

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

ORDER NO. 98-005

NPDES NO. CA0003352

WASTE DISCHARGE REQUIREMENTS  
for  
SIX FLAGS MAGIC MOUNTAIN  
(Valencia Amusement Park)

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

1. Six Flags Magic Mountain discharges wastes under waste discharge requirements contained in Order No. 93-004 (NPDES Permit No. CA0003352), adopted by this Board on January 25, 1993.
2. Six Flags Magic Mountain has filed a report of waste discharge and has applied for renewal and revision of its waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permit. The revision is a change of material type to include the midway washdown from the guest areas in the discharge.
3. Six Flags Magic Mountain operates an amusement park at 26101 West Magic Mountain Parkway, Valencia, Los Angeles County, and discharges wastewaters including overflow and drainage from lakes and ponds, irrigation runoff, midway washdown, and storm runoff into private storm drains on its property. The wastes flow to Santa Clara River, a water of the United States, above the estuary, via three separate discharge points as described below:

**Discharge Serial No. 001** (Latitude 34°25'41", Longitude 118°35'27") - up to 1,000,000 gallons per day (gpd) of drainage and/or overflow (600,000 gpd) from the East Side lakes and ponds, irrigation runoff (100,000 gpd), midway washdown (50,000 gpd), and storm runoff to a lined channel tributary to Santa Clara River at a point about 2,300 feet downstream from the Golden State Freeway. The lakes and ponds may be drained during the months of January, May, and October for repair and cleaning. On a continuous basis, approximately 40,000 gpd of overflow water is discharged.

**Discharge Serial No. 002** (Latitude 34°30'47", Longitude 118°35'38") - up to 20,000 gpd of duck pond overflow water to a lined channel tributary to Santa Clara River at a point about 3,000 feet downstream from the Golden State Freeway.

November 24, 1997  
Adopted January 26, 1998

**Discharge Serial No. 003** (Latitude 34°25'58", Longitude 118°35'52") - up to 1,000,000 gpd of drainage and/or overflow (600,000 gpd) from the West Side lakes and ponds, irrigation runoff (100,000 gpd), midway washdown (50,000 gpd), and storm runoff to a natural channel tributary to Santa Clara River at a point about 5,000 feet downstream from the Golden State Freeway. The lakes and ponds may be drained during the months of January, May, and October for repair and cleaning. On a continuous basis, approximately 50,000 gpd of overflow water is discharged.

4. The water in the larger east and west side lakes and ponds (Discharge Serial Nos. 001 and 003) is filtered; settled debris is vacuumed and the water surfaces are skimmed routinely. Currently, chlorine, muriatic acid, and soda ash are added to Discharge Serial Nos. 001 and 003 for treatment purposes. Since chloride can be formed by chlorine in the water, the Discharger agrees to investigate other alternatives for water treatment.
5. The discharge of lake and pond drainage from Discharge Serial Nos. 001 and 003 do not occur on the same day. Sediments and sludge resulting from lake and pond cleaning are hauled to a legal land disposal site.
6. As a regular course of operation, all litter and spills in the guest areas are continuously removed/cleaned before the washdown occurs. The quality of the midway washdown is similar to that of the irrigation runoff and the analytical data have demonstrated its insignificant impact to the environment.
7. Effluent monitoring data during previous discharges indicated that chlorides have occasionally exceeded the effluent limitation. These excursions were mainly caused by evaporation of water in the pond and lakes. Since treatment of water discharged is not cost-effective, Six Flags Magic Mountain requested the Regional Board to relax the limitation for chlorides from 100 to 175 mg/L. Six Flags Magic Mountain, Inc., has provided the Regional Board with sufficient information to demonstrated to the satisfaction of the Executive Officer that the proposed change, at the worst-case scenario, will not significantly affect the receiving waters.
8. On January 27, 1997, the Regional Board adopted Resolution 97-02, *Amendment to the Water Quality Control Plan to Incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters* with high concentrations of chlorides as a result of the drought. The provisions of the Resolution, as they apply, do not revise water quality objectives for chloride in the Santa Clara River Watershed, but grant a three-year variance to the existing discharges from Public Owned Treatment Works (PTOWs). During the variance period, the interim chloride limit for discharges to Santa Clara River Watershed is set at 190 mg/L.
9. The flow in the upper Santa Clara River is primarily discharges from the County Sanitation Districts of Los Angeles County's Saugus and Valencia water reclamation plants (WRPs). The Valencia WRP's discharges enter between the Six Flags Magic

Mountain, Inc.'s outfalls, and dominate the discharges from this facility. It is reasonable to argue that the Resolution 97-02 applies to the discharges from the Saugus and Valencia WRPs, would also apply to the discharges from Six Flags Magic Mountain.

