California Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM
ORDER NO. R1-2000-15

FOR

CITY OF RIO DELL
675 Wildwood Avenue
Rio Dell, California

Humboldt County

WASTEWATER MONITORING

An Influent monitoring station shall be established at the plant headworks. An 8-hour composite sample of influent shall be collected monthly when discharge occurs to the Eel River. The sample shall be analyzed for suspended solids and for biochemical oxygen demand.

An "effluent" monitoring station shall be established where samples of effluent can be collected following all treatment and just prior to discharge. The following shall constitute the effluent monitoring:

- A grab sample shall be collected whenever the flow during a day exceeds 1.5 million gallons. The sample shall be analyzed for settleable solids and total coliform.

- A grab sample shall be collected daily and shall be analyzed for chlorine residual. Chlorine residual monitoring shall be conducted only when effluent is discharged to the Eel River or its tributaries.

- A grab sample of effluent shall be collected weekly and shall be analyzed for total coliform organisms, pH and settleable solids.

- An 8-hour composite sample of effluent shall be collected monthly and shall be analyzed for suspended solids and biochemical oxygen demand. Effluent composite samples shall be collected on the same day during the winter discharge season that influent composite samples are collected.

- Daily discharge volumes.

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. An 8-hour composite sample of effluent shall be collected four times each year, at equal time intervals, 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 manual. If the test acceptability criteria are not achieved, then the permittee must resample and re-test within 14 days.

For effluent samples which exhibits less than a 90 percent survival as compared to the control, the discharger shall immediately resample the discharge and repeat the bioassay test. If the sample exhibits less that a 70 percent survival rate, as compared to the controls, the discharger shall resample and reanalyze the discharge immediately and again after 15 days. In these events, the discharger shall verbally notify the Regional Water Board of such occurrence within 48 hours of occurrence and follow-up in writing within 2 weeks.

The test results must be reported according to the acute manual chapter on Report Preparation, and shall be attached to the Discharger's Monitoring Report (DMR).

With the July 15 monitoring report the discharger shall summarize the season test results and provide an analysis regarding the toxicity of the discharge.

Effluents are considered acutely toxic when there is 1) less than 90 percent survival, 70 percent of the time based on any monthly median or 2) less than 70 percent survival, any time.

Whenever the acute toxicity effluent limitation has been exceeded, the permittee shall:

a) Initiate a Toxicity Identification Evaluation (TIE) within fifteen days of the exceedance to identify the causes of toxicity. The TIE shall be in accordance with the EPA acute manual

b) Initiate a Toxicity Reduction Evaluation (TRE) within fifteen days of the exceedance to reduce the toxicity. The TRE shall be in accordance with the EPA manual EPA/600/2-88/062 (protocol for municipal discharges).

Report of Evaluation Results

Notify EPA and the Regional Water Board within fifteen days of completion of:

a) The finding of the TIE/TRE or other investigation to identify the cause of the toxicity;

b) The actions the permittee has taken or will take to mitigate the impact of the discharge, to correct the noncompliance and prevent the recurrence of toxicity;

c) Where corrective actions (including TIE or TRE) have not been completed, a time schedule under which the corrective actions will be implemented.

SLUDGE DISPOSAL

Sludge Monitoring

Prior to applying sludge to new parcels, the permittee shall obtain a representative number of soil samples to determine background concentrations of metal compounds presented in Section D.4.c of this Order.

Once per year, prior to land application of the sludge, a representative composite sample of dewatered sludge shall be obtained and analyzed for the following:

Ammonia Nitrogen	Total Phosphorous
Nitrate Nitrogen	Ortho Phosphorous
Organic Nitrogen	Percent Solids

Every three years, a representative sample of the dewatered sludge shall be obtained and analyzed for the metal compounds listed in Section D. 4.c. of Order No.. Samples shall also be analyzed using EPA 601 methodology.

At individual application areas, every fifth year of usage representative soil samples of the application area shall be obtained and analyzed for the metal compounds listed in Section D. 4.c. of Order No..

Sludge Disposal Area Monitoring

Annually, by January 15 of each year, the discharger shall provide a report to the Regional Water Board regarding the previous year's sludge application activities, including, but not limited to the following:

1. The quantity of sludge produced at the POTW and volume disposed.
2. The specific location of the application site shown on a map along with soil types.
3. Determination of agronomic nitrogen and phosphorous needs, accounting for all nutrient sources and crop type, and calculation of maximum sludge loading rate.
4. The amount of sludge and nitrogen applied in pounds per acre.
5. Analysis of soil pH prior to sludge disposal.
6. Current years and cumulative metals loading per application area.

