ATTACHMENT T

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM No. CI-5662
FOR
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Long Beach Water Reclamation Plant)
(NPDES NO. CA0054119)
Order No. R4-2003-0123

The Discharger shall implement this monitoring and reporting program within 10 days after effective date of this Order.

I. SUBMITTAL OF MONITORING REPORTS

A. All monthly monitoring reports must be received by the fifteenth day of the **third** month following each monthly sampling period. The first monitoring report under this Program shall be received at the Regional Board by November 15, 2002, and will cover the monitoring period of September 2002.

B. By April 15th of each year, the Discharger shall submit an annual summary report containing a discussion of the previous year's effluent and receiving water monitoring data, as well as graphical and tabular summaries of the data. The first annual report under this Program shall be received at the Regional Board by April 15, 2003, and will cover the monitoring period of calendar year 2002. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. The Regional Board may request electronic submittal of data at any time.

C. All monitoring and annual summary reports must be addressed to the Regional Board, Attention: Information Technology Unit. Reference the reports to Compliance File No. CI-5662 to facilitate routing to the appropriate staff and file.

D. Database Management System: The Regional Board and the State Water Resources Control Board (State Board) are developing a database compliance monitoring management system that may require the Discharger to submit the monitoring and annual summary reports electronically when it becomes fully operational.

II. MONITORING REQUIREMENTS

A. All samples shall be representative of the waste discharge under conditions of peak load. Quarterly effluent analyses shall be performed during the months of February, May, August, and November. Semiannual analyses shall be performed

during the months of February and August. Annual analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Board, state the reason why monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual, and annual analyses shall be reported in the monthly monitoring report following the analysis.

B. Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; or where no methods are specified for a given pollutant, by methods approved by the Regional Board or State Board. The laboratory conducting analyses shall be certified by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Regional Board for that particular parameter. A copy of the laboratory certification shall be submitted with the annual summary report.

C. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Discharger shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Board. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the monthly report.

D. For all bacteriological analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000. The detection methods used for each analysis shall be reported with the results of the analyses.

Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR Part 136 (revised May 14, 1999), unless alternate methods have been approved in advance by the United State Environmental Protection Agency (USEPA) pursuant to 40 CFR Part 136.

Detection methods used for enterococcus shall be those presented in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure* or any improved method determined by the Regional Board to be appropriate.

III. REPORTING REQUIREMENTS

A. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), the minimum level and the reported Minimum Level (RML) for each pollutant. The MLs are those published by the State Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California,* March 2, 2000, Appendix 4. The ML represents the lowest quantifiable concentration in a sample based on the proper application

of all method-based analytical procedures and the absence of any matrix interference. MLs also represent the lowest standard concentration in the calibration curve for a specific analytical technique after the application of appropriate method-specific factors. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the reported minimum level.

B. The Discharger shall select the analytical method that provides a ML lower than the permit limit established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR 136, and obtains approval for a higher ML from the Executive Officer, as provided for in III.E. of this section. If the effluent limitation is lower than all the MLs in Appendix 4, SIP, the Discharge must select the method with the lowest ML for compliance purposes. The Discharger shall include in the Annual Summary Report a list of the analytical methods employed for each test.

C. The Discharger shall instruct its laboratories to establish calibration standards so that the ML (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. In accordance with section E, below, the Discharger's laboratory may employ a calibration standard lower than the ML in Appendix 4 of the SIP.

For the purpose of reporting compliance with numerical effluent limitations and receiving water limitations, analytical data shall be reported using the following reporting protocols:

i. Sample results greater than or equal to the RML must be reported "as measured" by the laboratory (i.e., the measured chemical concentration in the sample); or

ii. Sample results less than the RML, but greater than or equal to the laboratory's MDL, must be reported as "Detected, but Not Quantified", or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to Est. Conc.); or

iii. Sample results less than the laboratory's MDL must be reported as "Not-Detected", or ND.

D. In accordance with Section 2.4.3 of the SIP, the Regional Board Executive Officer, in consultation with the State Board's Quality Assurance Program Manager, may

establish an ML that is not contained in Appendix 4 of the SIP to be included in the discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Appendix 4, SIP;

2. When the discharger and the Regional Board agree to include in the permit a test method that is more sensitive than those specified in 40 CFR 136 (revised as of May 14, 1999);

3. When a discharger agrees to use an ML that is lower than those listed in Appendix 4;

4. When a discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 and proposes an appropriate ML for the matrix; or,

5. When the discharger uses a method which quantification practices are not consistent with the definition of the ML. Examples of such methods are USEPA-approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the discharger, the Regional Board, and the State Water Resources Control Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

If there is any conflict between foregoing provisions and the State Implementation Policy (SIP), the provisions stated in the SIP (Section 2.4) shall prevail.

E. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.

F. The Discharger shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant. This record shall be made available to the Regional Board upon request and a spill summary shall be included in the annual summary report.

1. For spills/bypass of 500 gallons or more that flowed to receiving waters or entered a shallow ground water aquifer or has public exposure, the Discharger shall report such spills to the Regional Board and the local health agency by telephone or electronically as soon as possible but not later than 24 hours of knowledge of the incident. The following information shall be included in the report: location; date and time of spill; volume and nature of

the spill; cause(s) of the spill; mitigation measures implemented; and corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.

2. For spills that reach receiving waters, the Discharger shall obtain and analyze grab samples for total and fecal coliforms, and enterococcus, upstream and downstream of the point of entry of the spill. This monitoring shall be on a daily basis from time the spill is known until the results of two consecutive sets of bacteriological monitoring indicate the return to the normal level or cessation of monitoring is authorized by the County Department of Health Services.

3. Regional Board notification shall be followed by a written report five working days after verbal/electronic notification.

G. The Discharger shall inform the Regional Board well in advance of any construction activity that could potentially affect compliance with applicable requirements.

IV. MONITORINGREQUIREMENTS

A. Pursuant to the Code of Federal Regulations [40 CFR Section 122.41(j) and Section 122.48(b)], the monitoring program for a discharger receiving an NPDES permit must be designed to determine compliance with NPDES permit terms and conditions, and demonstrate that State water quality standards are met.

B. Since compliance monitoring focuses on the effects of a point source discharge, it is not designed to assess impacts from other sources of pollution (e.g., non-point source run-off, aerial fallout) or to evaluate the current status of important ecological resources on a regional basis.

A watershed-wide Monitoring Program will be developed within one year from the effective date of this Order and permit for the San Gabriel River Watershed, under the leadership of the Los Angeles and San Gabriel Rivers Watershed Council, and in consultation with stakeholders. The goals of the watershed-wide monitoring program will include evaluating or assessing: compliance with receiving water objectives, trends in surface water quality, impacts to beneficial uses, the health of the biological community, and data needs for modeling contaminants of concern. On January 17, 2001, Regional Board staff gave a presentation before the Watershed Council, discussed components of the tentative NPDES permits for the five CSDLAC WRPs, and requested their future participation in the development of a watershed-wide monitoring program. The Discharger shall participate in the development and implementation of the watershed-wide monitoring program, and submit a copy of the proposed program to the Regional Board.

C. Changes to the compliance monitoring program may be required to fulfill the goals of the watershed-wide monitoring program, while retaining the compliance monitoring component required to evaluate compliance with the NPDESpermit. Revisions to the County Sanitation Districts of Los Angeles (CSDLAC's) program will be made under the direction of the Regional Board, as necessary, to accomplish the goal, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, and/or the number of samples collected.

D. Until such time when a watershed-wide monitoring program is developed, CSDLAC shall implement the monitoring program in the following sections.

V. INFLUENT MONITORING REQUIREMENTS

A. Influent monitoring is required:

1. To determine compliance with the permit conditions for BOD_5 20°C and suspended solids removal rates;

2. To assess treatment plant performance;

3. To assess the effectiveness of the pretreatment program; and,

4. As a requirement of the Pollution Minimization Program.

B. Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and/or where representative samples of the influent can be obtained. The date and time of sampling shall be reported with the analytical results.

C. Samples for influent $BOD_5$20°C and suspended solids analysis shall be obtained on the same day that the effluent $BOD_5$20°C and suspended solids samples are obtained to demonstrate percent removal. Similarly, sampling for other constituents shall also be coordinated with effluent sampling.

