CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. R7-2002-0001
FOR
MCCABE UNION SCHOOL DISTRICT, OWNER/OPERATOR
MUNICIPAL WASTEWATER TREATMENT PLANT, COLLECTION AND DISPOSAL SYSTEMS
El Centro – Imperial County

Location of Discharge: NW¼ of Section 23, T16S, R13E, SBB&M, through Outfall No. 001

MONITORING

1. The collection, preservation and holding times of all samples shall be in accordance with United States 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" (40CFR 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.

INFLUENT MONITORING

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

Constituent	Unit	Type of Sample	Sampling Frequency[1]
$20^{O}C$ BOD_5	mg/L[2]	8-Hr. Composite	Semi-Monthly[3]
Total Suspended Solids	mg/L	8-Hr. Composite	Semi-Monthly[3]

[1] During school year, considered as the months of September through May
[2] mg/L - milligrams-per-Liter
[3] Semi-Monthly - twice every month

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. Wastewater discharged to Wildcat Drain shall be monitored for the following constituents:

Constituent	Unit	Type of Sample	Sampling Frequency[1]
Daily Effluent Discharge	MGD[4]	Flow Meter Reading	Daily[5]
Chlorine Residual[6]	mg/L	Grab	Daily
Escherichia Coli (E. Coli)[8]	MPN[9]/100 ml	Grab	Five Samples per Month[10]
pH (Hydrogen Ion)	pH Units	Grab	Semi-Monthly
Total Suspended Solids	mg/L lbs/day[7]	8-Hr. Composite	Semi-Monthly
$20^{O}C$ BOD_5	mg/L lbs/day[7]	8-Hr. Composite	Semi-Monthly
Total Dissolved Solids	mg/L	8-Hr. Composite	Monthly
Temperature	^{o}F	Grab	Monthly
Dissolved Oxygen	mg/L	Grab	Monthly
Nitrates as Nitrogen (N)	mg/L	Grab	Semi Annual [11]
Nitrites as N	mg/L	Grab	Semi Annual
Total Nitrogen as N	mg/L	Grab	Semi Annual
Ammonia Nitrogen as N	mg/L	Grab	Semi Annual
Total Phosphate as Phosphorus (P)	mg/L	Grab	Semi Annual
Ortho-Phosphate as P	mg/L	Grab	Semi Annual

[4] Million gallons per day
[5] Reported monthly with monthly average daily flow
[6] Monitoring for chlorine residual shall begin on the day chlorination of the effluent is initiated
[8] Monitoring for E. Coli shall begin October 1, 2002
[9] MPN -Most Probable Number
[10] Five samples equally spaced over a 30-day period with a minimum of one sample per week
[7] Monitoring for mass loading shall begin after start up of the new facility
[11] Semi-Annual - Two times per year (October, April)

Oil and Grease	mg/L	Grab	Annual

RECEIVING WATER MONITORING

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

Station	Description
R-1	Not to exceed 200 feet downstream of the discharge pipe outlet.

Constituent	Unit	Type of Sample	Sampling Frequency
Temperature	°F	Grab	Semi Annual
Dissolved Oxygen	mg/L	Grab	Semi Annual
pH	pH Units	Grab	Semi Annual
Total Dissolved Solids	mg/L	Grab	Semi Annual
Nitrates as N	mg/L	Grab	Semi Annual
Nitrites as N	mg/L	Grab	Semi Annual
Total Nitrogen as N	mg/L	Grab	Semi Annual
Ammonia Nitrogen as N	mg/L	Grab	Semi Annual
Total Phosphate as Phosphorus (P)	mg/L	Grab	Semi Annual
Ortho-Phosphate as P	mg/L	Grab	Semi Annual

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

Notes on receiving water conditions shall be summarized in the monitoring report. A log shall be kept of the receiving water conditions at Station R1.

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

By June 2002, 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 within 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	TEF
2,3,7,8- Tetra-Chlorodibenzo-p-dioxins (CDD)	1
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
Octa-CDD	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 effluent monitoring, including the quantifiable limit and the Method Detection Limit,[12] and the measured or estimated concentration. In addition, the discharger shall multiply each measured or estimated congener concentration by its respective Toxic Equivalent Factors[13] value and report the sum of these values. This information shall be submitted as part of the discharger's monitoring reports.

OPERATION AND MAINTENANCE

The discharger shall report the following:

Activity	Units	Reporting
Amount of calcium hypochlorite used	Pounds	Daily[14]
Amount of sodium sulfite used	Pounds	Daily

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.

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 annually on the quantity, location and method of disposal of all sludge and similar solid material being produced at the wastewater treatment plant facility.

Sludge that is generated at the treatment facility and removed for disposal shall be sampled and analyzed for the following:

Constituent	Unit	Type of Sample	Sampling Frequency
Arsenic	mg/kg[15]	Composite	Annually
Cadmium	mg/kg	Composite	Annually
Copper	mg/kg	Composite	Annually
Lead	mg/kg	Composite	Annually

[12] As determined by the procedure found in 40 CFR 136 (revised as of May 14, 1999)
[13] Table 4 Toxic Equivalency Factors TEF's) 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
[14] Daily - Reported monthly with monthly average daily usage calculated
[15] mg/kg = milligrams-per-kilogram

Constituent	Unit	Type of Sample	Sampling Frequency
Mercury	mg/kg	Composite	Annually
Molybdenum	mg/kg	Composite	Annually
Nickel	mg/kg	Composite	Annually
Selenium	mg/kg	Composite	Annually
Zinc	mg/kg	Composite	Annually
Fecal Coliform	MPN/gram	Composite	Annually

EFFLUENT TOXICITY TESTING

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

Test	Unit	Type of Sample	Minimum Frequency of Test
Chronic Toxicity	TU_c[16]	8-Hr. Composite	Semi-Annually [17]
Acute Toxicity[18]	TU_a[19] & % Survival[20]	8-Hr. Composite	Semi-Annually[17]

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

Species	Effect	Test Duration (Days)	Reference
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.

[16] Chronic Toxicity Units
[17] Effluent Toxicity samples shall be collected on the last week before winter and summer vacation
[18] Acute bioassay results can be calculated from chronic bioassay test for Pimephales promelas
[19] Acute Toxicity Units
[20] % Survival - Percent survival in 100 percent effluent at 96 hours

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 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 96-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. 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).

4. 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.

5. 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.

6. 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.

7. 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."

8. 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.

9. Reporting of any failure in the waste disposal system shall be as described as in Provision No. 29 to the Regional Board Office and to the Office of Emergency Services.

10. The discharger shall attach a cover letter to the Self Monitoring Report. The information contained in the cover letter shall clearly identify violations of the WDR's, discuss corrective actions to be taken or planned and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.

11. The discharger shall submit copies of any test results received from contract laboratories regarding the analysis of any samples pertaining to the monitoring requirements in this permit.

12. 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.

13. Submit reports to:

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

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

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

_____
Executive Officer

_____
Date