



# California Regional Water Quality Control Board

## Los Angeles Region



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

Linda S. Adams  
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013  
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger  
Governor

March 8, 2007

Mr. Sam Alameddine  
Office of Environmental Engineering  
California Department of Transportation  
100 South Main Street, 12 Floor, MS-16  
Los Angeles, CA 90012

Certified Mail  
Return Receipt Requested  
Claim No. 7002 2410 0005 0647 9137

Dear Mr. Alameddine:

**COVERAGE UNDER GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND WASTE DISCHARGE REQUIREMENTS—CALIFORNIA DEPARTMENT OF TRANSPORTATION, VENTURA ROUTE 150 PROJECT, ALONG 150 HIGHWAY, BETWEEN SANTA PAULA CREEK AND SISAR CREEK, SANTA PAULA, CALIFORNIA (NPDES NO. CAG994004, CI-9238)**

We have completed our review of your application for a permit to discharge groundwater to surface waters under a National Pollutant Discharge Elimination System (NPDES) permit.

Based on the attached Fact Sheet and other information provided, we have determined that the proposed discharge at the above-referenced site meets the conditions to be regulated under 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.

Enclosed are your Waste Discharge Requirements, which also serve as your NPDES permit, consisting of Order No. R4-2003-0111 and Monitoring and Reporting Program No. CI-9238. The discharge limitations in Part E.1.a. and E.1.b. of Order No. R4-2003-0111 for the specific constituents listed on the Table with the enclosed Fact Sheet are applicable to your discharge. The groundwater discharge flows into the Santa Clara River (above Santa Paula Water Works Diversion Dam). Therefore, the discharge limitations in Attachment B.3.i. of Order No. R4-2003-0111 is applicable to your discharge. Prior to starting discharge, a representative sample of the effluent shall 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 this permit. 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 "Compliance File No. CI-9238 and NPDES No. CAG994004", which will assure that the reports are directed to the

**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. Sam Alameddine  
California Department of Transportation  
(Ventura Route 150 Project)  
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appropriate file and staff. Also, please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

In order to avoid future annual fees, please submit written notification when the project has been completed and the permit is no longer needed.

We are sending a copy of Order No. R4-2003-0111 only to the applicant. For those on the mailing list, please refer to the Board Order sent to you previously or download a copy of the Order from our website at [http://www.waterboards.ca.gov/rwqcb4/html/permits/general\\_permits.html](http://www.waterboards.ca.gov/rwqcb4/html/permits/general_permits.html).

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

Sincerely,



Jonathan S. Bishop  
Executive Officer

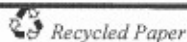
Enclosures:

General NPDES No. CAG994004, Order No. R4-2003-0111  
Fact Sheet  
Monitoring and Reporting Program No. CI-9238

cc: Environmental Protection Agency, Region 9, Permit Section (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 Resource Control Board, NPDES Unit  
California Department of Fish and Game, Marine Resources, Region 5  
Smita Dhuldhoya, California Department of Transportation (Los Angeles Office)  
Ventura County Environmental Programs Division  
Ventura County DPW, Flood Control Division  
City of Santa Paula, Department of Public Works  
Lee Solomon, Tetrattech  
Douglas M. Mangus, Ninyo & Moore

/vbc

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STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION  
320 West 4<sup>th</sup> Street, Suite 200, Los Angeles, California 90013

**FACT SHEET  
WASTE DISCHARGE REQUIREMENTS  
FOR**

**CALIFORNIA DEPARTMENT OF TRANSPORTATION  
(ROUTE 150 PROJECT-SANTA PAULA CREEK AND SISAR CREEK)**

**(NPDES NO. CAG994004, SERIES NO. 220)  
CI-9238**

**FACILITY ADDRESS**

Along Route 150 between Santa Paula Creek  
Bridge and Sisar Creek Bridge  
Santa Paula, CA 93060

**FACILITY MAILING ADDRESS**

100 South Main Street, 12<sup>th</sup> Floor, MS-16  
Los Angeles, CA 90012

**PROJECT DESCRIPTION:**

The California Department of Transportation (Caltrans) proposes to discharge groundwater generated during construction project between Santa Paula Creek Bridge and Sisar Creek Bridge in Santa Paula. The project involves road construction and bridge widening. A desilting tank will be installed to allow sediment to settle out before the groundwater is discharged. Treatment will be necessary to ensure that the concentration of VOC's, metals, and minerals in the discharge remains below the effluent limitations. The groundwater analytical data indicated that Total Dissolved Solids (TDS) level is above the receiving water quality objective. The proposed treatment system did not show how compliance will be achieved with the TDS limitation. Therefore, Caltrans is required to treat or implement measures to assure compliance with TDS limitation. The construction project shall last approximately two months.