D. The following shall constitute the influent monitoring program:

CTR #	Constituents	Units	Type of Sample	Minimum Frequency of Analysis
	pH	pH units	grab	weekly
	Suspended solids	mg/L	24-hour composite	weekly

CTR #	Constituents	Units	Type of Sample	Minimum Frequency of Analysis
	Flow	mgd	recorder	continuous[1]
	BOD_5 20°C	mg/L	24-hour composite	weekly
8	Mercury	µg/L	24-hour composite	quarterly[2]
14	Cyanide	µg/L	24-hour composite	quarterly[2]
16	2,3,7,8-TCDD (Dioxin)	µg/L	24-hour composite	quarterly[2]
74	Dibenzo(a,h)anthracene	µg/L	24-hour composite	quarterly[2]
92	Indeno(1,2,3-cd)pyrnen	µg/L	24-hour composite	quarterly[2]
105	Lindane (gamma-BHC)	µg/L	24-hour composite	quarterly[2]
	Remaining EPA priority pollutants excluding asbestos	µg/L	24-hour composite/ grab for VOCs and Chromium IV	semiannually

VI. EFFLUENT MONITORING REQUIREMENTS

A. Effluent monitoring is required to:

1. Determine compliance with NPDES permit conditions;

2. Identify operational problems and aid in improving plant performance;

3. Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data; and,

4. Determine Reasonable Potential Analysis for toxic pollutants.

B. An effluent sampling station shall be established for each point of discharge and shall be located downstream of any in-plant return flows where representative samples of the effluent (after receiving all treatment) can be obtained. Effluent samples may be obtained at a single station provided that such station is representative of the effluent quality at all discharge points. Any changes in sampling station locations must be approved by the Executive Officer.

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1 Where continuous monitoring of a constituent is required, the following shall be reported:

Total waste flow - Total daily flow and peak daily flow (24-hour basis);

Total residual chlorine - maximum daily value (24-hour basis);

Turbidity - Maximum daily value, total amount of time each day that turbidity exceeded five (5) turbidity units, the flow-proportioned average daily value.

2 If CSDLAC implements a PMP, then CSDLAC is required to conduct "quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system," according to SIP Section 2.4.5.1 item 2. However, if CSDLAC does not implement the PMP, then the frequency of monitoring will revert to semiannually.

C. The following shall constitute the effluent monitoring program:

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
	Total waste flow	mgd	recorder	continuous[1]
	Turbidity[2]	NTU	recorder	continuous[1]
	Total residual chlorine	mg/L	recorder	continuous[1]
	Total coliform[3]	MPN/100 ml	grab	daily
	Fecal coliform[3]	MPN/100 ml	grab	daily
	Temperature	°F	grab	daily
	pH	pH units	grab	daily
	Settleable solids	ml/L	grab	daily
	Suspended solids	mg/L	24-hour comp.	daily
	BOD_5 20°C [4]	mg/L	24-hour comp.	weekly
	Oil and grease	mg/L	grab	monthly
	Dissolved oxygen	mg/L	grab	monthly
	Total dissolved solids	mg/L	24-hour comp.	monthly
	Chloride	mg/L	24-hour comp.	monthly
	Sulfates	mg/L	24-hour comp.	monthly
	Boron	mg/L	24-hour comp.	monthly
	Fluoride	mg/L	24-hour comp.	monthly
	Ammonia nitrogen	mg/L	24-hour comp.	monthly
	Nitrate nitrogen	mg/L	24-hour comp.	monthly
	Nitrite nitrogen	mg/L	24-hour comp.	monthly
	Organic nitrogen	mg/L	24-hour comp.	monthly
	Total kjeldahl nitrogen(TKN)	mg/L	24-hour comp.	monthly
	Total nitrogen	mg/L	24-hour comp.	monthly
	Total phosphate	mg/L	24-hour comp.	monthly
	Orthophosphate-P	mg/L	24-hour comp.	monthly
	Algal biomass (Chlorophyll A) [5]	mg/L	24-hour comp.	monthly

3 Coliform and turbidity samples shall be obtained at some point in the treatment process at a time when wastewater flow and characteristics are most demanding on the treatment facilities, filtration, and disinfection procedures. Fecal coliform testing shall be conducted only if total coliform test result is positive.

4 If any result of a weekly BOD analysis yields a value greater than the 30-day average limit, the frequency of analysis shall be increased to daily within one week of knowledge of the test result for at least 30 days and until compliance with the 7-day and 30-day average BOD limits is demonstrated; after which the frequency shall revert to weekly.

5 Algal biomass as chlorophyll a.

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
	Surfactants (MBAS) [6]	mg/L	24-hour comp.	monthly
	Surfactants (CTAS) [6]	mg/L	24-hour comp.	monthly
	Total hardness ($CaCO_3$)	mg/L	24-hour comp.	weekly
	MTBE	µg/L	grab	semiannually
	Barium	µg/L	24-hour comp.	monthly
	Radioactivity [7]	PCi/L	grab	semiannually
	Chronic toxicity	TUc	24-hour comp.	monthly
	Acute toxicity	% Survival	grab	quarterly
1	Antimony	µg/L	24-hour comp.	quarterly
2	Arsenic	µg/L	24-hour comp.	monthly
3	Beryllium	µg/L	24-hour comp.	quarterly
4	Cadmium	µg/L	24-hour comp.	quarterly
5a	Chromium III	µg/L	24-hour comp.	quarterly
5b	Chromium VI	µg/L	grab	quarterly
6	Copper	µg/L	24-hour comp.	quarterly
	Iron	µg/L	24-hour comp.	quarterly
7	Lead	µg/L	24-hour comp.	quarterly
8	Mercury	µg/L	24-hour comp.	monthly
9	Nickel	µg/L	24-hour comp.	quarterly
10	Selenium	µg/L	24-hour comp.	quarterly
11	Silver	µg/L	24-hour comp.	quarterly
12	Thallium	µg/L	24-hour comp.	quarterly
13	Zinc	µg/L	24-hour comp.	quarterly
14	Cyanide	µg/L	24-hour comp.	monthly
16	2,3,7,8-TCDD (Dioxin) [8]	µg/L	24-hour comp.	semiannually

6 MBAS is Methylene blue active substances and CTAS is cobalt thiocyanate active substances.

7 If gross α activity exceeds 5 pCi/L in any sample, measurement of Ra^{226} shall be made; if Ra^{226} exceeds 3 pCi/L, measurement of Ra^{228} shall be made. If gross β activity exceeds 50 pCi/L in any sample, an analysis of the sample shall be performed to identify the major constituents present.

8 In accordance with the SIP, the Discharger shall conduct effluent monitoring for the following seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners:

Isomer Group	Toxicity Equivalence Factor (TEF)	Frequency of Monitoring (for at least 3 years)
2,3,7,8-tetra CDD	1.0	Once per dry season and once per wet season
1,2,3,7,8-pentaCDD	1.0	Once per dry season and once per wet season
1,2,3,4,7,8-HexaCDD	0.1	Once per dry season and once per wet season
1,2,3,6,7,8-HexaCDD	0.1	Once per dry season and once per wet season
1,2,3,7,8,9-HexaCDD	0.1	Once per dry season and once per wet season
1,2,3,4,6,7,8-HeptaCDD	0.01	Once per dry season and once per wet season
octaCDD	0.0001	Once per dry season and once per wet season
2,3,7,8-Tetra CDF	0.1	Once per dry season and once per wet season
1,2,3,7,8-PentaCDF	0.05	Once per dry season and once per wet season

