board in June 2005. The WLA will ultimately serve as the effluent limitation for the discharge. This limit becomes effective after USEPA approves the Los Angeles River Metals TMDL. If USEPA does not approve the TMDL this effluent limitation and its corresponding mass-based limitation will not apply.

[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] Use the requirements in Section IV.5.B.2 - Compliance Determination.

[3] Concentration expressed as total recoverable.

[4] The mass emission rates are based on the existing plant design flow rate of 16.1 mgd, and are calculated as follows: Flow(MDG) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. However, if the design capacity is reduced to achieve NDN process, the mass-based effluent limitation will accordingly be modified upon certification and approval of de-rated treatment plant capacity. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

[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 17, 2010, and until that time the Discharger shall comply with the interim limits established in I.A.(10) below.

[7] This effluent limitation will not be in effect until May 17, 2010, and until that time the Discharger shall comply with the interim limits established in the accompanying Time Schedule Order No. R4-2005-0075.

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

7. The effluent temperature shall not exceed 86°F.

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

9. In accordance with 40 CFR, Parts 133.102(a)(3) and 133.102(b)(3), for BOD and total suspended solids, respectively, the 30-day average percent removal shall not be less than 85 percent. Percent removal is defined as a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

10. 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 analysis has been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and the disinfection processes.

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

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

13. Interim Effluent Limitations

    a. The Discharger shall comply immediately with the following interim effluent limit until May 17, 2010. Thereafter, the Discharger shall comply with the final limitations specified in Section I.1.B.b. of this Order:

Constituent	Units	Monthly Average *
Cyanide	µg/L	10
Selenium	µg/L	12
Mercury	µg/L	0.06
Bis(2ethylhexyl)phthalate	µg/L	14**
Dichlorobromomethane	µg/L	62

* Interim limits prescribed as maximum detected effluent concentration or based on P-limit calculations. P-limit monthly average interim effluent limit was derived statistically as the 99% confidence level of the 95th percentile, using the P-limit software and effluent performance data from August 1999 through November 2004. This program incorporates the procedure in Appendix E of *the Technical Support Document (TSD) For*

Water Quality-based Toxics Control [EPA/505/2-90-001] for the limit calculation. 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 cyanide and mercury the monthly average interim limit was set as the limit in the existing permit (Order No. 95-081), 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."

** This is the interim limit for the Malibu Creek discharge. The interim limit for the Los Angeles River discharge is contained in the accompanying TSO.

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 cyanide, selenium and dichlorobromomethane 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 January 15, 2006.

11. Acute Toxicity Effluent Limitation:

a. The acute toxicity of the effluent shall be expressed and reported as percent survival.

b. 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, static-renewal*, or continuous flow bioassay tests shall be at least 90%, and

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

* Static-renewal bioassay tests may be used, as allowed by the most current USEPA test method, for measuring acute toxicity.

c. If either of the above requirements (11.b.i or 11.b.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 limitation.

d. 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.

e. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program (MRP) No. 8059.

12. Chronic Toxicity Effluent 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. 4760, Section VI.4.B.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 the following section of this Order (Section I.A.13).

d. The Discharger shall conduct chronic toxicity monitoring as specified in MRP No. 4760.

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 District to comply fully with the TRE/TIE requirements.

13. Preparation of an Initial Investigation TRE Workplan

The Discharger shall submit a detailed copy of the Discharger's Initial Investigation TRE Workplan to the Executive Officer of the Regional Board for approval within 90 days of the effective date of this permit. The Discharger shall use EPA manual EPA/833B-99/002 (municipal) as guidance, or most

current version. At a minimum, the TRE Work Plan must contain the provisions in Attachment C. This Workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

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

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

c. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section VI.4.D. for guidance manuals.

B. **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 5^0F above the natural temperature (or above 70^0F if the ambient receiving water temperature is less than 60^0F) due to the discharge of effluent at the receiving water station located downstream of the discharge. Natural conditions shall be determined on a case-by-case basis.

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

3. For waters designated with a WARM beneficial use, the dissolved oxygen in the receiving water shall not be depressed below 5 mg/L as a result of the wastes discharged. For waters designated with a COLD beneficial use, the dissolved oxygen in the receiving water shall not be depressed below 6 mg/L as a result of the wastes discharged.

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

   a. Geometric Mean Limits

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

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

   b. Single Sample Limits

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

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

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

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

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

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

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

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

9. The wastes discharged shall not contain substances that result in increases in BOD, which adversely affect the beneficial uses of the receiving waters.

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

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

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

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

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

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

16. The wastes discharged shall not contain any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses of the receiving waters. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life as a result of the wastes discharged.

17. The wastes discharged shall not contain radionuclides in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in accumulation of radionuclides in the food web to an extent that present a hazard to human, plant, animal, or aquatic life.

18. Acute Toxicity Receiving Water Quality Objective

    a. There shall be no acute toxicity in ambient waters as a result of wastes discharged.

    b. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.

    c. The acute toxicity of the receiving water, at the station located immediately downstream of the discharge, R-A, including mixing zone shall be such that: (i) the average survival in the undiluted receiving water for any three (3) consecutive 96-hour static, static-renewal*, or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.

        * Static-renewal bioassay tests may be used, as allowed by the most current USEPA test method, for measuring acute toxicity.

19. Chronic Toxicity Receiving Water Quality Objective

    a. There shall be no chronic toxicity in ambient waters as a result of wastes discharged.

    b. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.

    c. If the chronic toxicity of the receiving water, at the station located immediately downstream of the discharge, R-A, exceeds a monthly median of 1.0 TU_c in a critical life stage test and the toxicity cannot be attributed to upstream toxicity, as assessed by the Discharger, then the Discharger shall immediately implement an accelerated chronic toxicity testing according to Monitoring and Reporting Program CI 4760, section

VI.4.B.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.A.13 of this Order.

d. The Discharger shall conduct chronic toxicity monitoring as specified in MRP No. 4760.

III. SLUDGE REQUIREMENTS

1. The Discharger shall comply with the requirements of 40 CFR, Part 503, in general, and in particular the requirements in Attachment B of this Order, [*Biosolids Use and Disposal Requirements*]. These requirements are enforceable by the USEPA.

2. The Discharger shall comply, if applicable, with the requirements in State issued statewide general Waste Discharge Requirements (WDRs) Order No. 2000-10-DWQ, titled "General Waste Discharge Requirements for the Discharge of Biosolids to Land for use as a soil Amendment in Agricultural, Silvicultural and Horticultural and Land Reclamation Activities" adopted in August 2000.

3. The Discharger shall comply, if applicable, with WDRs issued by other Regional Boards to which jurisdiction the Tapia WRF's biosolids are transported and applied.

4. The Discharger shall furnish this Regional Board with a copy of any report submitted to USEPA, State Board or other regional board with respect to municipal sludge or biosolids.

IV. PRETREATMENT REQUIREMENTS

A. This Order includes the Discharger's approved Pretreatment Program as an enforceable condition. The Discharger is required to implement and enforce the Pretreatment Program in its entire service area, including any contributing jurisdictions.

B. The Discharger shall evaluate whether its pretreatment local limits are adequate to meet the requirements of this Order. In the reevaluation of the local limits, the Discharger shall consider the effluent limitations contained in this Order. The Discharger shall submit to the Regional Board revised local limits, as necessary, for Regional Board approval based on the schedule specified in the NPDES Permit issued to Tapia WRF. In addition, the Discharger shall consider collection system overflow protection from such constituents as oil and grease, etc. Lack of adequate local limits shall not be a defense against liability for violations of effluent limitations and overflow prevention requirements contained in this Order.

C. Any substantial modifications to the approved Pretreatment Program, as defined in 40 CFR 403.18(b), shall be submitted in writing to the Regional Board and shall not become effective until Regional Board approval is obtained.

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

E. The Discharger shall perform the pretreatment functions as required in Federal Regulations 40 CFR, Part 403 including, but not 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 and personnel to implement the Pretreatment Program as provided in 40 CFR 403.8(f)(3).

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

G. The Discharger shall be responsible and liable for the performance of all control authority pretreatment requirements contained in 40 CFR, Part 403, including subsequent regulatory revisions thereof. Where 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 Part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the Regional Board, USEPA, or other appropriate parties, as provided in the Federal Clean Water Act. The Regional Board or USEPA may initiate enforcement action against an industrial user for noncompliance with acceptable standards and requirements as provided in the Federal Clean Water Act and/or the California Water Code.

