

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. 00-010
FOR
VALLEY SANITARY DISTRICT, OWNER/OPERATOR
WASTEWATER TREATMENT PLANT
Indio – Riverside County

Location of Discharge: SW ¼, Section 19, T5S, R8E, SBB&M

MONITORING

1. The collection, preservation and holding times of all samples shall be in accordance with U. S. Environmental Protection Agency approved procedures. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.
2. Samples shall be collected at the location specified in the permit. If no location is specified, sampling shall be conducted at the most representative sampling point available.
3. If the facility is not in operation, or there is no discharge during a required reporting period, the discharger shall either forward a letter, or write a notation on the required monthly monitoring report to the Regional Board, indicating that there has been no activity during the required reporting period.

INFLUENT MONITORING

The wastewater influent to the treatment facilities shall be monitored as follows:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20°C CBOD ₅	mg/L ¹	24-Hr. Composite	Weekly
Suspended Solids	mg/L	24-Hr. Composite	Weekly

¹ mg/L – milligrams-per-Liter

EFFLUENT MONITORING

Effluent wastewater from the activated sludge plant shall be tested. In addition, combined flows from the oxidation ponds, and the wetlands shall be tested. Separate sampling stations shall be established at suitable locations, where representative samples of the wastewater shall be collected and monitored for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Daily Effluent Discharge	MGD ²	Flow Meter Reading	Daily ³
Settleable Matter	ml/L ⁴	Grab at Peak Flow	Twice-Weekly
Suspended Solids	mg/L	24-Hr. Composite	Twice-Weekly
20°C CBOD ₅	mg/L	24-Hr. Composite	Weekly
pH	pH Units	Grab	Daily ⁵

In addition, a representative sample from the total combined flow shall be collected prior to discharge from the common outfall and shall be monitored for constituents/parameters indicated below:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Fecal Coliform	MPN/100 ml ⁶	Grab	Twice Weekly
Chlorine Residual ⁷	mg/L	Grab	Daily ⁵
Nitrates	mg/L	24-Hr. Composite	Monthly
Ammonia Nitrogen	mg/L	24-Hr. Composite	Monthly
Total Nitrogen	mg/L	24-Hr. Composite	Monthly
Total Phosphate	mg/L	24-Hr. Composite	Monthly
Volatile Organic Compounds (EPA Methods 624 and 625)	µg/L ⁸	Grab	Quarterly
Oil and Grease	mg/L	24-Hr. Composite	Annually
<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>

² MGD – Million Gallons-Per-Day

³ Reported monthly with monthly average daily flow

⁴ ml/L – milliliters-per-Liter

⁵ Daily (excluding holidays and weekends)

⁶ MPN – Most Probable Number

⁷ The discharger may monitor for dechlorinating agent residual and report residual chlorine as nondetectable if the dechlorinating agent is present.

⁸ µg/L – micrograms-per-Liter

Sulfates	mg/L	24-Hr. Composite	Quarterly
Chloride	mg/L	24-Hr. Composite	Quarterly
Hardness (as CaCO ₃)	mg/L	Grab	Quarterly
Temperature	°F	Grab	Daily

Should the discharger need to install additional outfall lines in the future to meet necessary discharge capacity, then the constituents/parameters being monitored for the above total combined flow shall be done likewise for each outfall line.

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples. Sampling stations shall be as follows:

<u>Station</u>	<u>Description</u>
R-1	Not to exceed 100 feet upstream from the point of discharge. A greater distance may be acceptable provided the discharger submits proper justification that the prescribed distance is inaccessible.
R-2	Not to exceed 450 feet downstream of the discharge pipe outlet at a point where the plume would be expected.

<u>Constituent</u>	<u>Unit</u>	<u>Station</u>	<u>Sampling Frequency</u>
Temperature	°F	R-1, R-2	Monthly
Chlorine Residual ⁹	mg/L	R-1, R-2	Monthly
Dissolved Oxygen	mg/L	R-1, R-2	Monthly
Nitrates	mg/L	R-1, R-2	Monthly
Ammonia	mg/L	R-1, R-2	Monthly
Total Nitrogen	mg/L	R-1, R-2	Monthly
Total Phosphate	mg/L	R-1, R-2	Monthly
pH	pH Units	R-1, R-2	Monthly
Hardness (CaCO ₃)	mg/L	R-1, R-2	Monthly

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions at Stations R1 and R2. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter
- d. Visible film, sheen or coating

⁹ The discharger may monitor for dechlorinating agent residual and report residual chlorine as nondetectable if the dechlorinating agent is present.

- b. Discoloration
- c. Aquatic life
- e. Fungi, slime, or objectionable growths
- f. Potential nuisance conditions

In the event that no effluent is present at station R1, no receiving water monitoring data is required for station R1.