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
17	Acrolein	µg/L	grab	semiannually
18	Acrylonitrile	µg/L	grab	quarterly
19	Benzene	µg/L	grab	semiannually
20	Bromoform	µg/L	grab	semiannually
21	Carbon tetrachloride	µg/L	grab	quarterly
22	Chlorobenzene	µg/L	grab	semiannually
23	Dibromochloromethane	µg/L	grab	quarterly
24	Chloroethane	µg/L	grab	semiannually
25	2-Chloroethylvinyl ether	µg/L	grab	semiannually
26	Chloroform	µg/L	grab	quarterly
27	Bromodichloromethane	µg/L	grab	quarterly
28	1,1-Dichloroethane	µg/L	grab	semiannually
29	1,2-Dichloroethane	µg/L	grab	semiannually
30	1,1-Dichloroethylene	µg/L	grab	semiannually
31	1,2-Dichloropropane	µg/L	grab	semiannually
32	1,3-Dichloropropylene	µg/L	grab	semiannually
33	Ethylbenzene	µg/L	grab	quarterly
34	Methyl bromide (Bromomethane)	µg/L	grab	semiannually
35	Methyl chloride (Chloromethane)	µg/L	grab	semiannually
36	Methylene chloride	µg/L	grab	quarterly
37	1,1,2,2-Tetrachloroethane	µg/L	grab	semiannually
38	Tetrachloroethylene	µg/L	grab	quarterly
39	Toluene	µg/L	grab	quarterly
40	1,2-Trans-dichloroethylene	µg/L	grab	semiannually

2,3,4,7,8-PentaCDF	0.5	Once per dry season and once per wet season
1,2,3,4,7,8-HexaCDF	0.1	Once per dry season and once per wet season
1,2,3,6,7,8-HexaCDF	0.1	Once per dry season and once per wet season
1,2,3,7,8,9-HexaCDF	0.1	Once per dry season and once per wet season
2,3,4,6,7,8-HexaCDF	0.1	Once per dry season and once per wet season
1,2,3,4,6,7,8-HeptaCDF	0.01	Once per dry season and once per wet season
1,2,3,4,7,8,9-HeptaCDF	0.01	Once per dry season and once per wet season
octaCDF	0.0001	Once per dry season and once per wet season

Major dischargers are required to sample the effluent once during the dry season and once during the wet season for at least three years (between now and April 2003). The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i)., (i.e., $TEQ_i = C_i \times TEF_i$). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

$$\text{Dioxin concentration in effluent} = \sum_{1}^{17} (TEQ_i) = \sum_{1}^{17} (C_i)(TEF_i)$$

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
41	1,1,1-Trichloroethane	µg/L	grab	semiannually
42	1,1,2-Trichloroethane	µg/L	grab	semiannually
43	Trichloroethylene	µg/L	grab	semiannually
44	Vinyl chloride	µg/L	grab	semiannually
45	2-Chlorophenol	µg/L	24-hour comp.	semiannually
46	2,4-Dimethylphenol	µg/L	24-hour comp.	semiannually
47	2,4-Dimethylphenol	µg/L	24-hour comp.	semiannually
48	2-Methyl-4,6-dinitrophenol	µg/L	24-hour comp.	semiannually
49	2,4-Dinitrophenol	µg/L	24-hour comp.	semiannually
50	2-Nitrophenol	µg/L	24-hour comp.	semiannually
51	4-Nitrophenol	µg/L	24-hour comp.	semiannually
52	3-Methyl-4-chlorophenol	µg/L	24-hour comp.	semiannually
53	Pentachlorophenol	µg/L	24-hour comp.	semiannually
54	Phenol	µg/L	24-hour comp.	semiannually
55	2,4,6-Trichlorophenol	µg/L	24-hour comp.	semiannually
56	Acenaphthene	µg/L	24-hour comp.	semiannually
57	Acenaphthylene	µg/L	24-hour comp.	semiannually
58	Anthracene	µg/L	24-hour comp.	semiannually
59	Benzidine	µg/L	24-hour comp.	semiannually
60	Benzo(a)anthracene	µg/L	24-hour comp.	semiannually
61	Benzo(a)pyrene	µg/L	24-hour comp.	quarterly
62	Benzo(b)fluoranthene	µg/L	24-hour comp.	quarterly
63	Benzo(g,h,i)perylene	µg/L	24-hour comp.	semiannually
64	Benzo(k)fluoranthene	µg/L	24-hour comp.	semiannually
65	Bis(2-chloroethoxy)methane	µg/L	24-hour comp.	semiannually
66	Bis(2-chloroethyl)ether	µg/L	24-hour comp.	semiannually
67	Bis(2-chloroisopropyl)ether	µg/L	24-hour comp.	semiannually
68	Bis(2-ethylhexyl)phthalate	µg/L	24-hour comp.	quarterly
69	4-Bromophenyl phenyl ether	µg/L	24-hour comp.	semiannually
70	Butylbenzyl phthalate	µg/L	24-hour comp.	semiannually
71	2-Chloronaphthalene	µg/L	24-hour comp.	semiannually
72	4-Chlorophenyl phenyl ether	µg/L	24-hour comp.	semiannually
73	Chrysene	µg/L	24-hour comp.	quarterly
74	Dibenzo(a,h)anthracene	µg/L	24-hour comp.	monthly
75	1,2-Dichlorobenzene	µg/L	24-hour comp.	semiannually
76	1,3-Dichlorobenzene	µg/L	24-hour comp.	semiannually
77	1,4-Dichlorobenzene	µg/L	24-hour comp.	semiannually
78	3,3'-Dichlorobenzidine	µg/L	24-hour comp.	semiannually
79	Diethyl phthalate	µg/L	24-hour comp.	quarterly
80	Dimethyl phthalate	µg/L	24-hour comp.	semiannually
81	Di-n-butyl phthalate	µg/L	24-hour comp.	semiannually
82	2,4-Dinitrotoluene	µg/L	24-hour comp.	semiannually

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
83	2,6-Dinitrotoluene	µg/L	24-hour comp.	semiannually
84	Di-n-octyl phthalate	µg/L	24-hour comp.	semiannually
85	1,2-Diphenylhydrazine	µg/L	24-hour comp.	semiannually
86	Fluoranthene	µg/L	24-hour comp.	semiannually
87	Fluorene	µg/L	24-hour comp.	semiannually
88	Hexachlorobenzene	µg/L	24-hour comp.	semiannually
89	Hexachlorobutadiene	µg/L	24-hour comp.	semiannually
90	Hexachlorocyclopentadiene	µg/L	24-hour comp.	semiannually
91	Hexachloroethane	µg/L	24-hour comp.	semiannually
92	Indeno(1,2,3-cd)pyrene	µg/L	24-hour comp.	monthly
93	Isophrone	µg/L	24-hour comp.	semiannually
94	Naphthalene	µg/L	24-hour comp.	semiannually
95	Nitrobenzene	µg/L	24-hour comp.	semiannually
96	N-Nitrosodimethylamine (NDMA)	µg/L	24-hour comp.	quarterly
97	N-Nitrosodi-n-propylamine	µg/L	24-hour comp.	semiannually
98	N-Nitrosodiphenylamine	µg/L	24-hour comp.	semiannually
99	Phenanthrene	µg/L	24-hour comp.	semiannually
100	Pyrene	µg/L	24-hour comp.	semiannually
101	1,2,4-Trichlorobenzene	µg/L	24-hour comp.	semiannually
102	Aldrin	µg/L	24-hour comp.	semiannually
103	alpha-BHC	µg/L	24-hour comp.	semiannually
104	beta-BHC	µg/L	24-hour comp.	semiannually
105	gamma-BHC (Lindane)	µg/L	24-hour comp.	monthly
106	delta-BHC	µg/L	24-hour comp.	semiannually
107	Chlordane	µg/L	24-hour comp.	semiannually
108	4,4'-DDT [9]	µg/L	24-hour comp.	semiannually
109	4,4'-DDE [9]	µg/L	24-hour comp.	semiannually
110	4,4- DDD [9]	µg/L	24-hour comp.	semiannually
111	Dieldrin	µg/L	24-hour comp.	semiannually
112	alpha-Endosulfan	µg/L	24-hour comp.	semiannually
113	beta-Endosulfan	µg/L	24-hour comp.	semiannually
114	Endosulfan sulfate	µg/L	24-hour comp.	semiannually
115	Endrin	µg/L	24-hour comp.	semiannually
116	Endrin aldehyde	µg/L	24-hour comp.	semiannually
117	Heptachlor	µg/L	24-hour comp.	semiannually
118	Heptachlor epoxide	µg/L	24-hour comp.	semiannually

