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

ORDER NO. R4-2005-0036
NPDES PERMIT NO. CA0003352

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
FOR
SIX FLAGS THEME PARKS, INCORPORATED
SIX FLAGS MAGIC MOUNTAIN

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

Background

1. Six Flags Theme Parks, Inc., dba Six Flags Magic Mountain (hereinafter Six Flags or Discharger), discharges wastewater from the Six Flags Magic Mountain (Facility) under waste discharge requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit contained in Order No. 98-005 (NPDES Permit No. CA0003352) adopted by the Regional Board on January 26, 1998. Order No. 97-081 expired on January 10, 2003.

2. Six Flags filed a Report of Waste Discharge (ROWD) and applied for renewal of its WDRs and a NPDES permit on November 15, 2002.

Purpose of Order

3. The purpose of the proposed Order is to renew the WDRs for the Six Flags Facility. This NPDES permit regulates the discharge of wastewater (drainage/overflow from lakes and ponds, irrigation run-off, midway (walkway throughout the park) washdown, and duck pond overflow), and storm water run-off through three private storm drains on the property, then through Discharge Serial Nos. 001, 002, and 003, into the Santa Clara River, a water of the United States, above the Estuary. The points of discharge are located at Latitude 34° 25' 41" North, Longitude 118° 35' 27" West (Discharge Serial No. 001 / East Side Lakes and Ponds), Latitude 34° 30' 47" North, Longitude 118° 35' 38" West (Discharge Serial No. 002 / Duck Ponds), and Latitude 34° 25' 58" North, Longitude 118° 35' 52" West (Discharge Serial No. 003 / West Side Lakes and Ponds).

Facility Description

4. Six Flags Theme Parks, Inc., owns and operates the Facility located at 26101 West Magic Mountain Parkway, Valencia, California. Figure 1 depicts the location map. The Facility is an amusement park consisting of rides, shows and attractions. It occupies approximately 260 acres.

Description of Wastes Discharged and Outfalls

5. Six Flags discharges up to 1.52 million gallons per day (mgd) of wastewater, and up to 2.5 million gallons of storm water runoff when the rainfall exceeds one inch, through Discharge Serial Nos. 001, 002, and 003 into a storm drain thence to the Santa Clara River, a water of the United States. The wastewater consists of the following:

   Discharge Serial No. 001:

   Six Flags discharges up to 600,000 gallons per day (gpd) of drainage/overflow from the East Side lakes and ponds, up to 100,000 gpd of irrigation run-off, 50,000 gpd of midway (walkway throughout the park) washdown, and 1,000,000 gallons of storm water runoff when rainfall exceeds one inch, through Discharge Serial No. 001. The water in the lakes and ponds is treated with chlorine, muriatic acid and soda ash. The water is also filtered and settled debris is vacuumed, and the water surfaces are skimmed routinely.

   Discharge Serial No. 002:

   Six Flags discharges up to 20,000 gpd of duck pond overflow, and 50,000 gallons of storm water runoff when rainfall exceeds one inch, through Discharge Serial No. 002.

   Discharge Serial No. 003:

   Six Flags discharges up to 600,000 gallons per day (gpd) of drainage/overflow from the West Side lakes and ponds, up to 100,000 gpd of irrigation run-off, 50,000 gpd of midway (walkway throughout the park) washdown, and 1,000,000 gallons of storm water runoff when rainfall exceeds one inch, through Discharge Serial No. 003. The water in the lakes and ponds is treated with chlorine, muriatic acid and soda ash. The water is also filtered, and the water surfaces are skimmed routinely, and settled debris is vacuumed.

6. The discharge of lake and pond drainage from Discharge Serial Nos. 001 and 003 does not occur on the same day. The lakes and ponds may be drained for cleaning and repair during the months of January, May, and October, but not concurrently. Sediments and sludge resulting from lake and pond cleaning are hauled to a legal land disposal site.

