



California Regional Water Quality Control Board

Los Angeles Region

VAC



Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Linda S. Adams
Agency Secretary

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Arnold Schwarzenegger
Governor

February 13, 2008

Mr. Daniel J. Guillory
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054

Certified Mail
Return Receipt Requested
Claim No. 7007 0710 0003 2453 2227

Dear Mr. Guillory:

COVERAGE UNDER GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND WASTE DISCHARGE REQUIREMENTS—METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA, FOOTHILL POWER PLANT, 31849 N. LAKE HUGHES ROAD, CASTAIC, CALIFORNIA (NPDES NO. CAG994004, CI—6743)

We have completed our review of your application to discharge waste under the General National Pollutant Discharge Elimination System (NPDES). You propose to discharge up to 135,000 gallons per day (gpd) of non-contact cooling water from the above-referenced site. Discharge of this water is currently regulated under NPDES Individual Permit No. CA0059641 (Order No. R4-2005-0026).

Based on the attached Fact Sheet and other information provided indicating the presence of Indeno (1,2,3-cd) Pyrene in the discharge, we have determined that the non-contact cooling water discharge is more appropriately regulated under General NPDES Permit No. CAG994004, Order No. R4-2003-0111, *General National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for Groundwater Discharges from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties*, adopted by this Board on August 7, 2003. Your existing coverage under NPDES No. CA0059641, Order No. R4-2005-0026, which was issued to you on May 5, 2005 will be rescinded at a future Board meeting.

Enclosed are your Waste Discharge Requirements, which also serve as your General NPDES Permit, consisting of Order No. R4-2003-0111 and revised Monitoring and Reporting Program No. CI-6743. The discharge limitations in Part E.1.a.i. and a.ii of Order No. R4-2003-0111 are applicable to your discharge. Discharge from the project drains to Castaic Lake Afterbay, which is a tributary to the Santa Clara River (between West Pier Highway 99 and Blue Cut gaging station). Therefore, the discharge limitations in Attachment B.3.d. are applicable to your discharge. Prior to starting discharge, a representative sample of the effluent must be obtained and analyzed to determine compliance with the discharge limitations.

The Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of coverage under Order No. R4-2003-00111. All monitoring reports should be sent to the Regional Board, ATTN: Information Technology Unit. When submitting monitoring or technical reports to the Regional Board per these requirements, please include a reference to

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Mr. Daniel J. Guillory
Metropolitan Water District of Southern California
(Foothill Power Plant)
CI-6743

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February 13, 2008

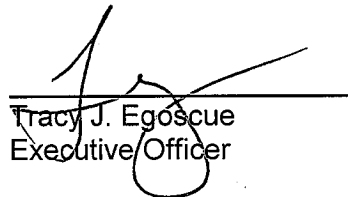
"Compliance File No. CI-6743 and NPDES No. CAG994004", which will assure that the reports are directed to the appropriate file and staff. Also, please do not combine your discharge monitoring reports with other reports. Submit each type of report as a separate document.

To avoid paying future annual fees, please submit written request for termination of your enrollment under the general permit in a separate letter, when your project has been completed and the permit is no longer needed. Be aware that the annual fee covers the fiscal year billing period beginning July 1 and ending June 30, the following year. You will pay full annual fee if your request for termination is made after the beginning of new fiscal year beginning July 1.

We are sending a copy of Order No. R4-2004-0111 only to the applicant. For those on the mailing list, please refer to the Board Order sent to you previously. A copy of the Order will be furnished to anyone who requests it, or it can be obtained at our website address at http://www.waterboards.ca.gov/rwqcblosangeles/html/permits/general_permits.html.

If you have any questions, please contact Vilma Correa at (213) 576-6794.

