

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

MONITORING AND REPORTING PROGRAM NO. 00-020
FOR
PRIMARY POWER MANAGEMENT AND DEVELOPMENT INC. OWNER
IMPERIAL VALLEY RESOURCE RECOVERY CO. LCC, OPERATOR
DISCHARGE OF INDUSTRIAL WASTEWATER FROM A
17 MEGAWATT BIOMASS WASTE FUELED POWER PLANT
South of Brawley - Imperial County

Location of Discharge: Rose Drain in the NW 1/2 of Section 27, T14S, R14E, 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. If the facility is not in operation, or there is no discharge to the Rose Drain during a required reporting period, the discharger shall forward a letter to the Regional Board indicating that no discharge has occurred.
3. A sampling station shall be established at the outfall where discharge to the Rose Drain occurs. Samples of the receiving water shall also be collected and tested for the same constituents both immediately upstream and downstream of the discharge point.

EFFLUENT MONITORING

Wastewater effluent discharged to Rose Drain shall be monitored for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids (TDS)	mg/L ¹	Grab	Daily ²
Settleable Solids	ml/L ³	Grab	Daily
Biochemical Oxygen Demand (BOD)	mg/L	Grab	Monthly
Chemical Oxygen Demand (COD)	mg/L	Grab	Monthly
Copper	Φg/L ⁴	Grab	Daily
Zinc	Φg/L	Grab	Daily
Chromium III	Φg/L	Grab	Daily

¹ mg/L – milligrams per Liter

² Reported monthly with monthly average daily flow calculated

³ ml/L – milliliters per Liter

⁴ Φg/L - micrograms per Liter

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Chromium VI	Φg/L	Grab	Daily
Residual Chlorine	mg/L	Grab	Daily
Hydrogen Ion (pH)	-----	Grab	Daily
Flow	GPD ⁵	Estimate	Daily

RECEIVING WATER MONITORING

1. Water in the Rose Drain shall be monitored for the following constituents. All samples shall be taken between 6 a.m. and 6 p.m. The sampling station shall be maintained where representative samples of mixed water can be obtained. Said sampling station shall be located midstream in Rose Drain at a point where the discharge and receiving waters have thoroughly mixed, but not to exceed 50 feet downstream from the point of discharge.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Hydrogen Ion	pH Units	Grab	Weekly
Dissolved Oxygen	mg/L	Grab	Weekly
Temperature	°C	Grab	Weekly
Hardness	ml/L	Grab	Weekly

2. Water in the Rose Drain shall be monitored for temperature at approved sampling stations. Sampling shall be conducted weekly at stations above and below the Rose Drain discharge point.
3. In conducting the receiving water sampling, attention shall be given to the presence or absence of:
 - a. Floating or suspended matter
 - b. Discoloration
 - c. Aquatic Life
 - d. Visible film, sheen or coating
 - e. Fungi, slime or objectionable growths
 - f. Potential nuisance conditions

2,3,7,8- TETRACHLORODIBENZO-P-DIOXIN (TCDD)
EQUIVALENT MONITORING

By May 18, 2001, the discharger shall begin monitoring its effluent for the presence of 17 (Toxic equivalency factors for 2,3,7,8-tetrachlorodibenzo-p-dioxin equivalents) congeners once during the dry weather and once during the wet weather each year for a period of three consecutive years. The congeners and Toxic Equivalent Factors can be found in Table 4 of the "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California." A copy of Table No. 4 is shown below:

Table 4

Congener	Toxic Equivalent Factors (TEF)
2,3,7,8- Tetra-Chlorinated dibenzodioxins (CDD)	1

⁵ GPD – Gallons per Day

1,2,3,7,8- Penta-CDD	1.0
1,2,3,4,7,8- Hexa-CDD	0.1
1,2,3,6,7,8- Hexa-CDD	0.1
1,2,3,7,8,9- Hexa-CDD	0.1
1,2,3,4,6,7,8- Hepta-CDD	0.01
OctaCDD	0.0001
2,3,7,8- Tetra-Chlorinated dibenzofurans (CDF)	0.1
1,2,3,7,8- Penta-CDF	0.05
2,3,4,7,8- Penta-CDF	0.5
1,2,3,4,7,8- Hexa-CDF	0.1
1,2,3,6,7,8- Hexa-CDF	0.1
1,2,3,7,8,9- Hexa-CDF	0.1
2,3,4,6,7,8- Hexa-CDF	0.1
1,2,3,4,6,7,8- Hepta-CDF	0.01
1,2,3,4,7,8,9- Hepta-CDF	0.01
Octa-CDF	0.0001

The discharger shall report for each congener the analytical results of the discharge monitoring, including the quantifiable limit and the Method Detection Limit⁶, and the measured or estimated concentration. In addition, the discharger shall multiply each measured or estimated congener concentration by its respective Toxic Equivalent Factors⁷ value and report the sum of these values. This information shall be submitted as part of the discharger's monitoring reports.

⁶ As determined by the procedure found in 40 CFR 136 (revised as of May 14, 1999)

⁷ Table 4 Toxic Equivalency Factors (TEFs) for 2, 3, 7, 8- TCDD Equivalents, pg. 27, Policy for Implementation of Toxics, Standard for Inland Surface Waters, Enclosed Bays and Estuaries of California, Adopted March 2, 2000

CHRONIC TOXICITY TESTING

The discharger shall conduct chronic toxicity testing on the discharge as follow:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Test</u>
Chronic Toxicity	tu _c	Composite	Quarterly
Acute Toxicity	% Survival	Composite	Quarterly

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

<u>Species</u>	<u>Test Duration Effect</u>	<u>(Days)</u>	<u>Reference</u>
Fathead Minnow (Pimephales Promelas)	Larval Survival	7	EPA/600/4-91/002 (Chronic) EPA/600/4-90/027F (Acute)
Water Flea (Ceriodaphnia dubia)	Survival; Number of Young	7	EPA/600/4-91/002 (Chronic) EPA/600/4-90/027F (Acute)

Toxicity Test Reference: Methods for measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition, EPA/600-4-90-027F, August 1993. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water for Freshwater Organisms, EPA/600/4-91/002, July 1994.

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 may 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 may 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 arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
2. The discharger shall report with each sample result the applicable Minimum Level (as described in the California Toxics Policy) and the laboratory current Method Detection Limit, as determined by the procedure in 40 CFR 136 (revised as of May 14, 1999).
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 have personally examined and am familiar with the information submitted in this document and 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 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. The discharger shall report immediately any failure in the waste disposal system by telephone with a follow-up by letter.
8. Daily, weekly, semi-weekly, and monthly monitoring reports shall be submitted by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15 of each year.

9. Reports shall be submitted to:

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

Ordered by:

Executive Officer

June 28, 2000

Date