9 This shall mean the sum of the p,p' and o,p'isomers.

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
	Polychlorinated biphenyls (PCBs)[10]	See below	See below	See below
119	Aroclor 1016	µg/L	24-hour comp.	semiannually
120	Aroclor 1221	µg/L	24-hour comp.	semiannually
121	Aroclor 1232	µg/L	24-hour comp.	semiannually
122	Aroclor 1242	µg/L	24-hour comp.	semiannually
123	Aroclor 1248	µg/L	24-hour comp.	semiannually
124	Aroclor 1254	µg/L	24-hour comp.	semiannually
125	Aroclor 1260	µg/L	24-hour comp.	semiannually
126	Toxaphene	µg/L	24-hour comp.	semiannually

D. Effluent Toxicity Testing

1. Acute Toxicity Testing

a. The Discharger shall conduct the effluent acute toxicity test on a quarterly basis.

b. If the effluent exceeds the 30-day average acute toxicity limitation, the Discharger shall conduct six additional tests over a six-week period. These additional tests shall begin within 24 hours of receipt of initial failed test results.

i If all of the additional tests are below the 30-day average acute toxicity limitation, the discharger may resume regular monthly testing.

ii If the results of any of the six accelerated tests are above the 30-day average limitation, the Discharger will continue to monitor weekly, until six consecutive weekly tests are below the 30-day average limitation. At that time, the Discharger may resume regular monthly testing.

iii If weekly testing indicates exceedance of the 30-day average limitation (i.e. the average of four consecutive weekly tests exceeds the 30-day average limitation) then the Discharger shall begin a Toxicity Reduction Evaluation (TRE). The TRE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet objective.

10 PCBs (polychlorinated biphenyls) shall mean the sum of Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, and Aroclor 1260.

iv If the results of any of two of the six accelerated tests, or any two tests in a six week period of weekly testing, exceed the weekly average limitation, then the Discharger shall begin a Toxicity Reduction Evaluation (TRE). The TRE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet objective.

c. The Discharger shall conduct acute toxicity tests on 100 % effluent grab samples by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms*, Fourth Edition, August, 1993 (EPA/600/4-90/027F) or the most recent approved method.

d. The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish discharges. However, if the salinity of the receiving water is between 1 to 32 parts per trillion (ppt), then CSDLAC may have the option of using the inland silverslide, *Menidia beryllina*, instead of the topsmelt.

2. Chronic Toxicity Testing

a. **Methods and test species**. The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100 percent effluent samples in accordance with USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Third Edition, July 1994, (EPA/600/4-91/002) or USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, August 1995, (EPA/600/R-95/136).

b. **Frequency**

i Screening - The Discharger shall conduct chronic toxicity test screening every 24 months for three consecutive months, with first screening under this Monitoring Program to be conducted in 2003. Re-screening shall be conducted at a different time of year from the previous screening. Screening tests shall be conducted using a vertebrate, an invertebrate, and a plant.

ii Regular toxicity tests - After the screening period, monitoring shall be conducted monthly using the most sensitive species on a monthly basis.

c. **Toxicity Units.** The chronic toxicity of the effluent shall be expressed and reported in toxic units, TU_c, where,

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

d. Quality Assurance

i Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).

ii If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manual (EPA/600/R-95/136), then the Discharger must re-sample and re-test within 14 days.

iii Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

e. Accelerated Monitoring

If the effluent chronic toxicity test result exceeds the limitation, or if the receiving water chronic toxicity test result (taken at the receiving water station located immediately downstream of the discharge) exceeds the trigger, then the Discharger shall immediately implement an accelerated chronic toxicity testing that consists of six additional tests, approximately every week, over a six-week period. Effluent sampling for the first test of the six additional tests shall commence within 3 days of receipt of the test results exceeding a chronic toxicity limit.

i If all the results of the six additional tests are in compliance with the chronic toxicity limitation, the Discharger may resume regular monthly testing.

ii If the results of any of the six accelerated tests exceeds the limitation, the Discharger shall continue to monitor weekly until six consecutive weekly tests are in compliance. At that time, the Discharger may resume regular monthly testing.

iii If the results of two of the six tests, or any two tests in a six-week period, exceed the limitation, the Discharger shall initiate a Toxicity Reduction Evaluation (TRE).

iv If implementation of the initial investigation TRE workplan (see item 3, below) indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the regular testing frequency.

3. Preparation of an Initial Investigation TRE Workplan

Within 90 days of the effective date of this Order and permit, the Discharger shall submit a copy of its initial investigation TRE workplan to the Executive Officer of the Regional Board for approval. The Discharger shall use the USEPA manual, *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*, EPA/833B-99/002, as guidance. This workplan shall describe the steps the Discharger intends to follow if the toxicity limitation is exceeded, and should include, at a minimum, the following:

a. Description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;

b. Description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility; and,

c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of the person who will conduct the TIE (i.e., an in-house expert or an outside contractor).

4. Steps in Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)

a. If the results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 15 days of the completion of the initial investigation TRE. The detailed workplan shall include, but not limited to:

i Further actions to investigate and identify the cause of toxicity;

ii Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and,

iii A schedule for these actions.

b. The following is a stepwise approach in conducting the TRE:

i Step 1 includes basic data collection;

ii Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and selection and use of in-plant process chemicals;

iii If Steps 1 and 2 are unsuccessful, Step 3 implements a Toxicity Identification Evaluation (TIE) and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity.

iv Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options.

v Step 5 evaluates in-plant treatment options, and

vi Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with the TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there is no longer toxicity violations.

c. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the EPA acute and chronic manuals, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance.

d. If a TRE/TIE is initiated prior to completion of the accelerated testing required in Part D.2.e. of this program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

e. The Board recognizes that toxicity may be episodic and identification of

causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

5. Ammonia Removal

a. Except with prior approval from the Executive Officer of the Regional Board ammonia shall not be removed from the bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate the toxicity is caused by ammonia and not other toxicants before the Executive Officer of the Regional Board would allow for control of pH in the test.

i There is consistent toxicity in the effluent/receiving water and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

ii Chronic ammonia concentrations in the effluent/receiving water are greater than 4 mg/L total ammonia. The level of detection for total ammonia generally need not be below 0.5-1.0 mg/L, since concentrations < 1.0 mg/L of total ammonia have not been found to be toxic to fathead minnows and Ceriodaphnia dubia (Acute ammonia LC_{50} values of 3 mg/L and 1 mg/L for Ceriodaphnia dubia and fathead minnows, respectively, at pH 8.0). Then,

iii Conduct the graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.

iv Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

b. After it has been demonstrated that toxicity is due to ammonia, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent after submitting a written request to the Regional Board, and receiving written permission expressing approval from the Executive Officer of the Regional Board.

6. Reporting

a. The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported in Toxicity Units (TUa or TUc) with the discharge monitoring reports (DMR) for the month in which the test is conducted.

b. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Section D.2.e.iv, then those results also shall be submitted with the DMR for the period in which the Investigation occurred.

i The full report shall be submitted by the end of the month in which the DMR is submitted.

ii The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the acute toxicity average limit or chronic toxicity limit.

iii Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the DMR. Routine reporting shall include, at a minimum, as applicable, for each test:

a). sample date(s)

b). test initiation date

c). test species

d). end point values for each dilution (e.g. number of young, growth rate, percent survival)

e). NOEC value(s) in percent effluent

f). TUc values $\left(TU_c = \frac{100}{NOEC} \right)$

g). Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable)

h). NOEC and LOEC (Lowest Observable Effect Concentration) values for reference toxicant test(s)

i). Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).

iv The Discharger shall provide a compliance summary which includes a summary table of toxicity data from at least eleven of the most recent samples.

v The Discharger shall notify this Regional Board immediately of any toxicity exceedance and in writing 14 days after the receipt of the results of a monitoring limit or trigger. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

E. Tertiary Filter Treatment Bypasses

1. During any day that the filters are bypassed, CSDLAC shall monitor the effluent for BOD, suspended solids, settleable solids, and oil and grease, on a daily basis, until it is demonstrated that the filter "bypass" has not caused an adverse impact on the receiving water.

2. CSDLAC shall maintain a chronological log of tertiary filter treatment process bypasses, to including the following:

   a. Date and time of bypass start and end;
   b. Total duration time; and,
   c. Estimated total volume bypassed.