**VOLUME AND DESCRIPTION OF DISCHARGE:**

Up to 450,000 gallons per day (gpd) of groundwater will be discharged into Santa Paula Creek and Sisar Creek (Latitude: 34° 25' 38", Longitude: 119° 5' 27"). The discharge flows into the Santa Clara River (above Santa Paula Water Works Diversion Dam), water of the United States. The site location map and process flow diagram are shown in Figures 1 and 2, respectively.

**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 your discharge. The discharge from the project site flows into Santa Clara River (above Santa Paula Water Works Diversion Dam). This stream reach of the Santa Clara River is designated as MUN (Potential) beneficial use.

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

Constituents	Units	Discharge Limitations	
		Daily Maximum	Monthly Average
Total Dissolved Solids	mg/L	600	
Sulfate	mg/L	250	
Chloride	mg/L	45	
Boron	mg/L	1.0	
Nitrogen <sup>1</sup>	mg/L	5	
Antimony	µg/L	6	
Arsenic	µg/L	50	
Beryllium	µg/L	4	
Chromium III	µg/L	50	
Copper	µg/L	44.4	22.1
Nickel	µg/L	100	100
Zinc	µg/L	350	170
Benzene	µg/L	1.0	
Total Suspended Solids	mg/L	150	50
Turbidity	NTU	150	50
BOD <sub>5</sub> 20°C	mg/L	30	20
Oil and Grease	mg/L	15	10
Settleable Solids	ml/L	0.3	0.1
Sulfides	mg/L	1.0	
Phenols	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 groundwater will be intermittent and will last until the duration of the construction project.

**REUSE OF WATER:**

Water reuse alternatives and their applicability were evaluated. A small volume of the groundwater will be used for dust control and soil compaction within the project area. The majority of the groundwater will be discharged to Santa Clara River in compliance with the requirements of the attached order.

<sup>1</sup> Nitrate-nitrogen plus nitrite nitrogen.

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

**MONITORING AND REPORTING PROGRAM NO. CI-9238  
FOR  
CALIFORNIA DEPARTMENT OF TRANSPORTATION  
(VENTURA ROUTE 150 PROJECT-SANTA PAULA CREEK AND SISAR CREEK)**  
**(ORDER NO. R4-2003-0111, SERIES NO. 220)**  
**(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, 2007. 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.

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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:

<b>Constituent</b>	<b>Units</b>	<b>Type of Sample</b>	<b>Minimum Frequency of Analysis</b>
Flow	gal/day	totalizer	continuously <sup>1</sup>
pH	pH units	grab	monthly
Temperature	°F	grab	monthly
Total Dissolved Solids	mg/L	grab	monthly
Sulfate	mg/L	grab	monthly
Chloride	mg/L	grab	monthly
Boron	mg/L	grab	monthly
Nitrogen <sup>2</sup>	mg/L	grab	monthly
Antimony	µg/L	grab	monthly <sup>3</sup>
Arsenic	µg/L	grab	monthly <sup>3</sup>
Beryllium	µg/L	grab	monthly <sup>3</sup>
Chromium III	µg/L	grab	monthly <sup>3</sup>
Copper	µg/L	grab	monthly <sup>3</sup>
Nickel	µg/L	grab	monthly <sup>3</sup>
Zinc	µg/L	grab	monthly <sup>3</sup>
Benzene	µg/L	grab	monthly <sup>3</sup>
Total Suspended Solids	mg/L	grab	monthly
Turbidity	NTU	grab	monthly
BOD <sub>5</sub> 20°C	mg/L	grab	monthly
Oil and Grease	mg/L	grab	monthly
Settleable Solids	ml/L	grab	monthly
Sulfides	mg/L	grab	quarterly
Phenols	mg/L	grab	quarterly
Residual Chlorine	mg/L	grab	quarterly
Methylene Blue Active Substances (MBAS)	µg/L	grab	quarterly
Acute Toxicity	% survival	grab	annually

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

<sup>2</sup> Nitrate-nitrogen plus nitrite-nitrogen

<sup>3</sup> Samples shall be collected weekly for the first one month of operation and monthly thereafter, if no exceedance is observed.

#### 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 West Coast 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.

#### 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 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:

  
\_\_\_\_\_  
Jonathan S. Bishop  
Executive Officer

Date: March 8, 2007

/vbc