V. REQUIREMENTS AND 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 *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. Conditions pertaining to bypass are contained in Standard Provisions sections B.13, B.20, and B.23, G.1. The bypass or overflow of untreated or partially treated wastewater to waters of the State is prohibited, except as allowed under conditions stated in 40 CFR sections 122.41(m)(2), (m)(4), and (n). Consistent with those provisions, during periods of elevated, wet-weather flows, the operational diversion of secondarily treated wastewater around the tertiary filters is allowable provided that the combined discharge of fully treated and partially treated wastewater complies with all effluent and receiving water limitations in this Order.

D. 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" (Attachment N), those provisions stated in the former prevail.

E. Compliance Determination

1. Compliance with single constituent effluent limitation – 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 has demonstrated compliance with the monthly average limit for that month.

b. If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the monthly average limit for any constituent, the Discharger shall collect up to four additional samples at approximately equal intervals. All analytical results shall be reported in the monitoring report for that month, or the subsequent month. The concentration of pollutant (a numeric average or a median) estimated from the following Section V.E.2.c. will be used for compliance determination.

c. When all sample results are reported Minimum Level (see Reporting Requirements III.1. of MRP), the numerical average of the analytical results of these samples will be used for compliance determination.

When one or more sample results are reported as "Not-Detected (ND)" or "Detected, but Not Quantified (DNQ)" (see Reporting Requirements III.4. of MRP). The median value of these samples collected during the month will be used for compliance determination. If, in a even number of samples, one or both of the middle values is ND or DNQ, the median will be the lower of the two middle values.

d. 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 effluent limitation has been demonstrated.

e. If only one sample was obtained for the month or more than a monthly period and the result exceeds 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, provided that the applicable ML is used.

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 = $[X_{n/2} + X_{(n/2)+1}] / 2$, 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.

5. Compliance with the receiving water temperature limitation – If the receiving water temperature, downstream of the discharge, exceeds 80 °F as a result of:

i. high temperature in the ambient air, or

ii. high temperature in the receiving water upstream of the discharge,

then the exceedance shall not be considered a violation.

F. In calculating mass emission rates from the monthly average concentrations for compliance determination, consider constituents reported as "Not Detected" (ND) or "Detected, but Not Quantified" (DNQ) to have concentrations equal to zero for the calculation of the monthly average concentration.

G. Pollutant Minimization Program (PMP)

1. The goal of the PMP is to reduce all potential sources of a pollutant through pollutant 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 biocumulative 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 requirements in this section.

2. The Discharger shall develop a PMP 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;

b. The concentration of the pollutant is reported as "Detected, but Not Quantified", DNQ;

c. There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

3. The Discharger shall also develop a PMP 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;

   b. The concentration of the pollutant is reported as "Not-Detected", ND;

   c. There is evidence showing 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 semi-annual 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. 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:

i. All PMP monitoring results for the previous year;

ii. A list of potential sources of the reportable pollutant;

iii. A summary of all action taken in accordance with control strategy; and,

iv. A description of actions to be taken in the following year.

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

I. The Discharger shall protect the facility from inundation, which could occur as a result of a flood having a predicted frequency of once in 100 years.

J. 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.

K. The Discharger may plan to conduct studies to obtain data in support of developing site-specific objectives (SSOs) for dichlorobromomethane and bis(2-ethylhexyl)phthalate for the protection of human health from the consumption of organisms, or an SSO for cyanide for protection of aquatic life. In such event, the Discharger shall submit to Regional Board staff a detailed work plan for these studies within one year of adoption of this permit. The work plan shall provide a schedule consistent with Effluent Limitation II.A.9.a for development and adoption of site-specific objectives for these constituents.

L. The Discharger shall submit a summary report to this Regional Board, by March 31, 2006, on the management and maintenance of the Discharger collection system. This report shall describe plans to upgrade the collection system, include a schedule and timeline of the major milestones of the upgrade, include maps of the Discharger collection system and any collection system not owned and operated by the Discharger, and include both current and future programs in relation to maintenance of the collection system.

VI. REOPENERS AND MODIFICATIONS

A. This Order may be reopened and modified, in accordance with SIP section 2.2.2.A to incorporate the results of revised reasonable potential analyses to be conducted upon receipt of additional data.

B. This Order may be modified, in accordance with the provisions set forth in 40 CFR, Parts 122 and 124 to include requirements for the implementation of the watershed protection management approach.

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

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

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

F. This Order may be reopened and modified, to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of a water quality objective, or the adoption of a TMDL for the Malibu Creek and Los Angeles River Watersheds.

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

H. This Order may be reopened and modified if there is a legal opinion by staff council that final limits removed pursuant to a reasonable potential analysis may nonetheless be restored or retained. Such reopener shall be brought to the Regional Board at the earliest opportunity thereafter.

I. This Order can be reopened, if the SIP is revised to include longer compliance schedules in NPDES permits, and if EPA approves such a provision.

J. "This Order may be reopened to modify final effluent limits, if at the conclusion of necessary studies conducted by the Discharger, the Regional Board determines that dilution credits, attenuation factors, a WER, or metal translators are warranted.

K. This Order may be reopened and modified to revise or remove the exception to Discharge Prohibition No.I for qualifying Storm Events.

VI. EXPIRATION DATE

This Order expires on June 10, 2010.

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

VII. RESCISSION

Order No. 95-081 (Malibu Creek discharge) adopted by this Regional Board on November 3, 1997, and its subsequent amended Orders, Order No. 98-030 and Order No. 99-142 are hereby rescinded, except for enforcement purposes.

I, Jonathan S. Bishop, 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 November 3, 2005.