7. Six Flags Magic Mountain is in the process of exploring options for reuse of wastewater. Six Flags Magic Mountain will explore and provide a report to the Regional Board within six months of the issuance of the permit on various options that are deemed reasonably feasible.

Compliance Status

8. A review of the effluent monitoring data for the period between the first Quarter 1999 and fourth Quarter 2004, indicated that the Discharger has had multiple exceedances of the existing effluent limitations for chloride, residual chlorine, lead, total dissolved solids (TDS), total suspended solids, and settleable solids. Further, the Discharger also has exceeded

the effluent limitations once for oil and grease, boron, nitrogen (Nitrate + Nitrite), and during this monitoring period.

9. On November 25, 2002, the Regional Board issued a Mandatory Administrative Civil Liability (ACL) in the amount of $33,000 against Six Flags for exceedance of the effluent limitations for TDS, settleable solids, chloride, nitrate + nitrite, residual chlorine, and oil and grease. Six Flags waived its right to a hearing and paid the Regional Board $33,000 on December 6, 2002, for all identified violations.

   The ACL was issued for the violations during the monitoring period of second Quarter 2000 through third Quarter 2001. The subsequent violations are being evaluated for appropriate enforcement actions.

Storm Water Management and Best Management Practices

10. The objective of the proposed Order is to protect the beneficial uses of receiving waters. To meet this objective, this Order requires Six Flags to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) consistent with the SWPPP requirements in the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity [State Water Resources Control Board (State Board) Order No. 97-03-DWQ, NPDES Permit No. CAS000001]. Discharges comprised of drainage and overflow from the lakes and ponds, the duck ponds, the midway (walkway throughout the park) wash-down water, irrigation runoff, and storm water occur at Six Flags. As a result, the proposed Order requires Six Flags to develop and implement a SWPPP and address storm water runoff and minimize pollutants from entering the Santa Clara River. The SWPPP should address specific areas of concern to include, but not limited to, the lakes and ponds, the duck ponds, the walkway throughout the park, and irrigated areas, to determine if additional treatment is required to meet final effluent limitations. In addition, the SWPPP must identify measures that can be implemented at each area of the Theme Park (e.g., East and West Side Lakes and Pond, and the Duck Ponds) to prevent contaminated storm water from discharging into the Santa Clara River.

11. The SWPPP shall also specify Best Management Practices (BMPs) that will be implemented to reduce the discharge of pollutants in the wastewater and in the storm water runoff to the maximum extent practicable. Further, the Discharger shall assure that wastewater and storm water discharges from the facility would neither cause, nor contribute to, the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water.

Applicable Plans, Policies, and Regulations

12. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) as amended on January 27, 1997 by Regional Board Resolution No. 97-02. The Basin Plan (i) designates beneficial uses for surface and groundwaters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state anti-degradation policy (*Statement of Policy with Respect to Maintaining High Quality Waters in California*, State Board Resolution No. 68-16, October 28, 1968), and (iii)

describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The Regional Board prepared the 1994 update of the Basin Plan to be consistent with all previously adopted State and Regional Board plans and policies. This Order implements the plans, policies and provisions of the Regional Board's Basin Plan.

13. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Lif*e. The Ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and U.S. Environmental Protection Agency (U.S. EPA) on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with U.S. EPA's 1999 ammonia criteria update.

14. The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. Inland surface waters consist of rivers, streams, lakes, reservoirs, and inland wetlands. Beneficial uses for a surface water can be designated, whether or not they have been attained on a water body, in order to implement either federal or state mandates and goals (such as fishable and swimmable for regional waters).

15. The receiving water for the permitted discharge covered by this permit is the Santa Clara River, above the Estuary. The beneficial uses listed in the Basin Plan for the Santa Clara River (H.U. 403.51) are:

    Existing Uses: Industrial service and process supplies, agricultural supply, groundwater recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, wildlife habitat, preservation of rare and endangered species, and wetland habitat.