Sincerely,

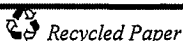

Tracy J. Egoscue
Executive Officer

Enclosures: Fact Sheet
Monitoring and Reporting Program No. CI-6743
Order No. R4-2004-0111, General NPDES Permit No. CAG994004

cc: Environmental Protection Agency, Region 9, Clean Water Act Standards and Permits Office (WTR-5)
U.S. Army Corps of Engineers
NOAA, National Marine Fisheries Service
Department of Interior, U.S. Fish and Wildlife Service
Philip Isorena, State Water Resources Control Board, NPDES Unit
California Department of Health Services, Drinking Water and Field Operations Branch
Department of Fish and Game, Region 5
Los Angeles County, Department of Public Works, Flood Control and Drainage
Los Angeles County, Department of Environmental Programs Division
Jae Kim, Tetra Tech
Jon Swidler, Metropolitan Water District of Southern California
Kimber Rose, Foothill Power Plant, Metropolitan Water District of Southern California

/vbc

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

**State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 West 4th Street, Suite 200, Los Angeles**

**FACT SHEET
WASTE DISCHARGE REQUIREMENTS
FOR
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
(FOOTHILL POWER PLANT)**

**(NPDES NO. CAG994004, SERIES NO. 284)
CI-6743**

FACILITY LOCATION

31849 N. Lake Hughes Road
Castaic, CA 91384

FACILITY MAILING ADDRESS

P. O. Box 54153
Los Angeles, CA 90054-0153

PROJECT DESCRIPTION

Metropolitan Water District of Southern California (MWD) discharges non-contact cooling water from the Foothill Power Plant located at 31849 N. Lake Hughes Road, Castaic, California. Potable water is used as non-contact lubricating/cooling water for the two turbine-generator units. MWD does not add any chemicals including chlorine to the cooling water discharge. The subject discharge is currently regulated under NPDES Permit No. CA0059641 (Order No. R4-2005-0026). On June 18, 2007, MWD submitted a Notice of Intent (NOI) form and analytical results of the wastewater samples to apply for an enrollment under the General NPDES Permit.

Staff has reviewed your waste discharge and determined that the non-contact cooling water discharge from your facility is more appropriately regulated under NPDES Permit No. CAG994004, Order No. R4-2003-0111. It is necessary to regulate the discharge under this general NPDES permit because of the presence of Indeno (1,2,3-cd) Pyrene, which precludes it from being regulated under other general NPDES permit. Your existing permit under NPDES Permit No. CA0059641, Order No. R4-2005-0026 will be rescinded in a separate letter.

VOLUME AND DESCRIPTION OF DISCHARGE

Up to 135,000 gallons per day of non-contact cooling water is discharged to the Castaic Lake Afterbay (Latitude 34° 30' 52", Longitude 118° 36' 29"). The discharge from Castaic Lake Afterbay is tributary to the Santa Clara River, a water of the United States. The site location is shown as Figure 1.

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APPLICABLE EFFLUENT LIMITATIONS

Based on the information provided in the NPDES Application Supplemental Requirements, the following constituents listed in the Table below have been determined to show reasonable potential to exist in the discharge. The discharge flows to Santa Clara River, therefore the discharge limitations in Attachment B.3.d. are applicable to the discharge.

This Table lists the specific constituents and effluent limitations applicable to the discharge.

Constituents	Units	Discharge Limitations	
		Daily Maximum	Monthly Average
Total Suspended Solids	mg/L	150	50
Turbidity	NTU	150	50
BOD ₅ 20°C	mg/L	30	20
Settleable Solids	ml/L	0.3	0.1
Indeno (1,2,3-cd) Pyrene)	µg/L	0.0088	0.0044
Total Dissolved Solids	mg/L	1,000	---
Sulfate	mg/L	400	---
Chloride	mg/L	100	---
Boron	mg/L	1.5	---
Nitrogen ¹	mg/L	5.0	---
Sulfides	mg/L	1.0	---
Residual Chlorine	mg/L	0.1	---
Methylene Blue Active Substances (MBAS)	mg/L	0.5	---

FREQUENCY OF DISCHARGE

The discharge of non-contact lubricating/cooling water is continuous.