10. The Board adopted a revised Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) on June 13, 1994. The Plan contains water quality objectives for the Santa Clara River watershed. Due to the nature of the discharge, certain priority pollutants are not expected to be present in the discharge; therefore, no numerical effluent limitations for these constituents are needed to protect the receiving waters and the beneficial uses. Narrative limitations to comply with all water quality objectives are provided in lieu of such numerical limitations.
11. The beneficial uses of the receiving water (Santa Clara River) are: (a) potential - municipal and domestic water supply; (b) existing - 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.
12. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Basin Plan.
13. 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 in accordance with Water Code Section 13389.

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

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

This Order shall serve as a NPDES permit pursuant to Section 402 of the Federal Clean Water Act (FCWA) or amendments thereto, and shall take effect at the end of ten days from the date of its adoption, provided the Regional Administrator of the U.S. Environmental Protection Agency (U.S. EPA), has no objections.

**IT IS HEREBY ORDERED** that Six Flags Magic Mountain, 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. Effluent Limitations**

1. Wastes discharged shall be limited to overflow and drainage from lakes and ponds, irrigation runoff, midway washdown, and storm runoff only, as proposed.
2. The discharge of an effluent from Discharge Serial Nos. 001, 002, and 003 in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>Discharge Limitations</u>	
		<u>30-Day Average</u>	<u>Daily Maximum</u>
Oil and grease	mg/L lbs/day*	10 83.4	15 125
Suspended solids	mg/L lbs/day*	50 417	150 1,250
Settleable solids	ml/L	0.1	0.3
Total dissolved solids	mg/L lbs/day*	— —	1,000 8,380
Sulfate	mg/L lbs/day*	— —	400 3,336
Chloride	mg/L lbs/day*	— —	175 1,467
Boron	mg/L lbs/day*	— —	1.5 12.5
Nitrate + Nitrite (as N)	mg/L lbs/day	—	5 41.7
Residual chlorine	mg/L	—	0.1
Arsenic	µg/L	—	50
Cadmium	µg/L	—	5
Chromium	µg/L	—	50

\* Based on a maximum flow rate of 1,000,000 gpd.

<u>Constituent</u>	<u>Units</u>	<u>Discharge Limitations</u>	
		<u>30-Day Average</u>	<u>Daily Maximum</u>
Copper	$\mu\text{g/L}$	—	1,000
Lead	$\mu\text{g/L}$	—	50
Mercury	$\mu\text{g/L}$	—	2
Selenium	$\mu\text{g/L}$	—	10
Silver	$\mu\text{g/L}$	—	50

3. Toxicity Limitations:

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

If the effluent consistently exceeds acute toxicity limitation, a toxicity identification evaluation (TIE) is required. The TIE shall include all reasonable steps to identify the source(s) of toxicity. Once the source of toxicity is identified, the Discharger shall take all reasonable steps necessary to reduce toxicity to the required level.

II. Receiving Water Limitations

1. The discharge shall not cause the following to be present in the receiving waters:
  - a. Toxic pollutants at concentrations that will bioaccumulate in aquatic life to levels that are harmful to aquatic life or human health;
  - b. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses;
  - c. Chemical substances in amounts that adversely affect any designated beneficial uses;
  - d. Visible floating materials, including solids, liquids, foams, and scum;

- e. 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 the objects in the water;
  - f. Suspended or settleable materials in concentrations that cause nuisance or adversely affect beneficial uses;
  - g. 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;
  - h. Turbidity which increases to the extent that such increase causes nuisance or adversely affects beneficial uses;
  - i. Substances that result in increase of  $BOD_5$  at 20°C that adversely affect beneficial uses; and
  - j. Concentrations of toxic substances that are toxic to, or cause detrimental physiological response in, human, animal, or aquatic life.
2. The discharge shall not cause the following to occur in the receiving waters:
- a. The dissolved oxygen to be depressed below 5 mg/L;
  - b. The pH to be depressed below 6.5 or raised above 8.5, and the ambient pH levels to be changed from natural conditions more than 0.5 units;
  - c. The temperature at any time or place and within any given 24-hour period to be altered by more than 5°F above natural temperature; but at no time be raised above 80°F;
  - d. Fecal coliform concentrations which exceed a log mean of 200/100mL (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10% of total samples during any 30-day period exceed 400/100mL;
  - e. Residual chlorine in concentrations that persist and impair beneficial uses; and
  - f. Any individual pesticide or combination of pesticides in concentrations that adversely affect the beneficial uses or increase pesticide concentration in bottom sediments or aquatic life.

3. The discharge shall not alter the color, create a visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters.
4. The discharge shall not degrade surface water communities and population including vertebrate, invertebrate, and plant species.
5. The discharge shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload their design capacity.
6. The discharge shall not cause problems associated with breeding of mosquitos, gnats, black flies, midges, or other pests.