    Potential Uses: Municipal and domestic water supply.

16. The State Water Resources Control Board (State Board) adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.

17. On May 18, 2000, the U.S. EPA promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR section 131.38]. In the CTR, U.S. EPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens. The CTR also allows for a schedule of compliance not

to exceed five years from the date of permit issuance for a point source discharge if the Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria. CTR' s Compliance Schedule provisions sunset 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 1, 2011, which ever is sooner.

18. On March 2, 2000, the State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP*).* The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through the National Toxics Rule (NTR), and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the U.S. EPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limitations (WQBELs) and to calculate the effluent limitations. Because the discharge to the Santa Clara River is above the Estuary, the CTR criteria for fresh water or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in the proposed Order to protect the beneficial uses of the Santa Clara River in the vicinity of the discharge.

19. Under 40 CFR section 122.44(d), *Water Quality Standards and State Requirements*, "[l]imitations must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants), which the Director [permitting authority] 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, including State narrative criteria for water quality." Where numeric effluent limitations for a pollutant or pollutant parameter have not been established in the applicable state water quality control plan, 40 CFR section 122.44(d)(1)(vi) specifies that WQBELs may be set based on U.S. EPA criteria, and may be supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria, and to fully protect designated beneficial uses.

20. Effluent limitation guidelines requiring the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT), were promulgated by the U.S. EPA for some pollutants in this discharge. Effluent limitations for pollutants not subject to the U.S. EPA effluent limitation guidelines are based on one of the following: best professional judgment (BPJ) of BPT, BCT or BAT; current plant performance; or WQBELs. The WQBELs are based on the Basin Plan, other State plans and policies, or U.S. EPA water quality criteria which are taken from the CTR. These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water. The attached Fact Sheet for this Order includes specific bases for the effluent limitations.

21. State and Federal anti-backsliding and anti-degradation policies require Regional Board actions to protect the water quality of a water body and to ensure that the water body will not be further degraded. The anti-backsliding provisions are specified in section 402(o) and 303(d)(4) of the Clean Water Act (CWA) and 40 CFR section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.

22. Effluent limitations are established in accordance with Parts 301, 304, 306, and 307 of the CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of the Santa Clara River.

Watershed Management Approach and Total Maximum Daily Loads (TMDLs)

23. The Regional Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Board's many diverse programs, particularly Total Maximum Daily Loads (TMDLs), to better assess cumulative impacts of pollutants from all point and non-point sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a water body and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocation (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the water body.

24. The existing permit prescribed effluent limitation of 175 mg/L for chloride. The current Basin Plan water quality objectives for chloride is 100 mg/L. This Order prescribed 100 mg/L and will stay in effect until the Chloride TMDL for the Santa Clara River, Resolution No. 04-004 (adopted on May 6, 2004, amending Resolution No. R03-008 adopted on July 10, 2003; amending Resolution No. 02-018 adopted on October 24, 2002), *Amendment to the Water Quality Control Plan for the Los Angeles Region to Include a TMDL for Chloride in the Santa Clara River* (*Chloride TMDL),* is approved by U.S.EPA (i.e., the effective date of the TMDL). If U.S. EPA does not approve the *Chloride TMDL*, this effluent limitation will remain in effect until revised by the Regional Board. (See item I.B.4.(c) for details).

25. The Discharger may not be able to immediately comply with the final effluent limit for chloride. However, because the limit is a non-CTR-based limit, and because the TMDL does not provide an interim limit or waste load allocation (WLA) for this Discharger, an interim limit must be included in a corresponding Time Schedule Order (TSO)

26. Six Flags discharges within Reach 8 of the Santa Clara River. The 2002 State Board' s California 303(d) List classifies the Santa Clara River as impaired. The pollutants of concern, detected in the water column include: chloride, high coliform count and nitrate + nitrite.