REUSE OF WATER

It is not economically feasible to haul the wastewater for off-site disposal or discharge the water to the sanitary sewer system. There are no other feasible reuse options for the discharge. Therefore, the non-contact cooling water is discharged to the Castaic Lake Afterbay in compliance with the requirements of the attached order.

¹ Nitrate-nitrogen plus nitrite nitrogen.

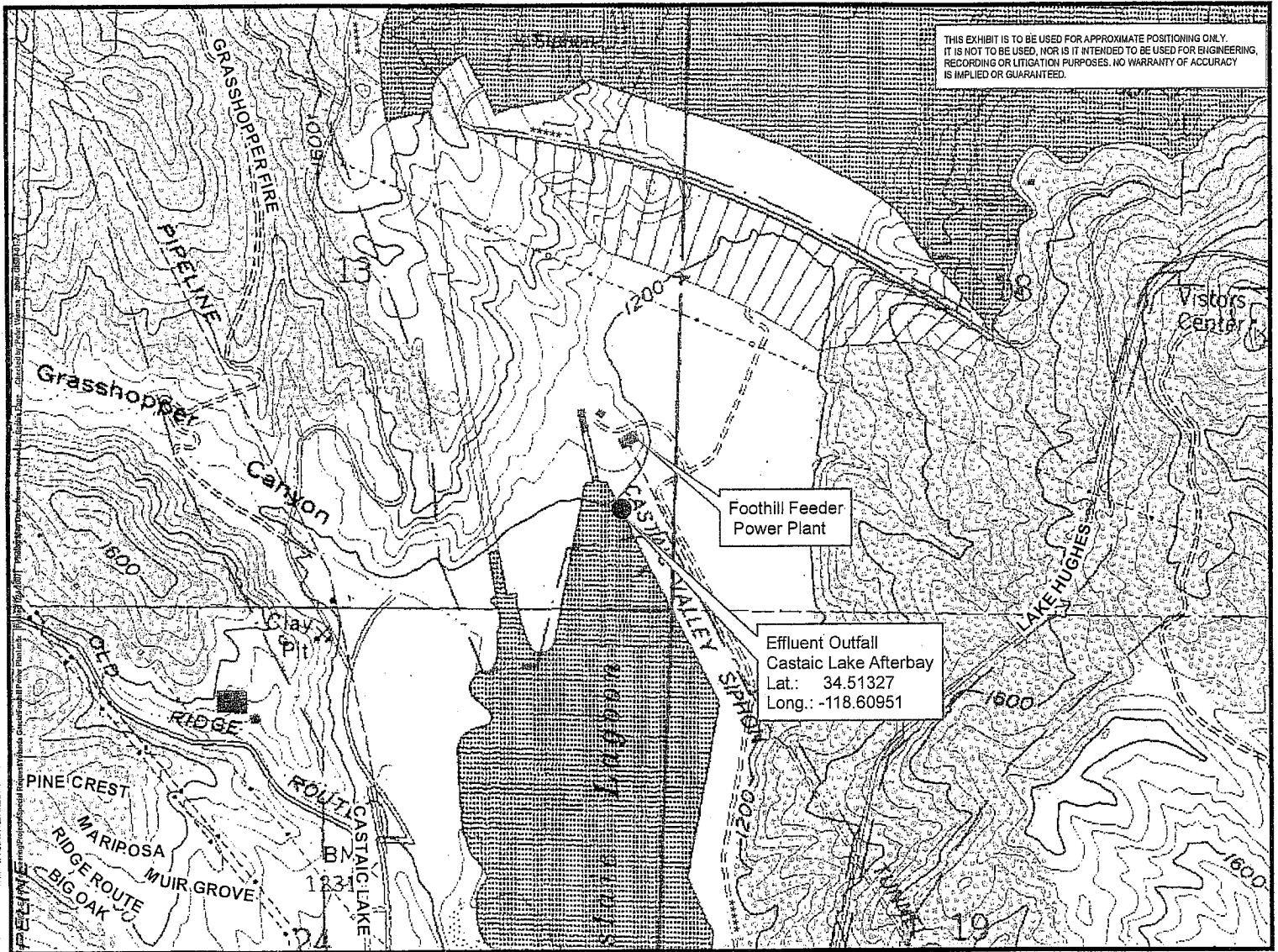


FIGURE 1

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
(FOOTHILL POWER PLANT)