Jonathan S. Bishop
Executive Officer

/NJ

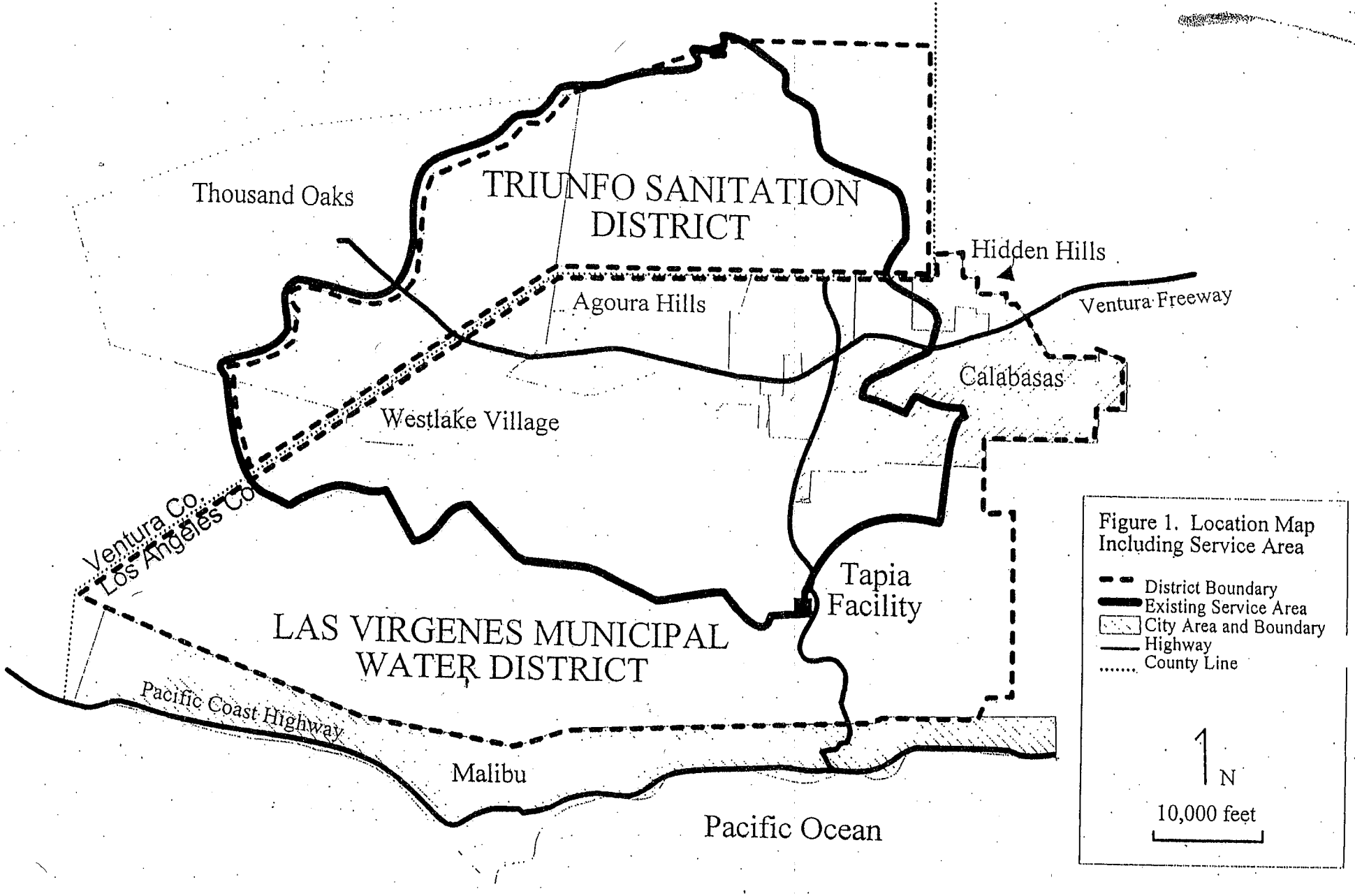
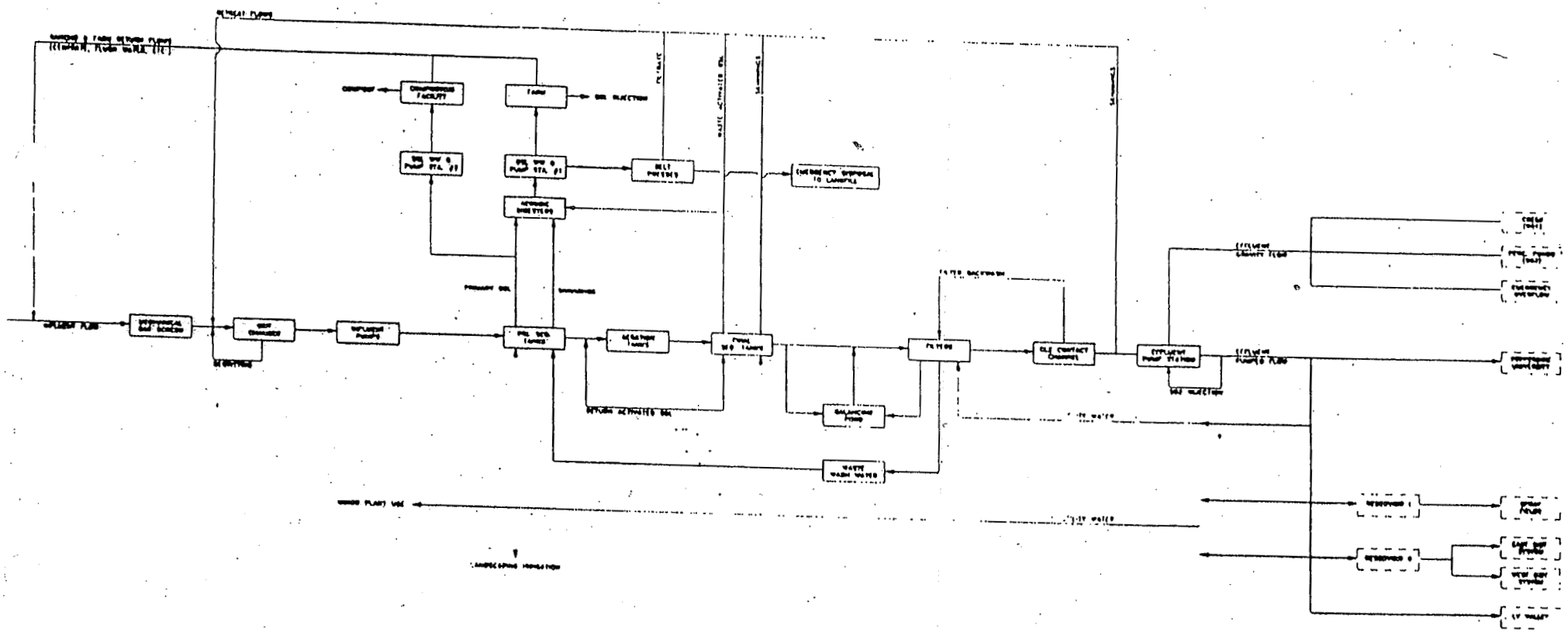

Thousand Oaks
TRIUNFO SANITATION DISTRICT
Hidden Hills
Agoura Hills
Ventura Freeway
Calabasas
Westlake Village
Ventura Co.
Los Angeles Co.
Tapia Facility
LAS VIRGENES MUNICIPAL WATER DISTRICT
Pacific Coast Highway
Malibu
Pacific Ocean
Figure 1. Location Map Including Service Area
District Boundary
Existing Service Area
City Area and Boundary
Highway
County Line
N
10,000 feet