Data Availability and Reasonable Potential Analysis

27. 40 CFR section 122.44(d)(1)(ii) requires that each toxic pollutant be analyzed with respect to its reasonable potential when determining whether a discharge (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality objective. This is done by performing a reasonable potential analysis (RPA) for each pollutant.

28. Section 1.3 of the SIP requires that a limitation be imposed for a toxic pollutant if: (1) the maximum effluent concentration (MEC) is greater than the most stringent CTR criterion, or (2) the background concentration is greater than the CTR criterion, or (3) other information is available that indicates the need for a WQBEL. Sufficient effluent data are needed to conduct and complete the RPA.

29. Certain effluent limitations have been established based on the revised water quality criteria contained in the CTR and the requirements contained in Section 1.4 of the SIP. RPA was conducted using the data the monitoring data collected annually from1999 through 2004 for Discharge Serial Nos. 001, 002, and 003. Based on the RPA, there is reasonable potential to exceed water quality criteria for copper, lead, and mercury at Discharge Serial Nos. 001 and 003. For Discharge Serial No. 002, mercury demonstrates reasonable potential to exceed water quality criterion. Thus, effluent limitations have been established for these pollutants that showed reasonable potential to exceed state water quality standards. This Order also includes a comprehensive monitoring requirements to provide the data needed to complete an RPA for all of the priority pollutants.

30. Certain pollutants did not show reasonable potential based on effluent data. Therefore, effluent limitations for arsenic, cadmium, chromium, selenium, and silver, will not be established in this Order. The removal of these effluent limitations is not considered backsliding because the current effluent monitoring data serve as "new information" that was not available at the time of the issuance of the previous permit. The Regional Board determines that the anti-backsliding exception for new information applies where new monitoring data indicate that the discharge of a pollutant does not have reasonable potential to cause or contribute to a water quality standards violation. However, this Order requires the Discharger to continue to monitor for these pollutants, to provide data to evaluate reasonable potential in the future.

31. This Order requires the Discharger to conduct monitoring for receiving water for priority pollutants annually to provide data for conduction of RPA in the future.

32. The discharge from Discharge Serial Nos. 001, 002, and 003 are continuous. The previous permit prescribed acute toxicity limitations or monitoring requirements and no chronic limitations nor monitoring requirements. This Order includes effluent limitations and monitoring requirements for acute toxicity, and a trigger and monitoring requirements for chronic toxicity.

Compliance Schedules and Interim Limitations

33. Six Flags may not be able to achieve immediate compliance with the WQBELs for copper, lead, and mercury in Section I.B.4. of this Order. Data submitted in self-monitoring reports

indicate that these constituents have been detected at concentrations greater than the new limit proposed in this Order. The specified effluent limitations were developed based on CTR criteria.

34. 40 CFR 131.38(e) provides conditions under which interim effluent limits and compliance schedules may be issued. The provisions of the SIP allow inclusion of an interim limit with a specific compliance schedule included in a NPDES permit for priority pollutants if the limit for the priority pollutant is CTR-based. Interim limits have been included in this Order for the following pollutants: (a) copper, lead, and mercury for Outfall 001 and 003; and (b) mercury for Outfall 002. The interim limits are based on the Facility' s current treatment performance.

    During the compliance period, the Discharger shall comply with the interim effluent limits for the following pollutants: (a) copper, lead, and mercury for Outfall 001 and 003; and (b) mercury for Outfall 002. The interim limits are applicable from the date of adoption of the Order through June 2, 2010, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

35. This Order requires the Discharger to develop a pollutant minimization plan and/or source control measures, and participate in the activities necessary to achieve the final effluent limitations.

CEQA and Notifications

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

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

38. 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 30 days (July 5, 2005) from the date of its adoption, in accordance with federal law, provided the Regional Administrator, USEPA, has no objections.

39. 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, Office of Chief Counsel, ATTN: Elizabeth Miller Jennings, Senior Staff Counsel, 1001 I Street, 22nd Floor, Sacramento, California, 95814, within 30 days of adoption of this Order.

40. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with section 21100) of Division 13 of the Public Resources Code (CEQA) in accordance with the California Water Code, section 13389.

IT IS HEREBY ORDERED that Six Flags Theme Parks, Inc., Six Flags Magic Mountain, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted there under, shall comply with the following:

I. DISCHARGE REQUIREMENTS

A. Discharge Prohibitions

1. Wastes discharged shall be limited to drainage/overflow from lakes and ponds, irrigation run-off, midway (walkway throughout the park) washdown, duck pond overflow, and storm water run-off through Discharge Serial No. 001, Discharge Serial No. 002, and Discharge Serial No. 003, as proposed (Finding No. 5). The discharge of wastes from accidental spills or other sources is prohibited.

2. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, through Discharge Serial Nos. 001, 002 and 003 to the Santa Clara River, or waters of the State, are prohibited.

B. Final Effluent Limitations

The discharge of an effluent in excess of the following limitations is prohibited:

1. A pH value less than 6.5 or greater than 8.5.

2. A Temperature greater than 86 °F; and

3. Toxicity limitations:

a. Acute Toxicity Limitation and Requirements

i. The acute toxicity of the effluent shall be such that (i) the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.

ii. If either of the above requirements [Section I.B.3.a.(i)] is not met, the Discharger shall conduct six additional tests over a 6-week period. The Discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the completion of the test, and the additional tests shall begin within 3 business days of the 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 source(s) of toxicity.

Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the objective.

iii. If the initial test and any of the additional six acute toxicity bioassay tests result in less than 70% survival, including the initial test, the Discharger shall immediately begin a TIE.

iv. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program (*MRP)* No. 6045.

b. Chronic Toxicity Limitation and Requirements

i. This Order includes a chronic testing toxicity trigger defined as an exceedance of 1.0 TU_c in a critical life stage test for 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed, 1 TU_c in a critical life stage test.)

ii. If the chronic toxicity of the effluent exceeds 1.0 TU_c, the Discharger shall immediately implement accelerated chronic toxicity testing according to *MRP* No. 6045, Item IV.D.1. If the results of two of the six accelerated tests exceed 1.0 TU_c, the Discharger shall initiate a TIE and implement the Initial investigation TRE Workplan.

iii. The Discharger shall conduct chronic toxicity monitoring as specified in *MRP* No. 6045.

iv. 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.

v. Preparation of an Initial Investigation TRE Work Plan

1) The Discharger shall submit a copy of the Discharger's initial investigation Toxicity Reduction Evaluation (TRE) Work Plan (1-2 pages) to the Executive Officer of the Regional Board for approval within 90 days of the effective date of this permit. If the Regional Board Executive Officer does not disapprove the Work Plan within 60 days, the Work Plan shall become effective. The Discharger shall use EPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This Work Plan shall describe the steps the

Discharger intends to follow if toxicity is detected, and should include, at a minimum, the elements described in ii through iv below.

2) 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;

3) 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

4) 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) (Section IV.E.3. of *MRP* No. CI-6045 provides references for the guidance manuals that should be used for performing TIEs.)

4. Final Effluent Limitations:

(a) **Discharge Serial Nos. 001 and 003.** In addition to the Requirements I.B.1 through I.B.3, the effluent limitations established in this Order are applicable to discharges during both dry and wet weather conditions through NPDES Discharge Serial Nos. 001 and Discharge Serial No. 003:

Constituents	Units	Discharge Limitations [1/]	
		Monthly Average	Daily Maximum
Total suspended solids	Mg/L	50	75
Turbidity	NTU	50	75
BOD_5 20°C	Mg/L	20	30
Oil and Grease	Mg/L	10	15
Total coliform	MPN/100ml	1000 [2/]	10,000
Fecal coliform	MPN/100ml	200 [3/]	400
Enterococcus	MPN/100ml	35 [4/]	104
Settleable solids	Ml/L	0.1	0.3
Residual chlorine	Mg/L	---	0.1
Phenols	Mg/L	---	1.0
Total dissolved solids	Mg/L	---	1000
Sulfate	Mg/L	---	400
Boron	Mg/L	---	1.5
Nitrate + Nitrite (as N)	Mg/L	---	5
Copper [5/, 6/]	µg/L	19.5	39.2
Lead [5/, 6/]	µg/L	10.5	21.2
Mercury [5/, 6/]	µg/L	0.051	0.102