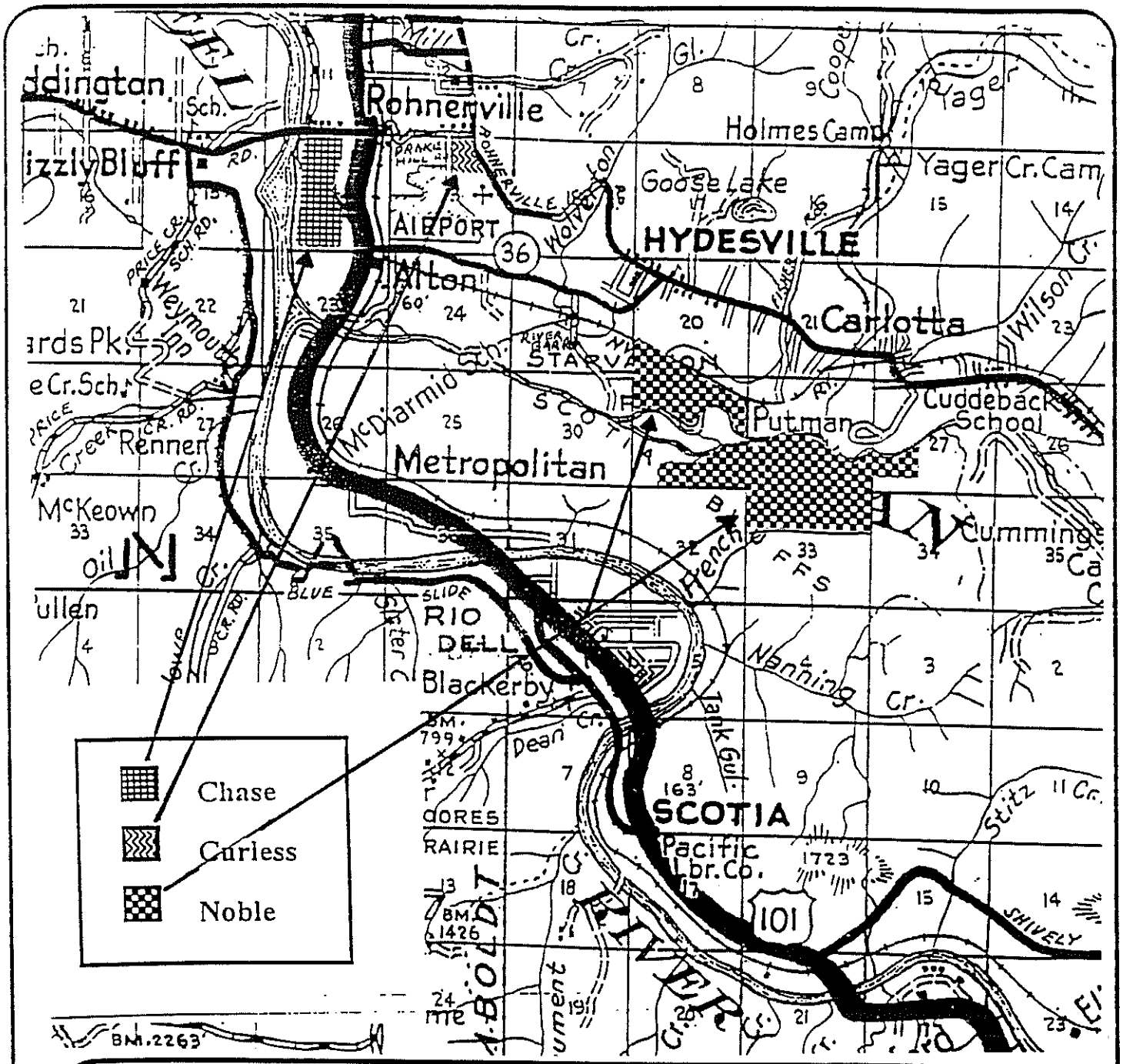
REPORTING

Monthly monitoring reports shall be submitted to the Regional Water Board by the 15th day of the following month. Numerical data shall be tabulated and narrative reporting statements shall be in letter form and signed by the representative of the permittee in accordance with **E. PROVISIONS,** Signatory Requirements. All information gathered more frequently than required by this monitoring program shall be submitted along with the monthly reports for review.

Ordered by_____
Lee A. Michlin
Executive Officer

February 24, 2000 (RDSMR.doc)

ATTACHMENT A



LOCATION MAP
LAND APPLICATION SITES

CITY OF FORTUNA
AND
CITY OF RIO DELL

HUMBOLDT COUNTY