Notes on receiving water conditions shall be summarized in the monitoring report.

GROUND WATER WELL MONITORING

The domestic well located 143 feet southeast of the wastewater treatment plant shall be monitored as follows:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/L	Grab	Quarterly
Fecal Coliform	MPN/100 ml	Grab	Quarterly
Nitrate	mg/L	Grab	Quarterly

In the event that the domestic well is not available for monitoring, the discharger shall construct a ground water monitoring well at a location approved by the Regional Board's Executive Officer or his designee.

OPERATION AND MAINTENANCE

The discharger shall inspect and document any operation/maintenance problems by inspecting each unit process. The results of the operation and maintenance inspections shall be forwarded to this Regional Board annually.

PRETREATMENT REPORT

In the event that the discharger is required to implement a pretreatment program then the discharger shall submit reports as required in accordance with Section F. Pretreatment and Appendix – Requirements for Pretreatment Annual Report of the Waste Discharge Requirements.

SLUDGE MONITORING

The discharger shall report quarterly on the quantity, location and method of disposal of all sludge and similar solid material being produced at the wastewater treatment plant facility.

The primary sludge that is generated at the treatment facility and the secondary sludge removed for disposal shall be sampled and analyzed for the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Arsenic	mg/kg ¹⁰	Grab	Annually
Cadmium	mg/kg	Grab	Annually
Nickel	mg/kg	Grab	Annually
Copper	mg/kg	Grab	Annually
Lead	mg/kg	Grab	Annually
Mercury	mg/kg	Grab	Annually
Molybdenum	mg/kg	Grab	Annually
Selenium	mg/kg	Grab	Annually
Zinc	mg/kg	Grab	Annually
Fecal Coliform	MPN/Gram	Grab	Annually

EFFLUENT TOXICITY TESTING

The discharger shall conduct chronic toxicity testing on the effluent as follows:

<u>Test</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Test</u>
Chronic Toxicity	tu _c	24-Hr. Composite	Quarterly
Acute Toxicity	% survival	24-Hr. Composite	Quarterly

¹⁰ mg/kg – milligrams-per-kilogram

Both test species given below shall be used to measure chronic toxicity:

<u>Species</u>	<u>Effect</u>	<u>Test Duration (Days)</u>	<u>Reference</u>
Fathead Minnow (Pimephales Promelas)	Larval Survival	7	EPA/600-4-91/002
Water Flea (Ceriodaphnia dubia)	Survival; Number of Young	7	EPA/600/4-91/002

Toxicity Test Reference: Horning W. B. and C. I. Weber (eds.). 1991. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organism. Third Edition. United States Environmental Protection Agency Monitoring Systems Laboratory, Cincinnati, Ohio. EPA/600/4-91/002.

Dilution and control waters may be obtained from an unaffected area of receiving waters. Standard dilution is an option and may be used if the above source is suspected to have toxicity greater than 1.0 tu_c . The sensitivity of the test organism to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

Chronic toxicity shall be expressed and reported as toxic units (tu_c) where:

$$tu_c = 100/NOEC$$

and the No Observed Effect Concentration (NOEC) is expressed as the maximum percent effluent of test water that causes no observed effect on a test organism, as determined in a critical life stage toxicity test indicated above.

Acute toxicity shall be calculated from the results of the chronic toxicity test described above and shall be reported along with the results of each chronic test. Acute toxicity shall be expressed as percent survival of test organism over a ninety-six hour period in 100% effluent.

REPORTING

1. The discharger shall report the results of acute and chronic toxicity testing as determined through standard toxicity protocols using 100% effluent.
2. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data should be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
3. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurement(s);
 - b. The individual(s) who performed the sampling or measurement(s);
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or method use; and
 - f. The results of such analyses.
4. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this monitoring report.

5. Each report shall contain the following statement:

"I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations."

6. A duly authorized representative of the discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - b. The authorization specified an individual or person having the responsibility for the overall operation of the regulated disposal system; and
 - c. The written authorization is submitted to the Regional Board's Executive Officer.
7. Reporting of any failure in the waste disposal system shall be as described as in Provision No. 28 to the Regional Board Office and to the Office of Emergency Services.
8. Daily, weekly, and monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted by January 15, April 15, July 15, and October 15 of each year. Annual reports shall be submitted by January 15 of each year.

9. Submit reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

10. A copy of the monitoring report shall also be sent to:

Regional Administrator
U.S. Environmental Protection Agency
Region 9, 65/MR, W-3
75 Hawthorne Street
San Francisco, CA 94105

Ordered by: original signed by/
Executive Officer

April 12, 2000
Date