3. CSDLAC shall notify Regional Board staff by telephonewithin 24 hours of the filter bypass event.

4. CSDLAC shall submit a written report to the Regional Board, according to the corresponding monthly self monitoring report schedule. The report shall include, at a minimum, the information from the chronological log. Results from the daily effluent monitoring, required by E.1. above, shall be submitted to the Regional Board as soon as the results become available.

VII. INTERIM EFFLUENT MONITORING REQUIREMENTS

CSDLAC began an interim monitoring and reporting program in July 2001, as directed to do so by a letter sent to CSDLAC by the Executive Officer of the Regional Board, in accordance with section 13267 of Porter Cologne. CSDLAC shall continue the interim monitoring and reporting program without any changes, unless otherwise directed by the Executive Officer. Data from the interim monitoring program may be used to supplement the compliance monitoring program, however the two reports must be submitted separately.

VIII. WATERSHED-WIDE MONITORING PROGRAM

A. The goals of the Watershed-wide Monitoring Program for the San Gabriel River Watershed are to:

1. Determine compliance with receiving water limits;

2. Monitor trends in surface water quality;

3. Ensure protection of beneficial uses;

4. Provide data for modeling contaminants of concern;

5. Characterize water quality including seasonal variation of surface waters within the watershed;

6. Assess the health of the biological community; and,

7. Determine mixing dynamics of effluent and receiving waters in the estuary.

B. The Discharger shall participate in the implementation of the Watershed-wide Monitoring Program. The CSDLAC' s responsibilities under the Watershed-wide Monitoring Program are described in the Receiving Water Monitoring Requirements section. To achieve the goals of the Watershed-wide Monitoring Program, revisions to the Receiving Water Monitoring Requirements will be made under the direction of USEPA and the Regional Board. CSDLAC shall participate with interested stakeholders in the San Gabriel River Watershed (such as, Southern California Coastal Water Research Project (SCWRP), the Los Angeles & San Gabriel Rivers Watershed Council, Los Angeles County Public Works for development of a San Gabriel River Master Plan, the San Gabriel Mountains Regional Conservancy, and the Rivers and Mountains Conservancy), in the development and implementation of a watershed-wide monitoring program. In order to develop a comprehensive watershed-wide monitoring program, the stakeholders requested additional time beyond what was originally allowed. The Discharger shall submit a draft Watershed-wide Monitoring Program by December 31, 2004, to the Regional Board. In the interim, the Discharger shall submit quarterly progress reports detailing ongoing efforts towards the development of a Watershed-wide Monitoring Program. The first report should be received in the Regional Board office by January 15, 2004.

C. In cooridination with the Los Angeles County Public Works and other interested stakeholders in the San Gabriel River Watershed, the Discharger shall conduct instream bioassessment monitoring once a year. Over time, bioassessment monitoring will provide a measure of the physical condition of the waterbody and the integrity of its biological communities.

1. The bioassessment program shall include an analysis of the community structure of the instream macroinvertebrate assemblages and physical habitat assessment at the following monitoring stations:

   Station Location
   RA-1 Coyote Creek upstream of the Long Beach WRP Discharge Point
   R-A Coyote Creek downstream of the Long Beach WRP Discharge Point

   All of the sites shall be sampled once during the fall. This Program shall be implemented by appropriately trained staff. Alternatively, a professional subcontractor qualified to conduct bioassessments may be selected to perform the bioassessment work for the Discharger. Analyses of the results of the bioassessment monitoring program, along with photographs of the monitoring site locations taken during sample collection, shall be submitted in the corresponding annual report.

2. The Discharger must provide a copy of their Standard Operation Procedures (SOPs) for the Bioassessment Monitoring Program to the Regional Board upon request. The document must contain step-by-step field, laboratory and data entry procedures, as well as, related QA/QC procedures. The SOP must also include specific information about each bioassessment program including: assessment program description, its organization and the responsibilities of all its personnel; assessment project description and objectives; qualifications of all personnel; and the type of training each member has received.

3. Field sampling must conform to the SOP established for the California Stream Bioassessment Procedure (CSBP). Field crews shall be trained on aspects of the protocol and appropriate safety issues. All field data and sample Chain of Custody (COC) forms must be examined for completion and gross errors. Field inspections shall be planned with random visits and shall be performed by the Discharger or an independent auditor. These visits shall report on all aspects of the field procedure with corrective action occurring immediately.

4. A taxonomic identification laboratory shall process the biological samples that usually consist of subsampling organisms, enumerating and identifying taxonomic groups and entering the information into an electronic format. The Regional Board may require QA/QC documents from the taxonomic laboratories and examine their records regularly. Intra-laboratory QA/QC for subsampling, taxonomic validation and corrective actions shall be conducted and documented. Biological laboratories shall also maintain reference collections, vouchered specimens (the Discharger may request the return of their sample voucher collections) and remnant collections. The laboratory should participate in an (external) laboratory taxonomic

validation program at a recommended level of 10% or 20%. External QA/QC be arranged through the California Department of Fish and Game's Aquatic Bioassessment Laboratory located in Rancho Cordova, California.

IX. RECEIVING WATER MONITORING REQUIREMENTS

A. Receiving water stations shall be established at the locations shown in Attachment 3 and as follows:

Station Number	Description
R-A-1	upstream of discharge from Long Beach Water Reclamation Plant
R-A	downstream of discharge from Long Beach Water Reclamation Plant
	San Gabriel River Lower Estuary Stations
R-9 East	at the downstream end of the pavement lining (near Atherton Street) in the eastern low flow channel of San Gabriel River
R-9 West	at the downstream end of the pavement lining (near Atherton Street) in the western low flow channel of San Gabriel River
R-A-2	downstream of the confluence of the eastern and western low flow channel
R-6	at College Park bridge
R-7	at Westminster Avenue (Second Street)
R-8	at Marina Avenue

B. The following analyses, which constitute the receiving water monitoring program, shall be conducted on grab samples obtained at:

3. Receiving water stations R-A and R-A-1:

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
	Total flow	mgd	recorder	weekly
	Temperature	°F	grab	weekly
	pH	pH units	grab	weekly
	Dissolved oxygen	mg/L	grab	weekly
	Total residual chlorine	mg/L	grab	weekly
	Total coliform	MPN/100 ml	grab	weekly
	Fecal coliform	MPN/100 ml	grab	weekly
	Turbidity	NTU	recorder	monthly
	BOD_5 20°C	mg/L	24-hour comp.	monthly

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
	Settleable solids	ml/L	grab	monthly
	Suspended solids	mg/L	24-hour comp.	monthly
	Oil and grease	mg/L	grab	monthly
	Conductivity		grab	monthly
	Total dissolved solids	mg/L	grab	monthly
	Chloride	mg/L	24-hour comp.	monthly
	Sulfates	mg/L	24-hour comp.	monthly
	Boron	mg/L	24-hour comp.	monthly
	Fluoride	mg/L	24-hour comp.	monthly
	Ammonia nitrogen	mg/L	24-hour comp.	weekly
	Nitrate nitrogen	mg/L	24-hour comp.	weekly
	Nitrite nitrogen	mg/L	24-hour comp.	weekly
	Organic nitrogen	mg/L	24-hour comp.	weekly
	Total kjeldahl nitrogen(TKN)	mg/L	24-hour comp.	weekly
	Total nitrogen	mg/L	24-hour comp.	weekly
	Total phosphorus	mg/L	24-hour comp.	weekly
	Orthophosphate-P	mg/L	24-hour comp.	weekly
	Algal biomass (Chlorophyll A)	mg/L	24-hour comp.	weekly
	Surfactants (MBAS)	mg/L	24-hour comp.	monthly
	Surfactants (CTAS)	mg/L	24-hour comp.	monthly
	Total hardness ($CaCO_3$)	mg/L	24-hour comp.	weekly
	MTBE	µg/L	24-hour comp.	semiannually
	Barium	µg/L	24-hour comp.	semiannually
	Chronic toxicity	TUc	grab	quarterly
	Acute toxicity	% Survival	grab	semiannually
1	Antimony	µg/L	24-hour comp.	quarterly
2	Arsenic	µg/L	24-hour comp.	monthly
3	Beryllium	µg/L	24-hour comp.	quarterly
4	Cadmium	µg/L	24-hour comp.	quarterly
5a	Chromium III	µg/L	24-hour comp.	quarterly
5b	Chromium VI	µg/L	grab	quarterly
6	Copper	µg/L	24-hour comp.	monthly
	Iron	µg/L	24-hour comp.	semiannually
7	Lead	µg/L	24-hour comp.	monthly
8	Mercury	µg/L	24-hour comp.	monthly
9	Nickel	µg/L	24-hour comp.	monthly
10	Selenium	µg/L	24-hour comp.	quarterly
11	Silver	µg/L	24-hour comp.	monthly
12	Thallium	µg/L	24-hour comp.	quarterly
13	Zinc	µg/L	24-hour comp.	monthly
14	Cyanide	µg/L	24-hour comp.	monthly
16	2,3,7,8-TCDD (dioxin)	µg/L	24-hour comp.	semiannually