[1/] The monthly average concentration shall be the arithmetic average of all the values of daily concentrations calculated using the results of analyses of all samples collected during the month. If only one sample is taken in that month, compliance shall be based on this sample result.

2/ The geometric mean density of total coliform organisms shall be less than 1000 per 100 ml (10 per ml): provided that not more than 20 percent of the samples, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml). Also, the total coliform density shall not exceed 1000 per 100 ml if the ratio of fecal to total coliform exceeds 0.1

3/ The fecal coliform density for any 30-day period, shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

4/ The geometric mean enterococcus density of the discharge shall not exceed 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a six month period.

5/ Discharge limitations for these metals are expressed as total recoverable.

6/ The interim limit in Section I.B.5 below is applicable from the date of adoption of the Order through June 2, 2010.

(b) **Discharge Serial No 002.** In addition to the Requirements I.B.1 through I.B.3, the effluent limitations established in this Order are applicable to discharges during both dry and wet weather conditions through NPDES Discharge Serial No. 002:

		Discharge Limitations 1/	
Constituents	**Units**	**Monthly Average**	**Daily Maximum**
Total suspended solids	Mg/L	50	75
Turbidity	NTU	50	75
BOD_5 20°C	Mg/L	20	30
Oil and Grease	Mg/L	10	15
Total coliform	MPN/100ml	1000 2/	10,000
Fecal coliform	MPN/100ml	200 3/	400
Enterococcus	MPN/100ml	35 4/	104
Settleable solids	Ml/L	0.1	0.3
Residual chlorine	Mg/L	---	0.1
Phenols	Mg/L	---	1.0
Total dissolved solids	Mg/L	---	1000
Sulfate	Mg/L	---	400
Boron	Mg/L	---	1.5
Nitrate + Nitrite (as N)	Mg/L	---	5
Copper 5/	µg/L	19.5	39.2
Mercury 5/, 6/	µg/L	0.051	0.102

1/ The monthly average concentration shall be the arithmetic average of all the values of daily concentrations calculated using the results of analyses of all samples collected during the month. If only one sample is taken in that month, compliance shall be based on this sample result.

2/ The geometric mean density of total coliform organisms shall be less than 1000 per 100 ml (10 per ml): provided that not more than 20 percent of the samples, in any 30-day period, may exceed

1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml). Also, the total coliform density shall not exceed 1000 per 100 ml if the ratio of fecal to total coliform exceeds 0.1

3/ The fecal coliform density for any 30-day period, shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

4/ The geometric mean enterococcus density of the discharge shall not exceed 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a six month period.

5/ Discharge limitations for these metals are expressed as total recoverable.

6/ The interim limit in Section I.B.5 below is applicable from the date of adoption of the Order through June 2, 2010.

(c) **Chloride Limitations for Discharge Serial Nos. 001, 002, and 003:**

Constituent	Units	Discharge Limitations	
		Monthly Average 1/	Daily Maximum
Chloride	mg/L	100 2/	--
	mg/L	--	100 3/

1/ The monthly average concentration shall be the arithmetic average of all the values of daily concentrations calculated using the results of analyses of all samples collected during the month. If only one sample is taken in that month, compliance shall be based on this sample result.

