

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

MONITORING AND REPORTING PROGRAM NO. 00-120  
FOR  
TERRA ORGANICS INTERNATIONAL INC., OWNER/OPERATOR  
DEMONSTRATION SALTON SEA TREATMENT FACILITY  
Salton City – Imperial County

Location of Discharge: Section 9, T10S, R10E, 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. Unless otherwise approved by the Regional Board's Executive Officer, all analyses shall be conducted by a laboratory certified for such analysis by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR 136), promulgated by the United States Environmental Protection Agency.
2. Compliance with the discharge limitations shall be determined at the end of the treatment process or as specified in the Board Order.
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.

INTAKE WATER MONITORING

The intake water drawn from the Salton Sea and pumped to the treatment process shall be monitored as follows:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20°C BOD <sub>5</sub>	mg/L <sup>1</sup>	8-Hr. Composite	Weekly
Total Suspended Solids	mg/L	8-Hr. Composite	Weekly
pH	-----	Grab	Twice Weekly
Temperature	°F	Grab	Twice Weekly
Dissolved Oxygen	mg/L	Grab	Weekly

  

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
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<sup>1</sup> mg/L – milligrams-per-Liter

Nitrates as Nitrogen (N)	mg/L	8-Hr. Composite	Weekly
Nitrites as N	mg/L	8-Hr. Composite	Weekly
Ammonia Nitrogen	mg/L	8-Hr. Composite	Weekly
Total Nitrogen	mg/L	8-Hr. Composite	Weekly
Total Phosphate as Phosphorus (P)	mg/L	8-Hr. Composite	Weekly
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly

### EFFLUENT MONITORING

A sampling station shall be established at the point of discharge and shall be located where representative samples of effluent can be obtained. Water discharged to the Salton Sea shall be monitored for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Daily Effluent Discharge to Salton Sea	MGD <sup>2</sup>	Flow Meter Reading	Daily <sup>3</sup>
pH	-----	Grab	Twice Weekly
Temperature	°F	Grab	Twice Weekly
Dissolved Oxygen	mg/L	Grab	Weekly
Total Suspended Solids	mg/L	8-Hr. Composite	Weekly
20°C BOD <sub>5</sub>	mg/L	8-Hr. Composite	Weekly
Nitrates as Nitrogen (N)	mg/L	8-Hr. Composite	Weekly
Nitrites as N	mg/L	8-Hr. Composite	Weekly
Ammonia Nitrogen	mg/L	8-Hr. Composite	Weekly
Total Nitrogen	mg/L	8-Hr. Composite	Weekly
<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Phosphate as Phosphorus (P)	mg/L	8-Hr. Composite	Weekly

<sup>2</sup> MGD – Million-Gallons Per Day

<sup>3</sup> Reported monthly with monthly average daily flow

Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly

RECEIVING WATER MONITORING

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Temperature	°F	Grab	Weekly

A log shall be kept of the receiving water conditions surrounding the point of discharge. Attention shall be given to the presence or absence of:

- |                                 |   |
|---------------------------------|---|
| a. Floating or suspended matter | d. Visible film, sheen or coating         |
| b. Discoloration                | e. Fungi, slime, or objectionable growths |
| c. Aquatic life                 | f. Potential nuisance conditions          |

Notes on receiving water conditions surrounding the point of discharge shall be summarized in the monitoring report.

A log shall be kept of the Salton Sea water conditions surrounding the point of intake. Attention shall be given to the presence or absence of:

- |                                 |   |
|---------------------------------|---|
| a. Floating or suspended matter | d. Visible film, sheen or coating         |
| b. Discoloration                | e. Fungi, slime, or objectionable growths |
| c. Aquatic life                 | f. Potential nuisance conditions          |

Notes on Salton Sea water conditions surrounding the point of intake shall be summarized in the monitoring report.

OPERATION AND MAINTENANCE

The discharger shall inspect and document any operation/maintenance problems by inspecting each unit process. The report shall include a listing of flow metering locations and dates of calibration of each flow meter. The results of the operation and maintenance inspections shall be forwarded to this Regional Board annually.

## INFLUENT AND EFFLUENT TOXICITY TESTING

The discharger shall conduct toxicity testing on the influent and effluent of the treatment process as follows:

<u>Test</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Test</u>
Chronic Toxicity	tu <sub>c</sub>	Composite	Quarterly
Acute Toxicity	% survival	Composite	Quarterly

The test species given below shall be used to measure acute and chronic toxicity:

<u>Species</u>	<u>Effect</u>	<u>Test Duration (Days)</u>	<u>Reference</u>
Topsmelt ( <i>Atherinops affinis</i> )	Larval Survival; Larval growth	7	EPA/600/R-95/136

Toxicity Test Reference: Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/600/R-95-136, August 1995.

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

An initial dilution of the sample to a 75% sample concentration will be allowed for the reduction of sample salinity to that which approximates ocean water.

Chronic toxicity shall be expressed and reported as toxic units (tu<sub>c</sub>) 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 75% effluent.

## REPORTING

1. 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.
2. 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 methods used; and
  - f. The results of such analyses.
3. The results of any analysis of samples taken more frequently than required at the locations specified in this Monitoring and Reporting Program\_\_ shall be reported to the Regional Board.
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; and
  - 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 treatment system shall be as described as in Provision No. 25 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 15<sup>th</sup> 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

Ordered by: original signed by/  
Executive Officer

November 8, 2000  
Date