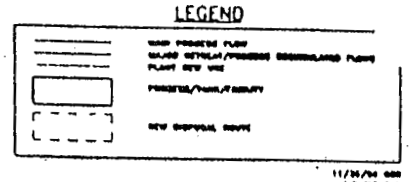
FIGURE 1

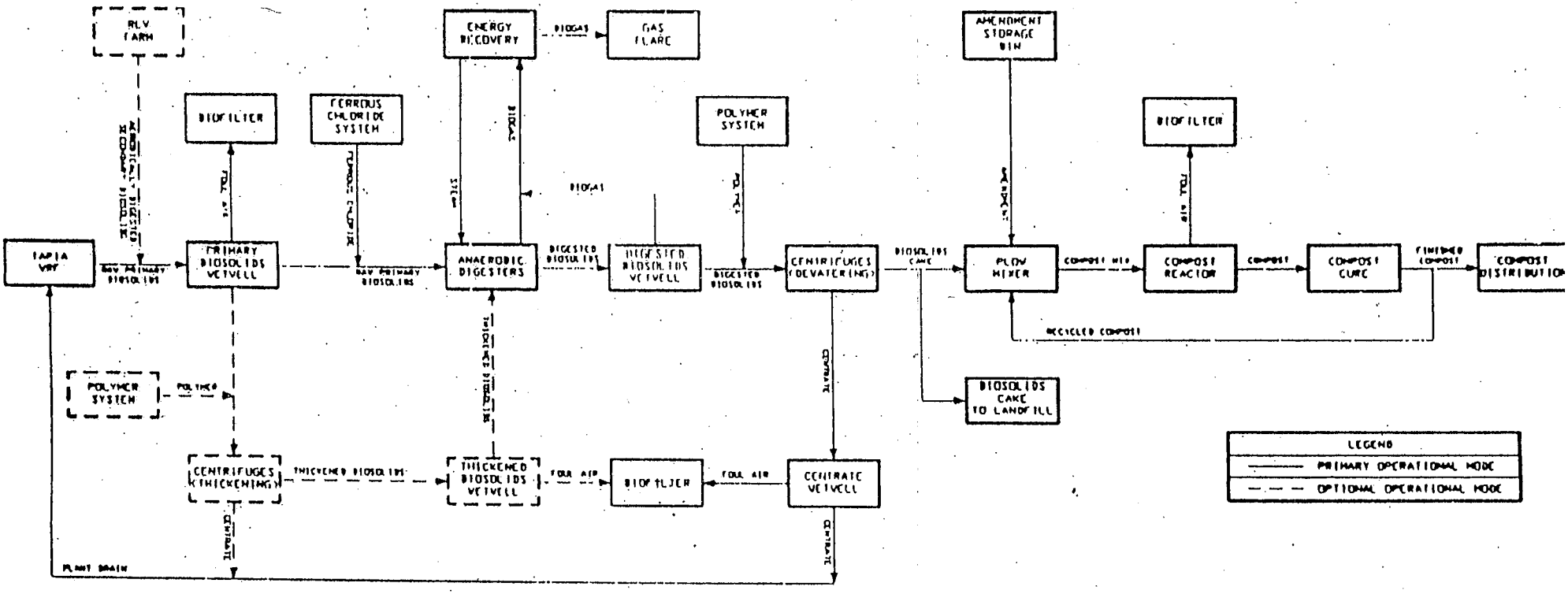


TAPIA WATER RECLAMATION FACILITY

PROCESS, SCHEMATIC DIAGRAM
& EFFLUENT DISPOSAL

FIGURE 2





RANCHO LAS VIRGENES COMPOSTING FACILITY

PROCESS FLOW DIAGRAM

FIGURE 2a

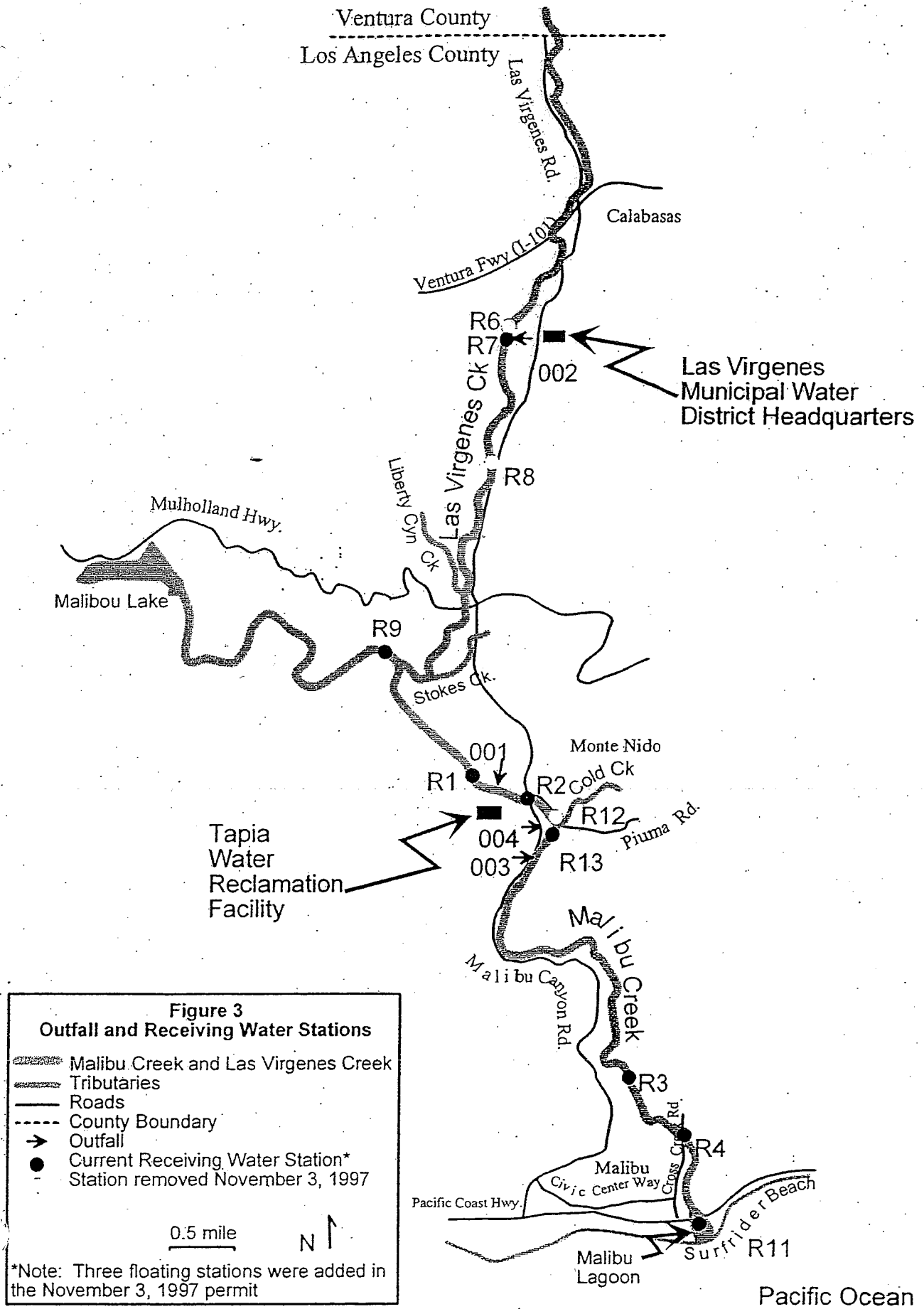

Ventura County
Los Angeles County
Las Virgenes Rd.
Calabasas
Ventura Fwy (I-101)
R6
R7
002
Las Virgenes Municipal Water District Headquarters
Las Virgenes Ck
R8
Liberty Cyn Ck
Mulholland Hwy.
Malibou Lake
R9
Stokes Ck.
001
R1
R2
Monte Nido
Cold Ck
R12
Piuma Rd.
004
003
R13
Tapia Water Reclamation Facility
Malibu Creek
Malibu Canyon Rd.
R3
Cross Creek Rd.
R4
Malibu
Civic Center Way
Pacific Coast Hwy.
Surfrider Beach
R11
Malibu Lagoon
Pacific Ocean
Figure 3
Outfall and Receiving Water Stations
Malibu Creek and Las Virgenes Creek
Tributaries
Roads
County Boundary
Outfall
Current Receiving Water Station*
Station removed November 3, 1997
0.5 mile
N
*Note: Three floating stations were added in the November 3, 1997 permit

FIGURE 3

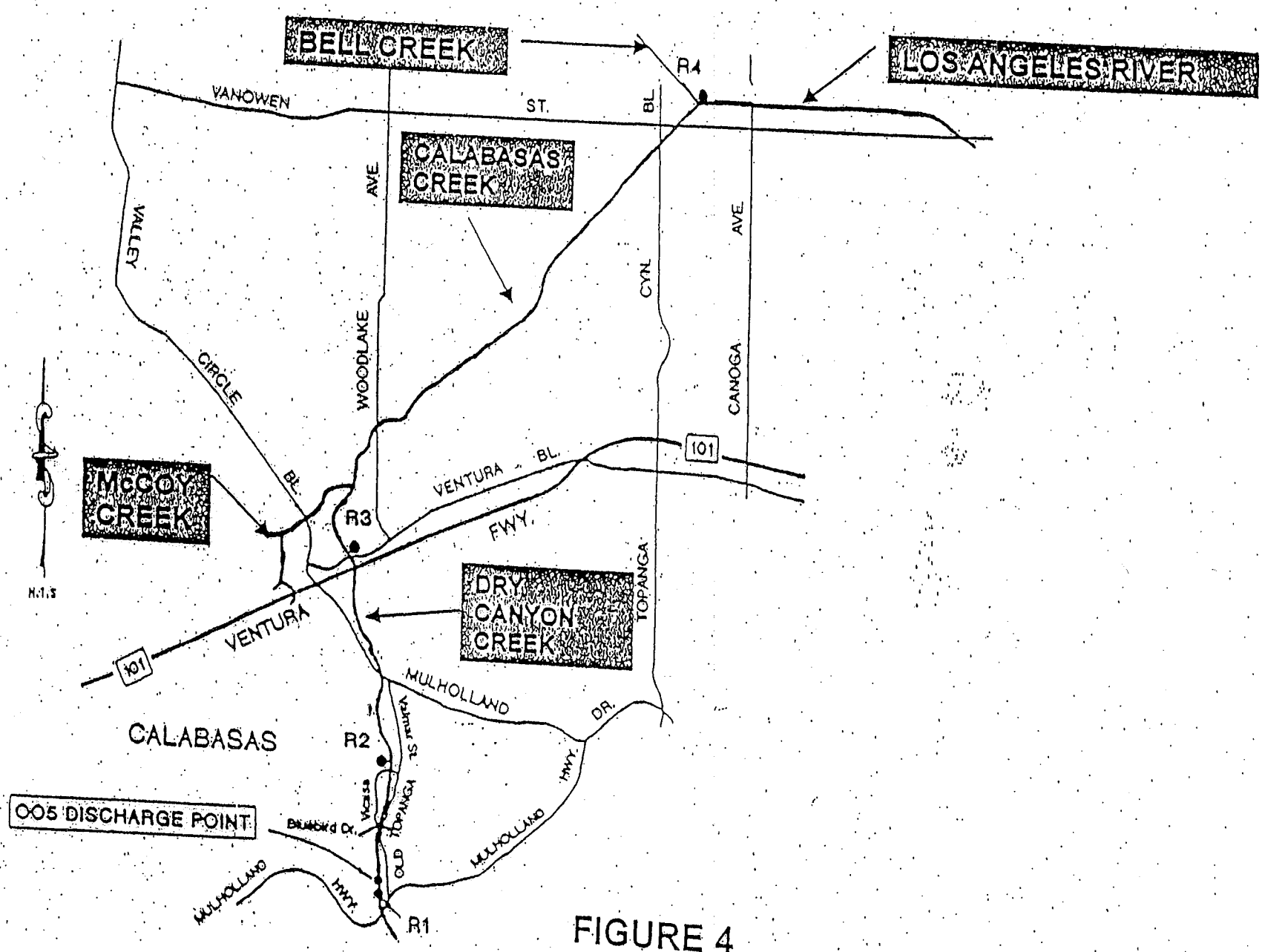

BELL CREEK
LOS ANGELES RIVER
R4
VANOWEN
ST.
BL
CALABASAS CREEK
AVE
VALLEY
CYN
AVE
CANOGA
CIRCLE
WOODLAKE
BL.
McCOY CREEK
R3
VENTURA
BL.
101
FWY.
DRY CANYON CREEK
TOPANGA
VENTURA
101
MULHOLLAND
DR.
CALABASAS
R2
005 DISCHARGE POINT
HWY.
MULHOLLAND
HWY.
R1