2/ This is the water quality objective for chloride in the current Basin Plan. This effluent limitation applies immediately and will stay in effect until the Chloride TMDL for the Santa Clara River, Resolution No. 04-004 (adopted on May 6, 2004, amending Resolution No. R03-008 adopted on July 10, 2003; amending Resolution No. 02-018 adopted on October 24, 2002), *Amendment to the Water Quality Control Plan for the Los Angeles Region to Include a TMDL for Chloride in the Santa Clara River* (*Chloride TMDL)*, is approved by USEPA (i.e., the effective date of the TMDL). At that time, the effluent limitation accompanying table footnote [3] will be effective. If U.S. EPA does not approve the *Chloride TMDL*, this effluent limitation will remain in effect until revised by the Regional Board.

5. Interim Effluent Limitations.

From the effective date of this Order until June 2, 2010, the following interim effluent limitations are established for discharges through **Discharge Serial Nos. 001, 002, and 003**. Discharges in excess of the following interim effluent limitations are prohibited:

Pollutant (units)	Maximum Daily Effluent Limitations (MDELs)		
	Discharge Serial No. 001	Discharge Serial No. 002	Discharge Serial No. 003
Copper [1] (µg/L)	32	--	240
Lead [1] (µg/L)	85	--	78
Mercury (µg/L)	0.21	0.25	0.22

[1] Discharge limitations for these metals are expressed as total recoverable.

C. Receiving Water Limitations

1. The discharge shall not cause the following conditions to exist in the receiving waters:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   c. Visible, floating, suspended or deposited oil or other products of petroleum origin;

   d. Bottom deposits or aquatic growths; or,

   e. Toxic or other deleterious substances present in concentrations or quantities that cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge shall not cause nuisance or adversely affect beneficial uses of the receiving water.

3. No discharge shall cause a surface water temperature rise greater than $5^{o}F$ above the natural temperature of the receiving waters at any time or place.

4. The discharge shall not cause the following limitations to be exceeded in the receiving waters at any place within the waterbody of the receiving waters:

   a. The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units;

   b. Dissolved oxygen shall not be less than 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation;

   c. Dissolved sulfide shall not be greater than 0.1 mg/L;

   d. The ammonia in the 1994 Basin Plan were revised by Regional Board Resolution No. 2002-011, adopted on April 28, 2002, to be consistent with the 1999 U.S. EPA update on ammonia criteria. Regional Board Resolution No. 2002-011 was approved by State Board, OAL and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively and is now in effect. Total ammonia (as N) shall not exceed concentrations specified in the Regional Board Resolution 2002-011.

5. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or State Board. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Clean Water Act, or amendments thereto, the Regional Board will revise or modify this Order in accordance with such standards.

6. The discharge shall not cause the following to be present in receiving waters:

   a. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses;

   b. Chemical substances in amounts that adversely affect any designated beneficial use;

   c. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water;

   d. Suspended or settleable materials in concentrations that cause nuisance or adversely affect beneficial uses;

   e. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses;

f. Substances that result in increases of $BOD_5$20°C that adversely affect beneficial uses;

7. The discharge shall not alter the color, create a visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters.

8. The discharge shall not degrade surface water communities and population including vertebrate, invertebrate, and plant species.

9. The discharge shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload their design capacity.

10. The discharge shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

II. REQUIREMENTS

A. The Discharger shall submit within 90 days of the effective date of this Order:

1. A Storm Water Pollution Prevention Plan (SWPPP) that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged to waters of the State. The SWPPP shall be developed in accordance with the requirements in Attachment A.

2. Best Management Practices (BMPs) that entail site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. The BMPs shall be consistent with the general guidance contained in the U.S. EPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004). In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters. BMPs shall be included in the SWPPP.

3. The Plans shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge points; describe the activities in each area and the potential for contamination of storm water runoff; and address the feasibility of containment and/or treatment of the storm water. The plans shall be reviewed annually by the Discharger. Updated information, if any, shall be submitted within 30 days of revision.