CI-6743

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. CI-6743
for
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
(FOOTHILL POWER PLANT)

(ORDER NO. R4-2003-0111 SERIES NO. 284)
(NPDES NO. CAG994004)

I. REPORTING REQUIREMENTS

- A. The discharger shall implement this monitoring program on the effective date of this permit. The discharger shall submit monitoring reports to the Regional Board by the dates in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January – March	May 15
April – June	August 15
July – September	November 15
October – December	February 15

- B. The first monitoring report under this Program is due by May 15, 2008. If there is no discharge during any reporting period, the report shall so state.
- C. All monitoring reports shall include the discharge limitations in the Order, tabulated analytical data, the chain of custody form, and the laboratory report (including but not limited to date and time of sampling, date of analyses, method of analysis and detection limits).
- D. Each monitoring report shall contain a separate section titled "Summary of Non-compliance" which discusses the compliance record and corrective action taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.
- E. Before commencing a new discharge at each outfall location, a representative sample of the effluent shall be collected and analyzed for toxicity and for all the constituents listed in the Fact Sheet and the test results must meet all applicable limitations of Order No. R4-2003-0111.

February 13, 2007

II. SAMPLE COLLECTION REQUIREMENTS (AS APPROPRIATE)

- A. Daily samples shall be collected each day.
- B. Weekly samples shall be collected on a representative day of each week.
- C. Monthly samples shall be collected on a representative day of each month.
- D. Quarterly samples shall be collected in February, May, August, and November.
- E. Semi-annual samples shall be collected in May and November.
- F. Annual samples shall be collected in November.

III. EFFLUENT MONITORING REQUIREMENTS

- A. Sampling station(s) shall be established at the discharge point and shall be located where representative samples of the effluent can be obtained. Provisions shall be made to enable visual inspections before discharge. In the event of presence of oil sheen, debris, and/or other objectionable materials or odors, discharge shall not commence until compliance with the requirements is demonstrated. All visual observations shall be included in the monitoring report.
- B. If monitoring result indicate an exceedance of a limit contained in Order R4-2003-0111, the discharge shall be terminated and shall only be resumed after remedial measures have been implemented and full compliance with the requirements has been ascertained.
- C. In addition, as applicable, following an effluent limit exceedance, the discharger shall implement the following accelerated monitoring program:
 - 1. Monthly monitoring shall be increased to weekly monitoring,
 - 2. Quarterly monitoring shall be increased to monthly monitoring,
 - 3. Semi-annually monitoring shall be increased to quarterly, and
 - 4. Annual monitoring shall be increased to semi-annually.

If three consecutive accelerated monitoring events demonstrate full compliance with effluent limits, the discharger may return to the regular monitoring frequency, with the approval of the Executive Officer of the Regional Board.

- D. The following shall constitute the discharge monitoring program:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Flow	gal/day	totalizer	continuously ¹
Indeno (1,2,3-cd) Pyrene	µg/L	grab	monthly
Total Dissolved Solids	mg/L	grab	monthly

¹ Record the monthly total flow and report the calculated daily average flow and monthly flow in the quarterly and annual reports, as appropriate.