FIGURE 4

Tapi Water Reclamation Facility.
Non-Priority Pollutant Summary and Reasonable Potential Analysis
(Data Analysed from 1999 through 2004)

Table R1

Value	Temp	pH	Oil & Grease	Monthly Effluent Sampling					Chronic Toxicity			
				NH3 as N	NO2 as N	NO3 as N	NO3+NO2	MBAS	Survival	Growth		
	°C	pH	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	TUc	TUc		
MAX	28	7.7	16.4	0.2	0.04	22.4	22.4	0.2	1.56	2.44		
MIN	4	6.2	1	0.1	0.005	4.8	4.805	0.05	1	1		
AVERAGE	22.86	7.1	1.115	0.102	0.008	12.608	12.671	0.067	1.009	1.067		
STDV	2.152	0.238	0.942	0.0125	0.00714	4.132	4.138	0.044	0.0729	0.2427		
/	0.094	0.033	0.845	0.123	0.871	0.328	0.327	0.659	0.072	0.288		
SAMPLE SIZE	433	1930	273	64	64	66	65	65	59	60		

Value	NH3 Citeria (Warm Water)				NH3 Citeria (COLD Water)							
	pH	Temp	CMC (1 Hour)	CCC (30 Days)	CMC (1 Hour)	CCC (30 Days)						
	Units	C	mg/L	mg/L	mg/L	mg/L						
MAX	7.7	28	58.4	7.1	39	7.1						
MIN	6.2	4	14.4	1.8	9.6	1.8						
AVERAGE	7.1	22.86	33.9	5.2	22.7	5.2						

CONSTITUENT	Units	Number of Samples	Maximum Observed Effluent Concentration	CV	Multiplier	Projected Maximum Effluent Concentration	Dilution Ratio	Background Conc.	Projected Maximum Receiving Water Concentration	Water Quality Objectives	BU - Beneficial use protection NC-Human noncarcinogen AP-Aquatic life protection	REASONABLE POTENTIAL
Ammonia Nitrogen	mg/L	*64*	0.200	0.123	1.11	0.22	0		0.22	1.8	AP	NO
NO2+NO3 as N	mg/L	*65*	22.4	0.327	1.31	29.26	0		29.26	8	BU	YES
Nitrite Nitrogen	mg/L	*64*	0.04	0.871	1.89	0.08	0		0.08	1	BU	NO
Chronic Tox(Survival)	TUc	*59*	1.56	0.072	1.07	1.66	0		1.66	1	AP	YES
Chronic Tox (Growth)	TUc	*60*	2.44	0.288	1.28	3.13	0		3.13	1	AP	YES
MBAS	mg/L	*65*	0.2	0.659	1.65	0.33	0		0.33	0.5	BU	NO
Oil and Grease	mg/L	*273*	16.4	0.845	1.16	18.99	0		18.99	10	BU	YES

Tapia Water Reclamation Facility

Reasonable Potentail Analysis and Limit Derivation
Priority Pollutants
Table R2

CTR#	Pollutant	MEC	WQC=C	MCL	MEC>C	B (Recv Wtr.), B>C	RPA	CV	ECA multiplier acute
6	Copper (Receiving Wtr. LA River)	73	30.5		NO	YES	YES (B > C)	1.2	0.1736338
14	Cyanide (effluent)	10	5.2		YES		YES (MEC >	0.71	0.2774855
8	Mercury (Hg) (Receiving Wtr. Malibu Crk)	0.1	0.051		NO	YES	YES (B > C)	1.68	0.1322604
8	Mercury (Hg) (Receiving Wtr. LA River)	0.22	0.051		NO	YES	YES (B > C)	2.56	0.1006093
7	Lead (Receiving Wtr. LA River)	31.7	18.58		NO	YES	YES (B > C)	2.2	0.1099679
10	Selenium (Effluent)	12	5		YES		YES (MEC >	1.312	0.1609364
4	Cadmium (Receiving Wtr. LA River)	13	7.31		NO	YES	YES (B > C)	2.69	0.097953
68	Bis(2-ethylhexyl)phthalate (effluent)	40	5.9	4	YES		YES (MEC >	1.54	0.1413387
27	Dicholorobromomethane (Effluent)	62	46		YES		YES (MEC >	0.2345	0.5996566

Tapia Water Reclamation Facility

Reasonable Potentail Analysis and Limit Derivation
Priority Pollutants
Table R2

CTR#	Pollutant	ECA multiplier chronic	ECAacute	ECA chronicle	LTAacute= ECA*EC Aacute	LTAchronic= ECA*ECA chronic	LTA lowest	AMEL multiplier
6	Copper (Receiving Wtr. LA River)	0.3210832	51.68	30.5	8.9733952	9.793038021	8.97	2.1349251
14	Cyanide (effluent)	0.476158	22	5.2	6.1046799	2.476021354	2.7426	1.6609468
8	Mercury (Hg) (Receiving Wtr. Malibu Crk)	0.2386778				0		2.5473072
8	Mercury (Hg) (Receiving Wtr. LA River)	0.1643163				0		3.1117802
7	Lead (Receiving Wtr. LA River)	0.1873438	476.82	18.58	52.434895	3.480848314	3.48	2.9106556
10	Selenium (Effluent)	0.2974268		5		1.487134061	1.54	2.2370885
4	Cadmium (Receiving Wtr. LA River)	0.1576366	21.58	7.31	2.1138266	1.152323705	1.15	3.1752041
68	Bis(2-ethylhexyl)phthalate (effluent)	0.2581303						2.4342363
27	Dicholorobromomethane (Effluent)	0.7672319						1.2036893

Tapia Water Reclamation Facility
Priority-Pollutant RPA Analysis
(Data Analysed from 1999 through 2004)
Table R2