B. Compliance Plan

1. The Discharger shall develop and implement a compliance plan that will identify the measures that will be taken to reduce copper, lead, and mercury in the effluent, and to achieve compliance with the final limits in this Order by the deadline specified in provisions I.B.5.

2. The Discharger shall submit annual progress reports to describe the progress of studies and or actions undertaken to reduce copper, lead, and mercury in the effluent, and to achieve compliance with the final limitations in this Order by the deadline specified in provision I.B.5. The Regional Board shall receive the first annual progress report at the same time the annual summary report is due, as required in section I.B of *MRP*.

3. The interim limits stipulated in Section I.B.5. shall be in effect for a period not to extend beyond June 2, 2010. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.4 (a) and I.B.4 (b) of this Order.

4. The Discharger must notify the Regional Board's Executive Officer, in writing, no later than 14 days following each interim date, compliance implementation event, or quarterly report, of the Discharger's compliance or noncompliance with the interim requirements.

C. Pursuant to the requirements of 40 CFR section 122.42(a), the Discharger must notify the Board as soon as it knows, or has reason to believe (1) that it has begun or expected to begin, to use or manufacture a toxic pollutant not reported in the permit application, or (2) a discharge of toxic pollutant not limited by this Order has occurred, or will occur, in concentrations that exceed the specified limits in 40 CFR section 122.42(a).

D. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.

E. The Discharger shall comply with the waste load allocations that will be developed from the TMDL process for the 303(d)-listed pollutants.

F. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.

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

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

a. Name and general composition of the chemical,
b. Frequency of use,
c. Quantities to be used,
d. Proposed discharge concentrations, and
e. U.S. EPA registration number, if applicable.

No discharge of such chemical shall be made prior to the Executive Officer's approval.

I. The Regional Board and U.S. EPA shall be notified immediately, by telephone, of the presence of adverse conditions in the receiving waters or on beaches and shores as a result of wastes discharged; written confirmation shall follow as soon as possible but not later than five working days after occurrence.

III. PROVISIONS

A. 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 attached Standard Provisions, those provisions stated herein shall prevail.

B. This Order includes the attached *MRP* No. CI-6045. If there is any conflict between provisions stated in the *MRP* and the Standard Provisions, those provisions stated in the former shall prevail.

C. The Discharger shall comply with the applicable requirements of SWPPP updates associated with industrial activity (State Board Order No. 97-03-DWQ adopted on April 17, 1997) and SWPPP updates and monitoring and reporting requirements of State Board general permit for discharges of storm water and Construction Activity (State Board Order No. 99-08-DWQ adopted on August 19, 1999). This Order R4-2005-0036 shall take precedence where conflicts or differences arise between it and the aforementioned Orders. This Order includes the relevant requirements contained in the attached *Storm Water Pollution Prevention Plan Requirements* (Attachment A).

D. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 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 Discharger for an Order modification,

revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

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

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

G. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, and 423 of the Federal Clean Water Act and amendments thereto.

H. 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 II.C of the *MRP* No. 6045*)*, 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, semi-annually, or annually, does not exceed the monthly average limitation for that constituent, the Discharger has demonstrated compliance with the monthly average limitation for that month.

b. If the analytical result of a single sample, monitored monthly, quarterly, semi-annually, or annually, exceeds the monthly average limitation for any constituent, the Discharger shall collect up to four additional samples at approximately equal intervals during the month. All analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

When all sample results are greater than or equal to the reported Minimum Level (see Reporting Requirement II.C of *MRP* No. 6045), 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 Requirement II.D of *MRP* No. 6045), the median value of these samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median

shall be the lower of the two middle values.

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

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

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.

IV. REOPENERS

A. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.

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

C. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new minimum levels (MLs) for each pollutant.

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

E. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity.

V. EXPIRATION DATE

This Order expires on May 10, 2010.

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

VI. RESCISSION

Order No. 98-005 adopted by this Regional Board on January 26, 1998, is 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 June 2, 2005.

_____
Jonathan S. Bishop
Executive Officer