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Sulfate	mg/L	grab	monthly
Chloride	mg/L	grab	monthly
Boron	mg/L	grab	monthly
Nitrogen ²	mg/L	grab	monthly
pH	pH units	grab	monthly
Temperature	°F	grab	monthly
Total Suspended Solids	mg/L	grab	semi-annually
Turbidity	NTU	grab	semi-annually
BOD ₅ 20°C	mg/L	grab	semi-annually
Oil and Grease	mg/L	grab	semi-annually
Settleable Solids	ml/L	grab	semi-annually
Sulfides	mg/L	grab	semi-annually
Phenols	mg/L	grab	semi-annually
Residual Chlorine	mg/L	grab	semi-annually
Methylene Blue Active Substances (MBAS)	mg/L	grab	semi-annually
Acute Toxicity	% survival	grab	annually

IV. EFFLUENT TOXICITY TESTING

- A. The discharger shall conduct acute toxicity testing tests on 100% effluent grab samples by methods specified in 40 CFR Part 136 which cites *USEPA's Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, October 2002, (EPA/821-R-02-012)* or a more recent edition. Submission of bioassay results should include the information noted on pages 109-113 of the EPA/821-R-02-012 document.
- B. The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish discharges. The method for topsmelt is found in *USEPA's Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, First Edition, August 1995, (EPA/600-R-95-136).
- C. If the results of the toxicity test yields a survival of less than 90%, then the frequency of analyses shall increase to monthly until at least three test results have been obtained and full compliance with effluent limitations has been demonstrated, after which the frequency of analyses shall revert to annually. Results of toxicity tests shall be included in the first monitoring report following sampling.

²

Nitrate-nitrogen plus nitrite-nitrogen

V. GENERAL PROVISIONS FOR REPORTING

- A. The discharger shall inform this Regional Board 24 hours before the start of the discharge.
- B. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer. A copy of the laboratory certification shall be provided with the first monitoring report and each time a new certification and/or renewal is obtained from ELAP.
- C. Samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. Proper chain of custody procedures must be followed and a copy shall be submitted with the report.
- D. As required in part H.5. of Order No. R4-2003-0111, the monitoring report shall specify the USEPA analytical method used, the Method Detection Limit and the Minimum Level for each pollutant.

VI. COMPLIANCE DETERMINATION (AS APPLICABLE)

- A. 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 Monitoring and Reporting Requirements Section H.5. of Order R4-2003-0111), then the Discharger is out of compliance.
- B. 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 a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the monthly average limit for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after 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 Monitoring and Reporting Requirements Section H.5. of Order R4-2003-0111), the numerical average of the analytical results of these five 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 Monitoring and Reporting Requirements Section H.5. of Order R4-2003-0111), the median value of these four 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 limit.
- C. 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.
- D. 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.
- E. In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for "Not Detected" (ND) and the estimated concentration for "Detected, but Not Quantified" (DNQ) for the calculation of the monthly average concentration. To be consistent with section VI.C., if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant

concentrations should be considered as zero for the calculation of the monthly average concentration.

VII. NOTIFICATION

A. The discharger shall notify the Executive Officer in writing prior to discharge of any chemical which may be toxic to aquatic life. Such notification shall include:

1. Name and general composition of the chemical,
2. Frequency of use,
3. Quantities to be used,
4. Proposed discharge concentrations and,
5. EPA registration number, if applicable.

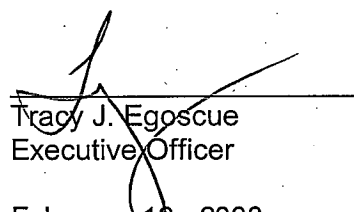
No discharge of such chemical shall be made prior to obtaining the Executive Officer's approval.

B. The discharger shall notify the Regional Board via telephone and/or fax within 24 hours of noticing an exceedance above the effluent limits in Order No. R4-2003-0111. The discharger shall provide to the Regional Board within 14 days of observing the exceedance a detailed statement of the actions undertaken or proposed that will bring the discharge into full compliance with the requirements and submit a timetable for correction.

VIII. MONITORING FREQUENCIES

Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if the discharger makes a request and the request is justified by statistical trends of monitoring data submitted. However, monitoring frequency may also increase based on site-specific conditions.

Ordered by:


Tracy J. Egoscue
Executive Officer

Date: February 18, 2008

/vbc