Pollutant_ID	Name	Date	Value	Detect	RPA_Valu	Source
32101	Dichlorobromo-methane	6/6/2002	40	YES	40	Effluent
32101	Dichlorobromo-methane	3/14/2002	33	YES	33	Effluent
32101	Dichlorobromo-methane	9/12/2002	62	YES	62	Effluent
32101	Dichlorobromo-methane	11/8/2001	36	YES	36	Effluent
32101	Dichlorobromo-methane	2/14/2002	33	YES	33	Effluent
32101	Dichlorobromo-methane	8/7/2002	45	YES	45	Effluent
32101	Dichlorobromo-methane	8/2/2001	31.8	YES	31.8	Effluent
32101	Dichlorobromo-methane	10/10/2002	53	YES	53	Effluent
32101	Dichlorobromo-methane	7/3/2002	32	YES	32	Effluent
32101	Dichlorobromo-methane	11/10/2002	35	YES	35	Effluent
32101	Dichlorobromo-methane	5/9/2002	32	YES	32	Effluent
32101	Dichlorobromo-methane	10/11/2001	32	YES	32	Effluent
32101	Dichlorobromo-methane	12/6/2001	32	YES	32	Effluent
32101	Dichlorobromo-methane	9/20/2001	40.2	YES	40.2	Effluent
32101	Dichlorobromo-methane	1/16/2002	27	YES	27	Effluent
32101	Dichlorobromo-methane	12/5/2002	33	YES	33	Effluent
32101	Dichlorobromo-methane	4/11/2002	34	YES	34	Effluent
32101	Dichlorobromomethane	10/14/1999	21	YES	21	Effluent
32101	Dichlorobromomethane	2/2/2000	25	YES	25	Effluent
32101	Dichlorobromomethane	2/15/2001	31	YES	31	Effluent
32101	Dichlorobromomethane	2/3/1999	21	YES	21	Effluent
32101	Dichlorobromomethane	10/11/2000	40.3	YES	40.3	Effluent
32101	Dichlorobromomethane	1/1/2003	35	YES	35	Effluent
32101	Dichlorobromomethane	2/1/2003	37	YES	37	Effluent
32101	Dichlorobromomethane	3/1/2003	19	YES	19	Effluent
32101	Dichlorobromomethane	4/1/2003	44	YES	44	Effluent
32101	Dichlorobromomethane	5/1/2003	45	YES	45	Effluent
32101	Dichlorobromomethane	6/1/2003	48	YES	48	Effluent
32101	Dichlorobromomethane	7/1/2003	32	YES	32	Effluent
32101	Dichlorobromomethane	8/1/2003	49	YES	49	Effluent
32101	Dichlorobromomethane	9/1/2003	25	YES	25	Effluent
32101	Dichlorobromomethane	10/9/2003	43	YES	43	Effluent
32101	Dichlorobromomethane	10/14/2003	40	YES	40	Effluent
32101	Dichlorobromomethane	11/6/2003	37	YES	37	Effluent
32101	Dichlorobromomethane	12/11/2003	33	YES	33	Effluent
32101	Dichlorobromomethane	1/15/2004	37	YES	37	Effluent
32101	Dichlorobromomethane	2/12/2004	35	YES	35	Effluent
32101	Dichlorobromomethane	3/11/2004	35	YES	35	Effluent
32101	Dichlorobromomethane	4/22/2004	35	YES	35	Effluent
32101	Dichlorobromomethane	5/5/2004	47	YES	47	Effluent
32101	Dichlorobromomethane	6/3/2004	39	YES	39	Effluent
32101	Dichlorobromomethane	7/15/2004	46	YES	46	Effluent
32101	Dichlorobromomethane	8/12/2004	25	YES	25	Effluent
32101	Dichlorobromomethane	9/9/2004	43	YES	43	Effluent
32101	Dichlorobromomethane	10/7/2004	43	YES	43	Effluent
32101	Dichlorobromomethane	11/4/2004	30	YES	30	Effluent
32101	Dichlorobromomethane	11/9/2004	30	YES	30	Effluent
32101	Dichlorobromomethane	12/2/2004	34	YES	34	Effluent
				MAX	62	
				AVERAGE	36.15208	
				SDV	8.477329	
				CV	0.234491	

Tapia Water Reclamation Facility
Priority-Pollutant RPA Analysis
(Data Analysed from 1999 through 2004)
Table R2

Pollutant_ID	Name	Date	Value	Detect	RPA_Valu	Source
720	Cyanide(CN)	12/6/2001	10	YES	10	Effluent
720	Cyanide(CN)	8/7/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	11/10/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	5/9/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	8/2/2001	5	NO	2.5	Effluent
720	Cyanide(CN)	12/5/2002	1	NO	0.5	Effluent
720	Cyanide(CN)	1/16/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	3/14/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	2/14/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	4/11/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	7/3/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	10/11/2001	3.1	NO	1.55	Effluent
720	Cyanide(CN)	11/8/2001	3.1	NO	1.55	Effluent
720	Cyanide(CN)	9/12/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	6/6/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	9/20/2001	5	NO	2.5	Effluent
720	Cyanide(CN)	10/10/2002	3.1	NO	1.55	Effluent
720	Cyanide(CN)	2/13/2003	10	NO	5	Effluent
720	Cyanide(CN)	2/14/2003	10	NO	5	Effluent
720	Cyanide(CN)	5/7/2003	10	NO	5	Effluent
720	Cyanide(CN)	8/14/2003	10	YES	10	Effluent
720	Cyanide(CN)	10/8/2003	10	NO	5	Effluent
720	Cyanide(CN)	10/9/2003	10	NO	5	Effluent
720	Cyanide(CN)	10/14/2003	10	NO	5	Effluent
720	Cyanide(CN)	2/10/2004	10	NO	5	Effluent
720	Cyanide(CN)	2/11/2004	10	NO	5	Effluent
720	Cyanide(CN)	8/11/2004	5	NO	2.5	Effluent
720	Cyanide(CN)	10/6/2004	5	NO	2.5	Effluent
720	Cyanide(CN)	10/7/2004	5	NO	2.5	Effluent
720	Cyanide(CN)	11/9/2004	5	NO	2.5	Effluent
				MAX	10	
				AVERAGE	3.064	
				SDV	2.171094	
80% of the values are non-detect. Therefore, per SIP, CV = 0.6				CV	0.6	

Pollutant_ID	Name	Date	Value	Detect	RPA_Valu	Source
39100	Bis(2-Ethylhexyl) phthalate	9/12/2002	5.7	YES	5.7	Effluent
39100	Bis(2-Ethylhexyl) phthalate	8/2/2001	0.5	NO	0.25	Effluent
39100	Bis(2-Ethylhexyl) phthalate	10/11/2001	0.96	NO	0.48	Effluent
39100	Bis(2-Ethylhexyl) phthalate	12/6/2001	0.96	NO	0.48	Effluent
39100	Bis(2-Ethylhexyl) phthalate	8/7/2002	9.7	YES	9.7	Effluent
39100	Bis(2-Ethylhexyl) phthalate	3/14/2002	0.96	NO	0.48	Effluent
39100	Bis(2-Ethylhexyl) phthalate	12/5/2002	0.96	NO	0.48	Effluent
39100	Bis(2-Ethylhexyl) phthalate	7/3/2002	14	YES	14	Effluent
39100	Bis(2-Ethylhexyl) phthalate	11/8/2001	3.1	NO	1.55	Effluent
39100	Bis(2-Ethylhexyl) phthalate	10/10/2002	5	YES	5	Effluent
39100	Bis(2-Ethylhexyl) phthalate	1/16/2002	0.96	NO	0.48	Effluent
39100	Bis(2-Ethylhexyl) phthalate	5/9/2002	0.96	NO	0.48	Effluent
39100	Bis(2-Ethylhexyl) phthalate	9/20/2001	0.5	NO	0.25	Effluent
39100	Bis(2-Ethylhexyl) phthalate	11/10/2002	0.96	NO	0.48	Effluent
39100	Bis(2-Ethylhexyl) phthalate	6/6/2002	0.96	NO	0.48	Effluent
39100	Bis(2-Ethylhexyl) phthalate	4/11/2002	40	YES	40	Effluent
39100	Bis(2-Ethylhexyl) phthalate	2/14/2002	0.91	NO	0.45	Effluent

Tapia Water Reclamation Facility
Priority-Pollutant RPA Analysis
(Data Analysed from 1999 through 2004)
Table R2

39100	Bis(2-Ethylhexyl) phthalate	02/14/03	10	NO	5	Effluent
39100	Bis(2-Ethylhexyl) phthalate	03/19/03	10	NO	5	Effluent
39100	Bis(2-Ethylhexyl) phthalate	10/08/03	10	YES	10	Effluent
39100	Bis(2-Ethylhexyl) phthalate	10/09/03	10	NO	5	Effluent
39100	Bis(2-Ethylhexyl) phthalate	10/14/03	10	NO	5	Effluent
39100	Bis(2-Ethylhexyl) phthalate	10/15/03	10	NO	5	Effluent
39100	Bis(2-Ethylhexyl) phthalate	02/10/04	10	NO	5	Effluent
39100	Bis(2-Ethylhexyl) phthalate	02/12/04	10	NO	5	Effluent
39100	Bis(2-Ethylhexyl) phthalate	10/05/04	10	YES	10	Effluent
				MAX	40	
				AVERAGE	5.220769	
				SDV	8.046082	
				CV	1.541168	

