California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2001-59

FOR

LOLETA COMMUNITY SERVICES DISTRICT
WASTEWATER TREATMENT FACILITY (WWTF)

Humboldt County

WASTEWATER MONITORING

Composite samples may be taken by an automatic sampling device approved by the Regional Water Board Executive Officer (Executive Officer) or by grab samples. In compositing grab samples, the sampling interval shall not exceed one hour. The following shall constitute the wastewater monitoring program.

Influent Monitoring

Constituent	Unit	Type of Sample	Frequency
BOD (20°C, 5-day)	mg/l	24-hour composite	monthly
Suspended Solids	mg/l	24-hour composite	monthly

Effluent Monitoring (SN 001)

Constituent	Unit	Type of Sample	Frequency
BOD (20°C, 5-day)	mg/l	24-hour composite	monthly
Suspended Solids	mg/l	24-hour composite	monthly
Settleable Solids	ml/l	24-hour composite	weekly
Coliform Organisms (Total)	MPN/100ml	grab	weekly
Chlorine Residual (before and after dechlorination)	mg/l	grab	daily[1]
pH		grab	weekly
Daily Flow	gpd	----	continuous

RECEIVING WATER MONITORING

Samples shall be collected in an ambient background location upstream of the discharge and downstream in the vicinity of the discharge. Samples shall be collected monthly and shall be analyzed for pH and dissolved oxygen.

Visual observations shall be made monthly of the receiving water upstream and downstream of the discharge for evidence of floatables (solids, liquids, foam, scum), visible films (oils, greases,

[1] During normal business hours.

waxes), aquatic growths, and discoloration. Observations shall be recorded and included in quarterly monitoring reports.

Daily flow monitoring (gpd) of receiving waters shall be conducted when wastewater effluent is being discharged to the Eel River. The flow in Eel River shall be that combined flow measured at the United States Geological Survey (USGS) gaging stations at Scotia and Grizzly Creek.

ACUTE TOXICITY MONITORING

The presence of acute toxicity in the effluent shall be determined by conducting 96-hour static or static renewal tests using rainbow trout *Oncorhynchus mykiss* as the test species in accordance with wastewater testing method specified in EPA 600/4-90/027F, 4th edition or subsequent editions. An 8-hour composite sample of effluent shall be collected two times each year during the winter discharge period and when discharge to the Eel River is occurring.

Testing procedures shall be as specified in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA 600/4-90-027F, August 1993 or subsequent editions). The tests shall be conducted with concurrent reference toxicant tests (control samples). Both the reference toxicant and the effluent test must meet all test acceptability criteria as specified in the acute toxicity manual. If the test acceptability criteria are not achieved, then the permittee shall resample and retest within 14 days. Toxicity tests shall be conducted such that pH and temperature conditions shall be maintained the same as in the effluent at the time the test sample is collected. Ammonia, pH and temperature shall be recorded at 24-hour intervals during the test and shall be reported with the toxicity test results.

If the acute toxicity effluent limitation is exceeded, the permittee shall initiate a Toxicity Reduction Evaluation (TRE) in accordance with **E. GENERAL PROVISION** 25. Toxicity Identification, Source and Reduction Evaluations for Acute and Chronic Toxicity.

CHRONIC TOXICITY MONITORING

1. Chronic Toxicity Monitoring Requirements

   a. Sampling. The permittee shall collect 8-hour composite samples of effluent (SN 001) for critical life stage toxicity testing as indicated below. For toxicity tests requiring renewals, 8-hour composite samples collected on consecutive days are required.

   b. Test Species: Chronic toxicity shall be monitored by using critical life stage test(s) and the most sensitive test specie(s) identified by screening phase testing in **E. GENERAL PROVISION** 24 (d) of Waste Discharge Requirements Order No. R1-2001-59. Test specie(s) shall be approved by the Executive Officer. Two test species may be required if test data indicate that there is alternating sensitivity between the two species.

   c. Frequency:

Routine Monitoring:	Twice per year
Accelerated Monitoring:	Quarterly, or as otherwise specified by the Executive Officer.

d. Conditions for Accelerated Monitoring: The permittee shall conduct accelerated monitoring when either of the following conditions are exceeded:

Three-sample median value of 1 TUc, or
Single-sample maximum value of 2 TUc.

e. Methodology: Sample collection, handling and preservation shall be in accordance with EPA protocols. The test methodology used shall be in accordance with the references cited in this Permit, or as approved by the Executive Officer. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

f. Dilution Series: The permittee shall conduct tests at 100 percent, 85 percent, 70 percent, 50 percent, and 25 percent of its initial strength. Dilution and control waters shall be obtained from an area unaffected by the discharge in the receiving waters. Standard dilution water may be used if the above sources exhibit toxicity or if approved by the Executive Officer.

2. Chronic Toxicity Reporting Requirements

a. Routine Reporting: Toxicity test results for the current reporting period shall include, at a minimum, for each test:
b. sample date(s)

i. test initiation date
ii. test species
iii. end point values for each dilution (e.g. number of young, growth rate, percent survival)
iv. NOEC value(s) in percent effluent
v. IC_{15}, IC_{25}, IC_{40}, and IC_{50} values (or EC_{15}, EC_{25} ... etc.) in percent effluent
vi. TUc values (100/NOEC, 100/IC_{25}, and 100/EC_{25})
vii. Mean percent mortality (±s.d.) after 96 hours in 100% effluent (if applicable)
viii. NOEC and LOEC values for reference toxicant test(s)
ix. IC_{50} or EC_{50} value(s) for reference toxicant test(s)
x. Available water quality measurements for each test (ex. pH, D.O., temperature, conductivity, hardness, salinity, ammonia)

c. Compliance Summary: The results of the chronic toxicity testing shall be provided in the most recent self-monitoring report and shall include a summary table of chronic toxicity data from at least eleven of the most recent samples. The information in the table shall include the items listed above under 2.a., item numbers i, ii, iii, vi (IC_{25} or EC_{25}), vii, and viii.

After at least four test rounds, the permittee may request the Executive Officer to decrease the required frequency of testing, and/or to reduce the number of compliance species to one. Such a request may be made only if toxicity exceeding the TUc values specified in the effluent limitations was never observed using that test specie.

REPORTING

Monitoring reports shall be submitted to the Regional Water Board monthly. If holiday work schedules prevent sample collection on the date specified by this monitoring program, a substitute sample shall be collected and an explanation of the circumstances shall be included with the self-monitoring report. Monitoring reports are due in the Regional Water Board office by the first day of the second month following sampling.

Ordered by _____

Lee A. Michlin
Executive Officer

June 28, 2001

(Loleta M&R)