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
17	Acrolein	µg/L	grab	semiannually
18	Acrylonitrile	µg/L	grab	semiannually
19	Benzene	µg/L	grab	quarterly
20	Bromoform	µg/L	grab	quarterly
21	Carbon tetrachloride	µg/L	grab	semiannually
22	Chlorobenzene	µg/L	grab	semiannually
23	Dibromochloromethane	µg/L	grab	quarterly
24	Chloroethane	µg/L	grab	semiannually
25	2-Chloroethylvinyl ether	µg/L	grab	semiannually
26	Chloroform	µg/L	grab	quarterly
27	Bromodichloromethane	µg/L	grab	quarterly
28	1,1-Dichloroethane	µg/L	grab	semiannually
29	1,2-Dichloroethane	µg/L	grab	semiannually
30	1,1-Dichloroethylene	µg/L	grab	semiannually
31	1,2-Dichloropropane	µg/L	grab	semiannually
32	1,3-Dichloropropylene	µg/L	grab	semiannually
33	Ethylbenzene	µg/L	grab	quarterly
34	Methyl bromide (Bromomethane)	µg/L	grab	semiannually
35	Methyl chloride (Chloromethane)	µg/L	grab	semiannually
36	Methylene chloride	µg/L	grab	quarterly
37	1,1,2,2-Tetrachloroethane	µg/L	grab	semiannually
38	Tetrachloroethylene	µg/L	grab	semiannually
39	Toluene	µg/L	grab	semiannually
40	1,2-Trans-dichloroethylene	µg/L	grab	semiannually
41	1,1,1-Trichloroethane	µg/L	grab	semiannually
42	1,1,2-Trichloroethane	µg/L	grab	semiannually
43	Trichloroethylene	µg/L	grab	semiannually
44	Vinyl chloride	µg/L	grab	semiannually
45	2-Chlorophenol	µg/L	24-hour comp.	semiannually
46	2,4-Dimethylphenol	µg/L	24-hour comp.	semiannually
47	2,4-Dimethylphenol	µg/L	24-hour comp.	semiannually
48	2-Methyl-4,6-dinitrophenol	µg/L	24-hour comp.	semiannually
49	2,4-Dinitrophenol	µg/L	24-hour comp.	semiannually
50	2-Nitrophenol	µg/L	24-hour comp.	semiannually
51	4-Nitrophenol	µg/L	24-hour comp.	semiannually
52	3-Methyl-4-chlorophenol	µg/L	24-hour comp.	semiannually
53	Pentachlorophenol	µg/L	24-hour comp.	semiannually
54	Phenol	µg/L	24-hour comp.	semiannually
55	2,4,6-Trichlorophenol	µg/L	24-hour comp.	semiannually
56	Acenaphthene	µg/L	24-hour comp.	semiannually
57	Acenaphthylene	µg/L	24-hour comp.	semiannually
58	Anthracene	µg/L	24-hour comp.	semiannually

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
59	Benzidine	µg/L	24-hour comp.	semiannually
60	Benzo(a)anthracene	µg/L	24-hour comp.	semiannually
61	Benzo(a)pyrene	µg/L	24-hour comp.	monthly
62	Benzo(b)fluoranthene	µg/L	24-hour comp.	monthly
63	Benzo(g,h,i)perylene	µg/L	24-hour comp.	semiannually
64	Benzo(k)fluoranthene	µg/L	24-hour comp.	monthly
65	Bis(2-chloroethoxy)methane	µg/L	24-hour comp.	semiannually
66	Bis(2-chloroethyl)ether	µg/L	24-hour comp.	semiannually
67	Bis(2-chloroisopropyl)ether	µg/L	24-hour comp.	semiannually
68	Bis(2-ethylhexyl)phthalate	µg/L	24-hour comp.	quarterly
69	4-Bromophenyl phenyl ether	µg/L	24-hour comp.	semiannually
70	Butylbenzyl phthalate	µg/L	24-hour comp.	semiannually
71	2-Chloronaphthalene	µg/L	24-hour comp.	semiannually
72	4-Chlorophenyl phenyl ether	µg/L	24-hour comp.	semiannually
73	Chrysene	µg/L	24-hour comp.	quarterly
74	Dibenzo(a,h)anthracene	µg/L	24-hour comp.	monthly
75	1,2-Dichlorobenzene	µg/L	24-hour comp.	semiannually
76	1,3-Dichlorobenzene	µg/L	24-hour comp.	semiannually
77	1,4-Dichlorobenzene	µg/L	24-hour comp.	semiannually
78	3,3'-Dichlorobenzidine	µg/L	24-hour comp.	semiannually
79	Diethyl phthalate	µg/L	24-hour comp.	quarterly
80	Dimethyl phthalate	µg/L	24-hour comp.	quarterly
81	Di-n-butyl phthalate	µg/L	24-hour comp.	quarterly
82	2,4-Dinitrotoluene	µg/L	24-hour comp.	semiannually
83	2,6-Dinitrotoluene	µg/L	24-hour comp.	semiannually
84	Di-n-octyl phthalate	µg/L	24-hour comp.	semiannually
85	1,2-Diphenylhydrazine	µg/L	24-hour comp.	semiannually
86	Fluoranthene	µg/L	24-hour comp.	semiannually
87	Fluorene	µg/L	24-hour comp.	semiannually
88	Hexachlorobenzene	µg/L	24-hour comp.	semiannually
89	Hexachlorobutadiene	µg/L	24-hour comp.	semiannually
90	Hexachlorocyclopentadiene	µg/L	24-hour comp.	semiannually
91	Hexachloroethane	µg/L	24-hour comp.	semiannually
92	Indeno(1,2,3-cd)pyrene	µg/L	24-hour comp.	monthly
93	Isophrone	µg/L	24-hour comp.	semiannually
94	Naphthalene	µg/L	24-hour comp.	semiannually
95	Nitrobenzene	µg/L	24-hour comp.	semiannually
96	N-Nitrosodimethylamine (NDMA)	µg/L	24-hour comp.	semiannually
97	N-Nitrosodi-n-propylamine	µg/L	24-hour comp.	semiannually
98	N-Nitrosodiphenylamine	µg/L	24-hour comp.	semiannually
99	Phenanthrene	µg/L	24-hour comp.	semiannually
100	Pyrene	µg/L	24-hour comp.	semiannually