Pollutant_ID	Name	Date	Value	Detect	RPA_Valu	Source
1147	Selenium	2/4/1999	4	NO	2	Effluent
1147	Selenium	5/10/1999	10	NO	5	Effluent
1147	Selenium	8/4/1999	10	NO	5	Effluent
1147	Selenium	10/13/1999	10	NO	5	Effluent
1147	Selenium	2/1/2000	10	NO	5	Effluent
1147	Selenium	5/10/2000	10	NO	5	Effluent
1147	Selenium	8/2/2000	10	NO	5	Effluent
1147	Selenium	10/11/2000	10	NO	5	Effluent
1147	Selenium	2/14/2001	50	NO	25	Effluent
1147	Selenium	5/9/2001	10	YES	10	Effluent
1147	Selenium	7/18/2001	2.4	YES	2.4	Effluent
1147	Selenium	8/1/2001	2.3	YES	2.3	Effluent
1147	Selenium(Se)	8/2/2001	2.3	YES	2.3	Effluent
1147	Selenium	9/19/2001	12	YES	12	Effluent
1147	Selenium(Se)	9/20/2001	12	YES	12	Effluent
1147	Selenium	10/10/2001	10	NO	5	Effluent
1147	Selenium(Se)	10/11/2001	5.9	NO	2.95	Effluent
1147	Selenium	11/7/2001	10	NO	5	Effluent
1147	Selenium(Se)	11/8/2001	5.9	NO	2.95	Effluent
1147	Selenium	12/5/2001	4	YES	4	Effluent
1147	Selenium(Se)	12/6/2001	4	YES	4	Effluent
1147	Selenium	1/16/2002	11	YES	11	Effluent
1147	Selenium(Se)	1/16/2002	11	YES	11	Effluent
1147	Selenium	2/13/2002	2	NO	1	Effluent
1147	Selenium(Se)	2/14/2002	0.49	NO	0.24	Effluent
1147	Selenium	3/13/2002	2	YES	2	Effluent
1147	Selenium(Se)	3/14/2002	2	YES	2	Effluent
1147	Selenium	4/10/2002	2	NO	1	Effluent
1147	Selenium(Se)	4/11/2002	0.49	NO	0.24	Effluent
1147	Selenium	5/8/2002	2	NO	1	Effluent
1147	Selenium(Se)	5/9/2002	0.49	NO	0.24	Effluent
1147	Selenium	6/5/2002	2	NO	1	Effluent
1147	Selenium(Se)	6/6/2002	0.75	NO	0.37	Effluent
1147	Selenium	7/2/2002	2	NO	1	Effluent
1147	Selenium(Se)	7/3/2002	0.75	NO	0.37	Effluent
1147	Selenium	8/6/2002	2	NO	1	Effluent
1147	Selenium(Se)	8/7/2002	0.49	NO	0.24	Effluent
1147	Selenium	9/11/2002	2	NO	1	Effluent
1147	Selenium(Se)	9/12/2002	0.49	NO	0.24	Effluent

Tapia Water Reclamation Facility
Priority-Pollutant RPA Analysis
(Data Analysed from 1999 through 2004)
Table R2

1147	Selenium	10/9/2002	2	NO	1	Effluent
1147	Selenium(Se)	10/10/2002	0.49	NO	0.24	Effluent
1147	Selenium	11/6/2002	2	NO	1	Effluent
1147	Selenium(Se)	11/10/2002	0.49	NO	0.24	Effluent
1147	Selenium(Se)	12/5/2002	0.49	NO	0.24	Effluent
1147	Selenium	12/18/2002	2	NO	1	Effluent
1147	Selenium	2/13/2003	6	YES	6	Effluent
1147	Selenium	2/14/2003	10	YES	10	Effluent
1147	Selenium	5/7/2003	2	NO	1	Effluent
1147	Selenium	8/13/2003	2	NO	1	Effluent
1147	Selenium	10/8/2003	2	NO	1	Effluent
1147	Selenium	10/8/2003	2	NO	1	Effluent
1147	Selenium	10/9/2003	2	NO	1	Effluent
1147	Selenium	10/15/03	2	NO	1	Effluent
1147	Selenium	02/11/04	2	NO	1	Effluent
1147	Selenium	02/12/04	2	NO	1	Effluent
1147	Selenium	05/04/04	2	NO	1	Effluent
1147	Selenium	08/11/04	2	NO	1	Effluent
1147	Selenium	10/05/04	2	NO	1	Effluent
1147	Selenium	11/09/04	2	NO	1	Effluent
				MAX	12	
				AVERAGE	3.280678	
				SDV	4.318109	
				CV	1.316224	

Pollutant_ID	Name	Date	Value	Detect	RPA_Value	Source
71900	Mercury	8/7/2002	0.01	YES	0.01	LA River
71900	Mercury	9/20/2001	0.05	NO	0.025	LA River
71900	Mercury	1/22/2002	0.0012	NO	0.0006	LA River
71900	Mercury	12/3/2002	0.0012	NO	0.0006	LA River
71900	Mercury	12/11/2001	0.01	YES	0.01	LA River
71900	Mercury	11/13/2001	0.0012	NO	0.0006	LA River
71900	Mercury	9/10/2002	0.0013	NO	0.0006	LA River
71900	Mercury	11/5/2002	0.0013	NO	0.0006	LA River
71900	Mercury	3/12/2002	0.01	YES	0.01	LA River
71900	Mercury	10/9/2001	1.2	NO	0.6	LA River
71900	Mercury	6/4/2002	0.02	YES	0.02	LA River
71900	Mercury	2/12/2002	0.04	YES	0.04	LA River
71900	Mercury	10/8/2002	0.22	YES	0.22	LA River
71900	Mercury	4/16/2002	0.0012	NO	0.0006	LA River
71900	Mercury	5/7/2002	0.0012	NO	0.0006	LA River
71900	Mercury	7/9/2002	0.02	YES	0.02	LA River
				MAX	0.22	
				AVERAGE	0.05995	
				SDV	0.153671	
				CV	2.563326	

Pollutant_ID	Name	Date	Value	Detect	RPA_Valu	Source
1027	Cadmium (Cd)	1/22/2002	0.2	1	0.2	LA River
1027	Cadmium (Cd)	12/3/2002	0.2	1	0.2	LA River
1027	Cadmium (Cd)	10/8/2002	2.1	1	2.1	LA River
1027	Cadmium (Cd)	2/12/2002	0.3	1	0.3	LA River
1027	Cadmium (Cd)	10/9/2001	0.15	0	0.075	LA River
1027	Cadmium (Cd)	9/20/2001	13	1	13	LA River
1027	Cadmium (Cd)	11/13/2001	0.6	1	0.6	LA River

Tapia Water Reclamation Facility
Priority-Pollutant RPA Analysis
(Data Analysed from 1999 through 2004)
Table R2

1027	Cadmium (Cd)	8/7/2002	0.3	1	0.3	LA River
1027	Cadmium (Cd)	7/9/2002	1	1	1	LA River
1027	Cadmium (Cd)	5/7/2002	0.15	0	0.075	LA River
1027	Cadmium (Cd)	6/4/2002	0.071	0	0.035	LA River
1027	Cadmium (Cd)	9/10/2002	0.3	1	0.3	LA River
1027	Cadmium (Cd)	11/5/2002	0.15	0	0.075	LA River
1027	Cadmium (Cd)	4/16/2002	0.15	0	0.075	LA River
1027	Cadmium (Cd)	3/12/2002	0.3	1	0.3	LA River
1027	Cadmium (Cd)	12/11/2001	0.3	1	0.3	LA River
				MAX	13	
				AVERAGE	1.183438	
				SDV	3.19286	
				CV	2.697954	
Pollutant_ID	Name	Date	Value	Detect	RPA_VALU	Source
1119	Copper (Cu)	9/20/2001	15	1	15	LA River
1119	Copper (Cu)	5/7/2002	10	1	10	LA River
1119	Copper (Cu)	12/11/2001	6	1	6	LA River
1119	Copper (Cu)	11/13/2001	7	1	7	LA River
1119	Copper (Cu)	4/16/2002	10	1	10	LA River
1119	Copper (Cu)	11/5/2002	27	1	27	LA River
1119	Copper (Cu)	3/12/2002	3	1	3	LA River
1119	Copper (Cu)	9/10/2002	9	1	9	LA River
1119	Copper (Cu)	8/7/2002	10	1	10	LA River
1119	Copper (Cu)	7/9/2002	10	1	10	LA River
1119	Copper (Cu)	10/8/2002	73	1	73	LA River
1119	Copper (Cu)	1/22/2002	4	1	4	LA River
1119	Copper (Cu)	10/9/2001	7	1	7	LA River
1119	Copper (Cu)	12/3/2002	15	1	15	LA River
1119	Copper (Cu)	2/12/2002	6	1	6	LA River
1119	Copper (Cu)	6/4/2002	11	1	11	LA River
				MAX	73	
				AVERAGE	13.9375	
				SDV	16.7271	
				CV	1.200151	