### **III. Requirements and Provisions**

1. Discharge of wastes to any point other than specifically described in this Order is prohibited and constitute a violation thereof.
2. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements. If there is any conflict between provisions stated hereinbefore and attached "Standard Provisions", those provisions stated hereinbefore prevail.
3. This Order includes the attached Monitoring and Reporting Program. If there is conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail.
4. This Order may be modified, revoked and reissued or terminated in accordance with the provisions of 40 CFR Part 122.44, 122.62, 122.63, 122.64, 125.62, and 125.64.

### **IV. Expiration Date**

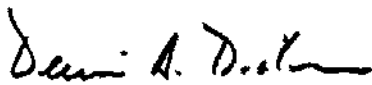
This Order expires on January 10, 2003.

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

**V. . . Rescission**

Order No. 93-004, adopted by this Board on January 25, 1993, is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on January 26, 1998.



DENNIS A. DICKERSON  
Executive Officer

/hdn



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 6045  
for  
SIX FLAGS MAGIC MOUNTAIN  
(Valencia Amusement Park)  
(CA0003352)

I. REPORTING REQUIREMENTS

The Discharger shall implement this monitoring program from the effective date of this Order. The first monitoring report under this program is due by April 15, 1998.

Monitoring reports shall be submitted by the dates in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January - March	April 15
April - June	July 15
July - September	October 15
October - December	January 15
Annual Report	March 1

If there is no discharge, the report shall so state.

II. EFFLUENT MONITORING REQUIREMENTS

1. A sampling station shall be established for each point of discharge and shall be located where representative samples of that effluent can be obtained.
2. The detection limits employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the discharger can demonstrate that a particular detection limit is not attainable and obtains approval for a higher detection limit from the Executive Officer. At least once a year, the discharger shall submit a list of the analytical methods employed for each test and associated laboratory quality assurance/quality control procedures.
3. This Regional Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
4. Quarterly effluent analyses shall be performed during the months of February, May, August, and November. Annual effluent analyses shall be performed during

Adopted January 26, 1998

the month of February. Results of quarterly and annual analyses shall be reported in the appropriate quarterly monitoring report.

5. Effluent Monitoring Program

The following shall constitute the effluent monitoring program:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Total waste flow	gal/day	---	monthly
Temperature	°F	grab	monthly
pH	pH units	grab	monthly
Residual chlorine	mg/L	grab	monthly
Oil and grease	mg/L	grab	quarterly
Settleable solids	ml/L	grab	quarterly
Suspended solids	mg/L	grab	quarterly
BOD <sub>5</sub> 20°C	mg/L	grab	quarterly
Total dissolved solids	mg/L	grab	quarterly
Chloride	mg/L	grab	quarterly
Sulfate	mg/L	grab	quarterly
Nitrate + Nitrite (as N)	mg/L	grab	quarterly
Boron	mg/L	grab	quarterly
Arsenic	µg/L	grab	annually
Cadmium	µg/L	grab	annually
Chromium	µg/L	grab	annually
Copper	µg/L	grab	annually
Lead	µg/L	grab	annually
Mercury	µg/L	grab	annually
Selenium	µg/L	grab	annually
Silver	µg/L	grab	annually
Acute toxicity <sup>1/</sup>	% survival	grab	annually <sup>2/</sup>

1/ By the method specified in "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" - March 1985 (EPA/600/4-85/013). Submission of bioassay results should include the information noted on pages 45-49 of the "Methods". The fathead minnow (Pimephales Promelas) shall be used as the test species.

2/ If the result of the annual toxicity test yields a result of non-compliance with the limitations then the frequency of analysis shall increase to monthly until at least three consecutive test results have been obtained and full compliance with Effluent Limitations 1-3 have been demonstrated, after which the frequency of analysis shall revert to annually. Results of toxicity tests shall be included in the first monitoring report following sampling.

**III. RECEIVING WATER MONITORING REQUIREMENTS**

A. Receiving water sampling stations shall be established at the following locations:

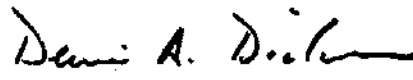
<u>Station No.</u>	<u>Description</u>
R-1	Santa Clara River, 300 feet upstream of the Discharge Serial No. 001.
R-2	Santa Clara River, 300 feet downstream of the Discharge Serial No. 003.

B. The following analyses shall be conducted on grab samples collected from each station:

<u>Constituents</u>	<u>Units</u>	<u>Minimum Frequency</u>
pH	pH unit	quarterly
Temperature	°F	quarterly
Dissolved oxygen	mg/L	quarterly
Residual chlorine	mg/L	quarterly
Chloride	mg/L	quarterly
Total dissolved solids	mg/L	quarterly
Turbidity	NTU	quarterly
Total coliform	MPN/100mL	quarterly

The results of the receiving water monitoring shall be submitted with effluent monitoring reports.

Ordered by:



DENNIS A. DICKERSON  
Executive Officer

Date: January 26, 1998

/hdn