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
101	1,2,4-Trichlorobenzene	µg/L	24-hour comp.	semiannually
102	Aldrin	µg/L	24-hour comp.	semiannually
103	alpha-BHC	µg/L	24-hour comp.	semiannually
104	beta-BHC	µg/L	24-hour comp.	semiannually
105	gamma-BHC (Lindane)	µg/L	24-hour comp.	monthly
106	delta-BHC	µg/L	24-hour comp.	semiannually
107	Chlordane	µg/L	24-hour comp.	semiannually
108	4,4'-DDT	µg/L	24-hour comp.	semiannually
109	4,4'-DDE	µg/L	24-hour comp.	semiannually
110	4,4- DDD	µg/L	24-hour comp.	semiannually
111	Dieldrin	µg/L	24-hour comp.	semiannually
112	alpha-Endosulfan	µg/L	24-hour comp.	semiannually
113	beta-Endosulfan	µg/L	24-hour comp.	semiannually
114	Endosulfan sulfate	µg/L	24-hour comp.	semiannually
115	Endrin	µg/L	24-hour comp.	semiannually
116	Endrin aldehyde	µg/L	24-hour comp.	semiannually
117	Heptachlor	µg/L	24-hour comp.	semiannually
118	Heptachlor epoxide	µg/L	24-hour comp.	semiannually
	Polychlorinated biphenyls (PCBs)	See below	See below	See below
119	Aroclor 1016	µg/L	24-hour comp.	semiannually
120	Aroclor 1221	µg/L	24-hour comp.	semiannually
121	Aroclor 1232	µg/L	24-hour comp.	semiannually
122	Aroclor 1242	µg/L	24-hour comp.	semiannually
123	Aroclor 1248	µg/L	24-hour comp.	semiannually
124	Aroclor 1254	µg/L	24-hour comp.	semiannually
125	Aroclor 1260	µg/L	24-hour comp.	semiannually
126	Toxaphene	µg/L	24-hour comp.	semiannually
	Diazinon[11]	µg/L	grab	quarterly

2. Receiving water stations R-9 East, R-A-2, R-6, R-7 and R-8:

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
	Total flow	mgd	recorder	weekly
	Temperature	°F	grab	weekly
	pH	pH units	grab	weekly
	Dissolved oxygen	mg/L	grab	weekly
	Total residual chlorine	mg/L	grab	monthly
	Total coliform	MPN/100 ml	grab	monthly

[11] Diazinon sampling shall be conducted concurrently with the receiving water chronic toxicity sampling.

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
	Fecal coliform	MPN/100 ml	grab	monthly
	Turbidity	NTU	recorder	monthly
	BOD_5 20°C	mg/L	24-hour comp.	monthly
	Settleable solids	ml/L	grab	monthly
	Suspended solids	mg/L	24-hour comp.	monthly
	Oil and grease	mg/L	grab	monthly
	Conductivity		grab	monthly
	Total dissolved solids	mg/L	grab	monthly
	Chloride	mg/L	24-hour comp.	monthly
	Sulfates	mg/L	24-hour comp.	monthly
	Boron	mg/L	24-hour comp.	monthly
	Fluoride	mg/L	24-hour comp.	monthly
	Ammonia nitrogen	mg/L	24-hour comp.	weekly
	Nitrate nitrogen	mg/L	24-hour comp.	weekly
	Nitrite nitrogen	mg/L	24-hour comp.	weekly
	Organic nitrogen	mg/L	24-hour comp.	weekly
	Total kjeldahl nitrogen(TKN)	mg/L	24-hour comp.	weekly
	Total nitrogen	mg/L	24-hour comp.	weekly
	Total phosphorus	mg/L	24-hour comp.	weekly
	Orthophosphate-P	mg/L	24-hour comp.	weekly
	Algal biomass (Chlorophyll A)	mg/L	24-hour comp.	weekly
	Surfactants (MBAS)	mg/L	24-hour comp.	monthly
	Surfactants (CTAS)	mg/L	24-hour comp.	monthly
	Total hardness ($CaCO_3$)	mg/L	24-hour comp.	weekly
	MTBE	µg/L	24-hour comp.	semiannually
	Barium	µg/L	24-hour comp.	semiannually
	Chronic toxicity	TUc	grab	quarterly
	Acute toxicity	% Survival	grab	semiannually
1	Antimony	µg/L	24-hour comp.	quarterly
2	Arsenic	µg/L	24-hour comp.	monthly
3	Beryllium	µg/L	24-hour comp.	quarterly
4	Cadmium	µg/L	24-hour comp.	quarterly
5a	Chromium III	µg/L	24-hour comp.	quarterly
5b	Chromium VI	µg/L	grab	quarterly
6	Copper	µg/L	24-hour comp.	quarterly
	Iron	µg/L	24-hour comp.	quarterly
7	Lead	µg/L	24-hour comp.	quarterly
8	Mercury	µg/L	24-hour comp.	quarterly
9	Nickel	µg/L	24-hour comp.	quarterly
10	Selenium	µg/L	24-hour comp.	quarterly
11	Silver	µg/L	24-hour comp.	monthly
12	Thallium	µg/L	24-hour comp.	quarterly

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
13	Zinc	µg/L	24-hour comp.	quarterly
14	Cyanide	µg/L	24-hour comp.	quarterly
16	2,3,7,8-TCDD (dioxin)	µg/L	24-hour comp.	semiannually
17	Acrolein	µg/L	grab	semiannually
18	Acrylonitrile	µg/L	grab	semiannually
19	Benzene	µg/L	grab	semiannually
20	Bromoform	µg/L	grab	semiannually
21	Carbon tetrachloride	µg/L	grab	semiannually
22	Chlorobenzene	µg/L	grab	semiannually
23	Dibromochloromethane	µg/L	grab	semiannually
24	Chloroethane	µg/L	grab	semiannually
25	2-Chloroethylvinyl ether	µg/L	grab	semiannually
26	Chloroform	µg/L	grab	semiannually
27	Bromodichloromethane	µg/L	grab	semiannually
28	1,1-Dichloroethane	µg/L	grab	semiannually
29	1,2-Dichloroethane	µg/L	grab	semiannually
30	1,1-Dichloroethylene	µg/L	grab	semiannually
31	1,2-Dichloropropane	µg/L	grab	semiannually
32	1,3-Dichloropropylene	µg/L	grab	semiannually
33	Ethylbenzene	µg/L	grab	semiannually
34	Methyl bromide (Bromomethane)	µg/L	grab	semiannually
35	Methyl chloride (Chloromethane)	µg/L	grab	semiannually
36	Methylene chloride	µg/L	grab	semiannually
37	1,1,2,2-Tetrachloroethane	µg/L	grab	semiannually
38	Tetrachloroethylene	µg/L	grab	semiannually
39	Toluene	µg/L	grab	semiannually
40	1,2-Trans-dichloroethylene	µg/L	grab	semiannually
41	1,1,1-Trichloroethane	µg/L	grab	semiannually
42	1,1,2-Trichloroethane	µg/L	grab	semiannually
43	Trichloroethylene	µg/L	grab	semiannually
44	Vinyl chloride	µg/L	grab	semiannually
45	2-Chlorophenol	µg/L	24-hour comp.	semiannually
46	2,4-Dimethylphenol	µg/L	24-hour comp.	semiannually
47	2,4-Dimethylphenol	µg/L	24-hour comp.	semiannually
48	2-Methyl-4,6-dinitrophenol	µg/L	24-hour comp.	semiannually
49	2,4-Dinitrophenol	µg/L	24-hour comp.	semiannually
50	2-Nitrophenol	µg/L	24-hour comp.	semiannually
51	4-Nitrophenol	µg/L	24-hour comp.	semiannually
52	3-Methyl-4-chlorophenol	µg/L	24-hour comp.	semiannually
53	Pentachlorophenol	µg/L	24-hour comp.	semiannually
54	Phenol	µg/L	24-hour comp.	semiannually
55	2,4,6-Trichlorophenol	µg/L	24-hour comp.	semiannually