Pollutant_ID	Name	Date	Value	Detect	RPA_Valu	Source
1051	Lead	9/20/2001	0.03	0	0.015	LA River
1051	Lead	10/9/2001	0.8	1	0.8	LA River
1051	Lead	11/13/2001	1.3	1	1.3	LA River
1051	Lead	12/11/2001	0.5	1	0.5	LA River
1051	Lead	1/22/2002	0.4	1	0.4	LA River
1051	Lead	2/12/2002	0.8	1	0.8	LA River
1051	Lead	3/12/2002	0.084	0	0.042	LA River
1051	Lead	4/16/2002	0.3	1	0.3	LA River
1051	Lead	5/7/2002	0.3	1	0.3	LA River
1051	Lead	6/4/2002	0.4	1	0.4	LA River
1051	Lead	7/9/2002	7	1	7	LA River
1051	Lead	8/7/2002	1.1	1	1.1	LA River
1051	Lead	9/10/2002	1.3	1	1.3	LA River
1051	Lead	10/8/2002	9.5	1	9.5	LA River
1051	Lead	11/5/2002	31.7	1	31.7	LA River
1051	Lead	12/3/2002	2.3	1	2.3	LA River
				MAX	31.7	
				AVERAGE	3.609813	
				SDV	7.947998	

Tapia Water Reclamation Facility
Priority-Pollutant RPA Analysis
(Data Analysed from 1999 through 2004)
Table R2

				CV	2.201776	
Pollutant_ID	Name	Date	Value	Detect	RPA_Valu	Source
71900	Mercury	7/19/2001	0.05	NO	0.025	Malibu Creek
71900	Mercury	8/2/2001	0.05	NO	0.025	Malibu Creek
71900	Mercury	9/20/2001	0.05	NO	0.025	Malibu Creek
71900	Mercury	10/9/2001	0.0012	NO	0.0006	Malibu Creek
71900	Mercury	11/13/2001	0.01	YES	0.01	Malibu Creek
71900	Mercury	12/11/2001	0.0012	NO	0.0006	Malibu Creek
71900	Mercury	1/22/2002	0.0012	NO	0.0006	Malibu Creek
71900	Mercury	2/12/2002	0.04	YES	0.04	Malibu Creek
71900	Mercury	3/12/2002	0.01	YES	0.01	Malibu Creek
71900	Mercury	4/16/2002	0.0012	NO	0.0006	Malibu Creek
71900	Mercury	5/7/2002	0.0012	NO	0.0006	Malibu Creek
71900	Mercury	6/4/2002	0.0012	NO	0.0006	Malibu Creek
71900	Mercury	7/9/2002	0.01	YES	0.01	Malibu Creek
71900	Mercury	8/7/2002	0.01	YES	0.01	Malibu Creek
71900	Mercury	9/10/2002	0.0013	NO	0.0006	Malibu Creek
71900	Mercury	10/8/2002	0.1	YES	0.1	Malibu Creek
71900	Mercury	11/5/2002	0.0013	NO	0.0006	Malibu Creek
71900	Mercury	12/3/2002	0.0012	NO	0.0006	Malibu Creek
				MAX	0.1	
				AVERAGE	0.014467	
				SDV	0.024388	
				CV	1.685803	

Tapia Water Reclamation Facility

Reasonable Potentail Analysis and Limit Derivation
Priority Pollutants
Table R2

CTR#	Pollutant	MDEL multiplier	AMEL aquatic	MDEL aquatic	AMELhh= ECA	MDELhh	Monthly Average	Daily Maximum
6	Copper (Receiving Wtr. LA River)	5.7592471	19.15028	51.660446			19	52
14	Cyanide (effluent)	3.6037926	4.555313	9.8837615	220000	477338.8	4.6	9.9
8	Mercury (Hg) (Receiving Wtr. Malibu Crk)	7.5608444	0	0	0.051	0.151377	0.051	0.151
8	Mercury (Hg) (Receiving Wtr. LA River)	9.9394433	0	0	0.051	0.162901	0.051	0.163
7	Lead (Receiving Wtr. LA River)	9.0935625	10.12908	31.645598			10	32
10	Selenium (Effluent)	6.2136351	3.445116	9.5689981			3.4	9.5
4	Cadmium (Receiving Wtr. LA River)	10.208974	3.651485	11.74032			4	12
68	Bis(2-ethylhexyl)phthalate (effluent)	7.0752015					4	
27	Dicholorobromomethane (Effluent)	1.667621			46	63.72954	46	64

Tapia Water Reclamation Facility
Metal Water Quality Objective for Copper and Lead
Table R3

Copper Metal Crireria

	Freshwater CMC or Acute						Freshwater CCC or Chronic						Human Health	
	CMC = WER x Conversion Factor x (exp {mA [ln(Hardness)] + bA})						CCC = WER x Conversion Factor x (exp {mC [ln(Hardness)] + bC})						Water & Organisms	Organism only
ARDNESS	WER	Conversion Factor	mA	bA	Total Recoverable Limit	Dissolved Fraction Limit	WER	Conversion Factor	mC	bC	Total Recoverable Limit	Dissolved Fraction Limit		
(mg/L)	1	0.96	0.9422	-1.7		(µg/L)	1	0.96	0.8545	-1.702		(µg/L)	1300	---
100	1	0.96	0.9422	-1.7	14.00	13.44	1	0.96	0.8545	-1.702	9.33	8.96	1300	---
200	1	0.96	0.9422	-1.7	26.90	25.82	1	0.96	0.8545	-1.702	16.87	16.19	1300	---
252	1	0.96	0.9422	-1.7	33.44	32.10	1	0.96	0.8545	-1.702	20.55	19.73		
300	1	0.96	0.9422	-1.7	39.41	37.84	1	0.96	0.8545	-1.702	23.85	22.90	1300	---
400	1	0.96	0.9422	-1.7	51.68	49.62	1	0.96	0.8545	-1.702	30.50	29.28	1300	---

Lead Metal Crireria

	Freshwater CMC or Acute						Freshwater CCC or Chronic						Human Health	
	CMC = WER x Conversion Factor x (exp {mA [ln(Hardness)] + bA})						CCC = WER x Conversion Factor x (exp {mC [ln(Hardness)] + bC})						Water & Organisms	Organism s only
HARDNESS	WER	Conversion Factor*	mA	bA	Total Recoverable Limit	Dissolved Fraction Limit	WER	Conversion Factor	mC	bC	Total Recoverable Limit	Dissolved Fraction Limit		
(mg/L)	1	0.791	1.273	-1.46		(µg/L)	1	0.791	1.273	-4.705		(µg/L)	narrative	narrative
100	1	0.791001442	1.273	-1.46	81.65	64.58	1	0.791001442	1.273	-4.705	3.18	2.52	narrative	narrative
200	1	0.69000158	1.273	-1.46	197.31	136.14	1	0.69000158	1.273	-4.705	7.69	5.31	narrative	narrative
252	1	0.656325829	1.273	-1.46	264.80	173.79	1	0.656325829	1.273	-4.705	10.32	6.77	narrative	narrative
300	1	0.630920448	1.273	-1.46	330.60	208.58	1	0.630920448	1.273	-4.705	12.88	8.13	narrative	narrative
400	1	0.589001718	1.273	-1.46	476.82	280.85	1	0.589001718	1.273	-4.705	18.58	10.94	narrative	narrative

Lead

	Freshwater						Freshwater						Human Health	
	CMC or Acute						CCC or Chronic						Water & Organisms	Organisms only
	CMC = WER x Conversion Factor x (exp {mA [ln(Hardness)] + bA})						CCC = WER x Conversion Factor x (exp {mC [ln(Hardness)] + bC})							
HARDNESS	WER	Conversion Factor*	mA	bA	Total Recoverable Limit	Dissolved Fraction Limit	WER	Conversion Factor	mC	bC	Total Recoverable Limit	Dissolved Fraction Limit		
(mg/L)	1	0.791	1.273	-1.46		(µg/L)	1	0.791	1.273	-4.705		(µg/L)	narrative	narrative
100	1	0.791001442	1.273	-1.46	81.65	64.58	1	0.79100144	1.273	-4.705	3.18	2.52	narrative	narrative
200	1	0.69000158	1.273	-1.46	197.31	136.14	1	0.69000158	1.273	-4.705	7.69	5.31	narrative	narrative
252	1	0.656325829	1.273	-1.46	264.80	173.79	1	0.65632583	1.273	-4.705	10.32	6.77		
300	1	0.630920448	1.273	-1.46	330.60	208.58	1	0.63092045	1.273	-4.705	12.88	8.13	narrative	narrative
400	1	0.589001718	1.273	-1.46	476.82	280.85	1	0.58900172	1.273	-4.705	18.58	10.94	narrative	narrative