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
56	Acenaphthene	µg/L	24-hour comp.	semiannually
57	Acenaphthylene	µg/L	24-hour comp.	semiannually
58	Anthracene	µg/L	24-hour comp.	semiannually
59	Benzidine	µg/L	24-hour comp.	semiannually
60	Benzo(a)anthracene	µg/L	24-hour comp.	semiannually
61	Benzo(a)pyrene	µg/L	24-hour comp.	semiannually
62	Benzo(b)fluoranthene	µg/L	24-hour comp.	semiannually
63	Benzo(g,h,i)perylene	µg/L	24-hour comp.	semiannually
64	Benzo(k)fluoranthene	µg/L	24-hour comp.	semiannually
65	Bis(2-chloroethoxy)methane	µg/L	24-hour comp.	semiannually
66	Bis(2-chloroethyl)ether	µg/L	24-hour comp.	semiannually
67	Bis(2-chloroisopropyl)ether	µg/L	24-hour comp.	semiannually
68	Bis(2-ethylhexyl)phthalate	µg/L	24-hour comp.	semiannually
69	4-Bromophenyl phenyl ether	µg/L	24-hour comp.	semiannually
70	Butylbenzyl phthalate	µg/L	24-hour comp.	semiannually
71	2-Chloronaphthalene	µg/L	24-hour comp.	semiannually
72	4-Chlorophenyl phenyl ether	µg/L	24-hour comp.	semiannually
73	Chrysene	µg/L	24-hour comp.	semiannually
74	Dibenzo(a,h)anthracene	µg/L	24-hour comp.	monthly
75	1,2-Dichlorobenzene	µg/L	24-hour comp.	semiannually
76	1,3-Dichlorobenzene	µg/L	24-hour comp.	semiannually
77	1,4-Dichlorobenzene	µg/L	24-hour comp.	semiannually
78	3,3'-Dichlorobenzidine	µg/L	24-hour comp.	semiannually
79	Diethyl phthalate	µg/L	24-hour comp.	semiannually
80	Dimethyl phthalate	µg/L	24-hour comp.	semiannually
81	Di-n-butyl phthalate	µg/L	24-hour comp.	semiannually
82	2,4-Dinitrotoluene	µg/L	24-hour comp.	semiannually
83	2,6-Dinitrotoluene	µg/L	24-hour comp.	semiannually
84	Di-n-octyl phthalate	µg/L	24-hour comp.	semiannually
85	1,2-Diphenylhydrazine	µg/L	24-hour comp.	semiannually
86	Fluoranthene	µg/L	24-hour comp.	semiannually
87	Fluorene	µg/L	24-hour comp.	semiannually
88	Hexachlorobenzene	µg/L	24-hour comp.	semiannually
89	Hexachlorobutadiene	µg/L	24-hour comp.	semiannually
90	Hexachlorocyclopentadiene	µg/L	24-hour comp.	semiannually
91	Hexachloroethane	µg/L	24-hour comp.	semiannually
92	Indeno(1,2,3-cd)pyrene	µg/L	24-hour comp.	monthly
93	Isophrone	µg/L	24-hour comp.	semiannually
94	Naphthalene	µg/L	24-hour comp.	semiannually
95	Nitrobenzene	µg/L	24-hour comp.	semiannually
96	N-Nitrosodimethylamine (NDMA)	µg/L	24-hour comp.	semiannually
97	N-Nitrosodi-n-propylamine	µg/L	24-hour comp.	semiannually

CTR #	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
98	N-Nitrosodiphenylamine	µg/L	24-hour comp.	semiannually
99	Phenanthrene	µg/L	24-hour comp.	semiannually
100	Pyrene	µg/L	24-hour comp.	semiannually
101	1,2,4-Trichlorobenzene	µg/L	24-hour comp.	semiannually
102	Aldrin	µg/L	24-hour comp.	semiannually
103	alpha-BHC	µg/L	24-hour comp.	semiannually
104	beta-BHC	µg/L	24-hour comp.	semiannually
105	gamma-BHC (Lindane)	µg/L	24-hour comp.	quarterly
106	delta-BHC	µg/L	24-hour comp.	semiannually
107	Chlordane	µg/L	24-hour comp.	semiannually
108	4,4'-DDT	µg/L	24-hour comp.	semiannually
109	4,4'-DDE	µg/L	24-hour comp.	semiannually
110	4,4- DDD	µg/L	24-hour comp.	semiannually
111	Dieldrin	µg/L	24-hour comp.	semiannually
112	alpha-Endosulfan	µg/L	24-hour comp.	semiannually
113	beta-Endosulfan	µg/L	24-hour comp.	semiannually
114	Endosulfan sulfate	µg/L	24-hour comp.	semiannually
115	Endrin	µg/L	24-hour comp.	semiannually
116	Endrin aldehyde	µg/L	24-hour comp.	semiannually
117	Heptachlor	µg/L	24-hour comp.	semiannually
118	Heptachlor epoxide	µg/L	24-hour comp.	semiannually
	Polychlorinated biphenyls (PCBs)	See below	See below	See below
119	Aroclor 1016	µg/L	24-hour comp.	semiannually
120	Aroclor 1221	µg/L	24-hour comp.	semiannually
121	Aroclor 1232	µg/L	24-hour comp.	semiannually
122	Aroclor 1242	µg/L	24-hour comp.	semiannually
123	Aroclor 1248	µg/L	24-hour comp.	semiannually
124	Aroclor 1254	µg/L	24-hour comp.	semiannually
125	Aroclor 1260	µg/L	24-hour comp.	semiannually
126	Toxaphene	µg/L	24-hour comp.	semiannually

C. In the event of a spill or bypass of raw or partially treated sewage from the Long Beach Water Reclamation Plant into Coyote Creek, total and fecal coliform analyses shall be made on grab samples collected at all potentially affected downstream receiving water stations and at least one unaffected upstream receiving water station.

Coliform samples shall be collected at each station on the date of the spill or bypass, and daily on each of the following four days or until coliform levels in the receiving water are within normal range and the bypass or spill has ceased.

D. Once every quarter, a representative bottom sample shall be collected at receiving

water station R-6. This bottom sample shall be analyzed for total organic nitrogen, total organic carbon, sediment grain size distribution, arsenic, cadmium, copper, lead, mercury, nickel, zinc, PCBS, DDTs, PAHs, cyanide, phenols, aldrin and dieldrin, endrin, HCH, chlordane and toxaphene. Constituents to be included in the PAHs analysis shall be approved by the Executive Officer.

E. At the same time the receiving waters are sampled, observations shall be made in the reach bounded by the Stations (the river, shore and ocean), and a log shall be maintained thereof.

1. Attention shall be given to the presence and extent, or absence of:
   a. oil, grease, scum, or solids of waste origin;
   b. sludge deposits;
   c. discoloration of surface waters;
   d. algal blooms;
   e. odors;
   f. foam; and,
   g. other significant observations in immediate vicinity (i.e. storm drain flows, etc.)

2. The following shall also be noted in the log:

   a. date and time of observation;
   b. weather conditions;
   c. flow measurement (estimation);
   d. exact sampling location;
   e. users of water in the river (i.e. people washing, swimming and playing in the river, etc.);
   f. non-contact users (i.e. bikers, joggers, etc.); and,
   g. wildlife (i.e. birds, mammals, reptiles, estimated amount of vegetation).

3. A summary of these observations noted in the log shall be submitted with the monitoring reports.

F. CSDLAC shall monitor the receiving water downstream of the discharge, during any day that the filters are bypassed, for BOD, suspended solids, settleable solids, and oil and grease, until it is demonstrated that the filter “bypass” has not caused an adverse impact on the receiving water. CSDLAC shall submit a written report to the Regional Board, according to the corresponding monthly self monitoring report schedule. The report shall include, the results from the daily receiving water monitoring. However, if the results are not available in time to be submitted with the corresponding monthly report, then, the results shall be submitted to the Regional Board as soon as the results become available.

G. Receiving water samples shall not be taken during or within 48 hours following the

flow of rainwater runoff into the San Gabriel River – Coyote Creek system.

H. Sampling may be rescheduled at receiving water stations if weather and flow conditions would endanger personnel collecting receiving water samples. The monthly monitoring report shall note such occasions.

X. COMPLIANCE WITH 7-DAY AND MONTHLY AVERAGE LIMITS

A. For any constituent monitored weekly: if any result of a weekly analysis or less frequent monitoring exceeds the 7-day average limit (or the monthly average limit if no 7-day limit is prescribed), the frequency of analysis shall be increased to daily within one week of knowledge of the test results. Daily testing shall continue for at least 7 consecutive days and until compliance with the 7-day average limit is demonstrated, after which the frequency shall revert to weekly.

B. For any constituent monitored monthly: if any result of a monthly analysis exceeds the monthly average limit, the frequency of analysis shall be increased to weekly within one week of knowledge of the test result. Weekly testing shall continue for at least 4 consecutive weeks and until compliance with the monthly average limit is demonstrated, after which the frequency shall revert to monthly.

XI. STORM WATER MONITORING AND REPORTING

The CSDLAC shall implement the Storm Water Monitoring Program and Reporting Requirements of the State Water Resources Control Board' s General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities (Order No. 97-03-DWQ).

Ordered by:

Dennis A. Dickerson
Executive Officer

Date: September 11, 2003